



November 15, 2012

**1006.008.01.003**

SRMKII, LLC  
520 6th Street South  
Kirkland WA 98033

Attention: Mr. Dave Tomson

**SOIL ASSESSMENT REPORT  
FORMER PACE NATIONAL PROPERTY  
500 7<sup>TH</sup> AVENUE SOUTH  
KIRKLAND, WASHINGTON**

Dear Mr. Tomson:

PES Environmental, Inc. (PES) conducted an assessment of soil quality at the Former Pace National property, located at 500 7<sup>th</sup> Avenue South, in Kirkland, Washington (Property; Figure 1), currently owned by Ultra Corporation (Ultra). The purpose of the soil assessment was to assist SRMKII, LLC (SRMKII) in characterizing the soil that will be excavated during future site re-development activities and determine the appropriate disposal method. Based on the results of this assessment, PES identified excavation areas for soils requiring off-site disposal at a facility permitted to accept soil with detectable concentrations of contaminants, including concentrations below applicable cleanup levels (referred to as “gray soil”) and those that may be disposed of off-site without restrictions (referred to as “clean soil”). PES also evaluated the removal of saturated soils and groundwater within the estimated vinyl chloride area located in the northwestern portion of the Property.

Proposed revisions to the Compliance Monitoring Plan as a result of the planned site re-development are also included in this report. Our understanding of the project background is based on a review of the Remedial Investigation/Feasibility Study (RI/FS) prepared by Sound Environmental Strategies (SES), dated December 13, 2010, and the Final Cleanup Action Plan (CAP) prepared by the Washington Department of Ecology (Ecology) dated January 2012. PES conducted the soil assessment field activities from August 13 to 17, 2012, consistent with PES’s *Soil Assessment Proposal – Revised*, dated August 7, 2012.

**SITE DESCRIPTION**

The 5-acre Property is currently vacant. The northern one-third portion of the Property is the location of the former Pace National operations and is a mixture of dirt, vegetation, and asphalt surfaces (see Figure 2). The majority of the non-asphalt areas are overgrown with brush, blackberries, and a few small trees. The southern two-thirds of the Property are wooded and have never been developed. The surface terrain of the northern portion of the Property consists of a relatively flat area at an elevation of approximately 169 feet above mean sea level (amsl)

and slopes to the west to an elevation of approximately 149 feet amsl along the western property line. The area of a former drum storage yard is at a slightly lower elevation of approximately 160 feet amsl.

## **RE-DEVELOPMENT PLANS**

The preliminary proposed re-development plans for the property include a mass excavation to an elevation of approximately 142.5 feet amsl for the construction of two floors of subsurface parking. The parking garage footprint is shown on Figure 2. A two-story office complex will be constructed above the parking structure. Slope cuts for the mass excavation will be 1:1 along the northern, western, and southern excavation limits. The eastern sidewall of the excavation will be shored along the property line. In addition to the re-development mass excavation, saturated soils within the vinyl chloride area will be removed (as discussed below in the Vinyl Chloride Area Excavation Approach). The sidewalls for the vinyl chloride area excavation will be shored along the northern and western property lines.

## **BACKGROUND**

The Property is the location of a former chemical mixing and packaging facility (Pace National Corporation). Extensive investigation and remediation activities have occurred at the Property as independent cleanup actions (prior to 2009) and pursuant to an Agreed Order between Ultra and Ecology. Ultra and Ecology have since negotiated a Consent Decree for implementation of the selected final cleanup action. The final cleanup action includes monitored natural attenuation of vinyl chloride in groundwater present in the northwest corner of the Property, but no further actions for soil. Ecology concluded that soil on the Property met applicable cleanup levels. Contaminants of Concern (COCs) on the Property include petroleum hydrocarbons, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and organochlorine pesticides.

Previous consultants have conducted remedial actions (predominantly soil excavation activities) to address areas where soil investigations indicated COC concentrations above the Model Toxics Control Act (MTCA)<sup>1</sup> Method A or Method B soil cleanup levels for unrestricted land use.

The areas where soil remediation was completed include:

- Former Ecology Tank Area (FETA): this area is the location of a former oil/water separator and Ecology flow-through tank where investigations indicated elevated concentrations of VOCs, SVOCs, and organochlorine pesticides in soil;
- Former Railroad Unloading Area (RUA): investigations in this area indicated elevated concentrations of mineral spirits, diesel-range petroleum hydrocarbons (DRPH), and VOCs in soil;

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<sup>1</sup> Washington State Department of Ecology *Model Toxics Control Act – Cleanup*, Chapter 173-340 WAC. October 2007.

- Former Underground Storage Tank (UST) Area: investigations in this area indicated elevated concentrations of gasoline-range petroleum hydrocarbons (GRPH) and mineral spirits in soil;
- Subsurface Utilities: investigations in this area indicated elevated concentrations of VOCs in soil; and
- SB-15 Area: investigations in this area indicated elevated concentrations of oil-range petroleum hydrocarbons (ORPH) in soil.

Additional investigation activities were conducted to assess the following areas:

- Former Drum Storage Yard;
- Site of the former Pace Main Building; and
- Downgradient of the facility.

Confirmation soil samples collected during the previous soil excavation activities indicated that the excavation base and sidewall samples did not contain COC concentrations above their respective MTCA Method A or Method B cleanup levels. However, excavation sidewall soil samples indicated that low-level detections of residual COCs did remain in some locations at the time of the soil excavation activities.

Soil samples collected from two soil borings located in areas outside of the soil excavation activities indicated concentrations of tetrachloroethene (PCE) above the MTCA Method A cleanup level of 0.05 milligrams per kilogram (mg/kg). These included hand auger boring HA-3 (located in the drum storage yard along the southern property line) with a PCE detection of 0.08 mg/kg at a depth of 0.5 feet, and SP-17 (located in the RUA area, along the eastern property line) with a PCE detection of 0.059 mg/kg at a depth of 2 feet.

Additional soil investigation activities indicated that samples collected from seven locations within and west of the former drum storage yard contained detectable concentrations of petroleum hydrocarbons and VOCs. Three samples collected within the site of the former Pace main building contained detectable concentrations of bromomethane (a VOC). The bromomethane concentrations were reportedly due to method blank contamination.<sup>2</sup> The soil boring log for SP-11 indicated black-stained soil at 11 feet below ground surface (bgs). Based on a review of the available data, it is unclear if soils containing the organochlorine pesticide chlordane (detected in the 1999 FETA excavation western sidewall) were removed. In addition, based on a review of the available data, it is unclear if excavated soil that was treated on-site was placed back into the excavations, and if so, if detectable concentrations remained in the material.

The preliminary proposed property re-development activities include excavation of soil to depths ranging from 10 to 26.5 feet bgs (resulting in an excavation base elevation of

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<sup>2</sup> This conclusion was confirmed by the current investigation.

approximately 142.5 feet amsl). Soil samples collected during previous soil investigation activities (not including excavation activities) ranged from near the surface to 10-11 feet bgs. PES was only able to determine the location of one soil boring with a soil sample analyzed deeper than 11 feet bgs (HC-MW-4 at a depth of 19 feet). A soil sample collected from boring SP-T at 17.5 feet bgs had detectable DRPH, but the location of this boring is not known.

Although these historical data indicated that the soil remaining on the property met applicable cleanup levels (except the two locations noted above), the data also indicated that remaining soil contains detectable concentrations of COCs. These detectable concentrations will affect the method of disposal of the excavated soil during re-development. The scope of work for this soil assessment was to assist in defining the extent (horizontally and vertically) of the soil containing residual concentrations of COCs (i.e. gray soil). In addition, this investigation assessed whether there were possible impacts to the southernmost portion of the property (south of the drum storage yard), which had not been investigated to date.

## **FIELD ACTIVITIES**

Prior to conducting the drilling activities, public and private utility locates were conducted, the proposed boring locations were identified with a Global Positioning System (GPS) unit, and where necessary, the locations were cleared of vegetation using a backhoe.

From August 13 to August 17, 2012, PES oversaw the drilling of 4 shallow borings (HA-5 through HA-8) and 21 deeper borings (GP-1 through GP-5, GP-7 through GP-10, GP-12 through GP-20, GP-23, GP-24, and GP-25). Cascade Drilling, Inc., a Washington State licensed drilling company, was subcontracted to drill the borings with either a track-mounted or truck-mounted direct-push drilling rig. The borings were hand-cleared to approximately 2.5 to 3 feet bgs with a hand auger, and shallow soil samples were collected from most locations using the hand auger. The shallow borings (HA-5 through HA-8) were advanced to depths of 10 feet bgs, and the deeper borings were advanced to a maximum of 35 feet bgs. The boring locations are shown on Figure 2.

The soil boring locations were selected to address the following concerns:

- 1) Residual PCE concentrations in the location of HA-3 (boring GP-1);
- 2) Residual PCE and ORPH concentrations in the location of SP-17 and the RUA eastern sidewall (boring GP-12);
- 3) Black stained soil in the location of SP-11 (boring GP-8);
- 4) Residual VOC and petroleum hydrocarbon concentrations in the location of HC-MW-5 and SP-15 (boring GP-13);
- 5) Backfill and soil concentrations within and beneath Area C of the former UST excavation (boring GP-20);
- 6) Backfill and residual sidewall soil concentrations within the FETA excavation area (boring GP-19);

- 7) Vinyl chloride concentrations of soil in contact with the vinyl chloride groundwater plume (borings GP-15 and GP-18);
- 8) Various low-level residual VOC and petroleum hydrocarbon concentrations detected at locations throughout the site; and
- 9) Black-stained soil with a hydrocarbon odor observed during the pre-drilling site walk (GP-24 and GP-25).

Continuous soil samples were collected using five-foot long core barrels lined with new acetate sleeves. PES observed the soil cores for lithologic characterization and field screened the soil cores for VOCs with a photo-ionization detector (PID). PES collected soil samples in the appropriate laboratory-approved sampling containers at least every 5 feet. The soil samples were collected using syringe samplers following the USEPA Method 5035 protocols. The syringe samples were placed in laboratory provided bottles preserved with methanol for GRO and VOC analyses; additional sample volume was collected in unpreserved glass soil sample jars for DRO and HO analyses and to determine soil moisture content. The sample bottles were sealed, labeled, and placed in a cooler on ice for delivery to Fremont Analytical, Inc, (Fremont) in Seattle, Washington, a Washington State accredited laboratory. The soil borings logs are included in Attachment A.

All drilling and non-dedicated sampling equipment was decontaminated between each drilling location. Upon completion of the soil sampling activities, the borings were filled from the bottom of the boring to the surface with bentonite chips, hydrated, and sealed at the surface with a concrete patch. Decontamination water (one drum containing approximately 15 gallons) and residual soil (one 55-gallon drum) were stored on-site, pending disposal. Samples of the soil and water were collected and analyzed for disposal characterization purposes. The drummed soil and groundwater will be disposed of appropriately once disposal acceptance has been obtained.

## **FIELD OBSERVATIONS OF SUBSURFACE CONDITIONS**

The general geology encountered at the Property consisted of an upper fill layer of silty sand to depths ranging from approximately 2 to 13 feet bgs, underlain by medium plasticity silt with sand to depths ranging from approximately 8.5 to 20 feet bgs. A marker bed between 4 and 12 inches thick composed of organic material was seen in most of the borings at or near the contact between the silty sand fill and the silt with sand. The lower-most unit encountered in all but three borings was a very hard, highly elastic silt layer to a maximum drilled depth of 35 feet bgs. This unit was not encountered at GP-15, GP-16, or GP-18, which are located on the northwestern portion of the Property.

No areas of staining (with the exception of iron oxide staining) were observed in the soil cores. Notable chemical odors were observed in boring GP-10 from approximately 13 to 15 feet bgs and in GP-13 at approximately 5 feet bgs. Notable PID readings were encountered while drilling in GP-10 from approximately 13 to 17 feet bgs, GP-13 from approximately 5 to 12 feet bgs, and GP-19 from approximately 1 foot to 8 feet bgs.

## LABORATORY ANALYTICAL RESULTS

The samples selected for analysis were based on field observations, historical data, and/or selected to characterize soil in 10-foot horizons. The initial soil samples were analyzed for VOCs using US Environmental Protection Agency (USEPA) Method 8260, GRPH using Method NWTPH-Gx, and DRPH and ORPH using Method NWTPH-Dx with silica gel cleanup. Two samples collected near the FETA excavation (GP-19) were analyzed for organochlorine pesticides using EPA Method 8081. If the initial analytical results indicated any chemical detections, additional analyses were requested of samples located either directly above or directly below the detections in order to vertically delineate the detections. Copies of the laboratory analytical reports are included in Attachment B.

The final laboratory analytical reports were reviewed and validated in accordance with USEPA data validation procedures to ensure that the data were acceptable for their intended use. Data validation memoranda were prepared and are included with the laboratory analytical reports in Attachment B. With the exception of one methylene chloride result, which was analyzed significantly outside of holding times, all of the soil data were deemed acceptable for site characterization. Methylene chloride is a common laboratory contaminant; detections of this compound are not considered a concern and the data will not be considered as soil detections.

The laboratory analytical results are summarized in Tables 1 through 3. A total of 63 soil samples were analyzed from 25 locations throughout the Property. As indicated in the data tables, only nine samples from eight soil borings had detections of one or more of the following: GRO, DRO, HO, petroleum-related VOCs, and/or chlordane. These detections are summarized below, including the approximate sample elevation (in feet amsl) of the sample using the available topographic survey information for the property:

- 1) GP-18 (northwest portion of the property, herein referred to as Area 1):
  - 6 feet bgs (152 feet amsl): DRO detected at a concentration of 661 mg/kg; HO detected at a concentration of 109 mg/kg; various low-level petroleum-related VOCs; and
  - 12 feet bgs (146 feet amsl): HO detected at a concentration of 102 mg/kg; various low-level petroleum-related VOCs including benzene detected at a concentration of 0.0426 mg/kg. The benzene concentration also slightly exceeds the MTCA Method A soil cleanup level for unrestricted land use (0.03 mg/kg).
- 2) GP-10 (Former Pace Main Building, herein referred to as Area 2):
  - 14.5 feet bgs (154.5 feet amsl): GRO detected at a concentration of 6,070 mg/kg; DRO (as fuel oil) detected at a concentration of 5,890 mg/kg; various low-level petroleum-related VOCs. The GRO and DRO concentrations also exceed the MTCA Method A soil cleanup levels for unrestricted land use (100 mg/kg and 2,000 mg/kg, respectively).

- 3) GP-8 (Former Pace Main Building, herein referred to as Area 3):
  - 10 feet bgs (159 feet amsl): cis-1,2-dichloroethene (cis-1,2-DCE) detected at a concentration of 0.0251 mg/kg.
- 4) HA-7 (south of former drum storage yard, herein referred to as Area 4):
  - 2 feet bgs (elevation unknown): total xylenes detected at a concentration of 0.019 mg/kg.
- 5) GP-1 (southern portion of former drum storage yard, herein referred to as Area 5):
  - 1 feet bgs (157 feet amsl): toluene detected at a concentration of 0.157 mg/kg.
- 6) GP-24 (west of former drum storage yard, herein referred to as Area 6):
  - 0.5 feet bgs (157.5 feet amsl): HO detected at a concentration of 176 mg/kg.
- 7) GP-13 (west of former drum storage yard, herein referred to as Area 7):
  - 6 feet bgs (152 feet amsl): GRO detected at a concentration of 851 mg/kg; DRO (as fuel oil) detected at a concentration of 13,000 mg/kg; various low-level petroleum-related VOCs including naphthalene detected at a concentration of 11.5 mg/kg. The GRO, DRO and naphthalene concentrations also exceed the MTCA Method A soil cleanup levels for unrestricted land use (100 mg/kg, 2,000 mg/kg, and 5 mg/kg, respectively).
- 8) GP-19 (north central portion of the property, area of FETA excavation; herein referred to as Area 8):
  - 1.5 feet bgs (163.5 feet amsl): DRO detected at a concentration of 17.8 mg/kg; alpha- and gamma-chlordane detected at concentrations of 0.0164 and 0.0242 mg/kg, respectively.

The various low level petroleum-related VOCs detected on the Property include benzene, toluene, ethylbenzene, and xylenes (BTEX), iso-propyltoluene, n-propyltoluene, 1,3,5-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene, n-butylbenzene, 1,2,4-trimethylbenzene, and naphthalene.

All historical data indicating detectable concentrations were either confirmed or refuted with the recent soil data, with the exception of HA-4 and B-9 in the drum storage yard. Historically (1990), di-n-butyl-phthalate was detected in HA-4 in the surface sample at a concentration of 0.79 mg/kg. This phthalate detection in the shallow soils is not expected to be a concern for the purposes of special soil handling and disposal. In 1991, a Hydrocarbon Identification (HCID) detection of 38 mg/kg was reported for B-9 at a depth of 7.5 feet bgs. HCID is generally a qualitative screening technique, and this area is not expected to be a concern.

## **GRAY SOIL EXCAVATION APPROACH**

SRMKII will excavate soils in the locations of borings with detectable concentrations prior to the start of the re-development mass excavation. The proposed locations of the gray soil excavations, designated as "Areas," are shown on Figure 3. PES proposes an observational approach to the gray soil excavations. PES recommends limited soil excavation activities within each of the identified Areas beginning at the locations with the documented soil contamination and extending radially outward 10 feet and one to two feet below the depth of the soil sample with a detection. The proposed excavations for Area 1 and Areas 4 through 8 begin at the ground surface due to the chemical detections within the shallowest soil samples. For Areas 2 and 3, the soil from the ground surface to seven feet bgs was considered clean based on a clean soil sample at seven feet in boring GP-8. It is assumed that seven feet of overburden will be removed and transported off-site as clean soil in Areas 2 and 3.

Upon completion of the initial excavation of gray soil, samples from the sidewalls and base of each excavation will be collected and analyzed for the known chemical detections in each area. If the sample results indicate soils with detectable chemical concentrations remain, the sidewalls and/or base will be extended an additional four feet and the soils will be re-tested until each Area meets the clean soil criteria. Once an Area meets the clean soil criteria, the Area will be approved for mass excavation and no further soil testing will be required. Given the large size of the property and locations of the gray soil areas within the property, this approach will limit the volume of gray soil excavated while minimizing impacts to the general re-development activities.

## **VINYL CHLORIDE AREA EXCAVATION APPROACH**

A portion of the proposed subsurface parking garage is located over the area where vinyl chloride is present in groundwater near the northwestern corner of the Property (Figure 3). SRMKII has decided to extend the excavation in this area to remove the saturated soils, which includes the perched groundwater containing vinyl chloride concentrations greater than the cleanup level (0.2 micrograms per liter [ $\mu\text{g/L}$ ]). This additional excavation is being conducted to mitigate potential concerns regarding vapor intrusion into the subsurface parking garage and overlying office complex. The assumed area of vinyl chloride-impacted groundwater (as shown on Figure 3) is based on the area of monitored natural attenuation specified in the CAP. Prior to conducting the excavation in this area, a limited investigation will be performed to further delineate the extent of vinyl chloride in groundwater in this area to better direct the excavation activities. Up to six additional direct-push borings will be drilled for the collection of saturated soil samples and vertical delineation of the depth of the glacial till. Temporary wells will be installed in the soil borings to facilitate the collection of groundwater samples. All soil and groundwater samples will be analyzed for vinyl chloride, using USEPA Method 8260.

Saturated soils within the vinyl chloride area (Area 9) will be excavated to the depth of the till. The elevation of the till outside the garage footprint is estimated to range from 130 to 132 feet amsl. The clean overburden will be removed and stockpiled on-site. Confirmation samples of the overburden will be collected and analyzed prior to its use as backfill. The



saturated soils will be transported off-site for disposal as either clean material or gray soil, based on the pre-excitation assessment analytical results. Water that accumulates in the excavation (rain water or perched water) will be collected, stored, tested, and properly disposed of. The excavation will be back-filled with either clean on-site soils or imported clean fill material.

The majority of saturated soils within the vinyl chloride area inside the garage footprint will be excavated during planned site mass excavation for the re-development (Figure 3). The current planned mass excavation elevation for the base of the parking garage is 142.5 feet amsl. Based on a review of soil boring logs, PES anticipates that the depth to the till could extend to an elevation of approximately 132 feet amsl in portions of the vinyl chloride area and therefore, over-excavation deeper than the planned re-development excavation will be necessary to remove the saturated soils above the till. A cross section showing the vinyl chloride area excavation is shown on Figure 4. The cross-section is based on the Generalized Geologic Cross Section A-A' from the RI/FS report which was annotated to show the limits of the subsurface garage, additional geologic information obtained from this soil assessment, and the proposed vertical extent of the saturated soil excavation in the vinyl chloride area. As shown on Figure 4, upon completion of the proposed excavation, the saturated soil and the perched groundwater containing the vinyl chloride will be removed from the Property.

## **PROPOSED COMPLIANCE MONITORING PLAN REVISIONS**

The compliance monitoring plan (included in the CAP) for the final cleanup action includes collection and analysis of groundwater samples from eight monitoring wells (HC-MW-3, HC-MW-7 through HC-MW-10, and SES-MW25 through SES-MW27) located on and off the property (Figure 3). Four of these compliance monitoring wells (HC-MW-7 through HC-MW-10) are located within the proposed vinyl chloride excavation area along the western property boundary and will need to be decommissioned by a licensed driller prior to the start of excavation activities (tentatively scheduled for August 2013).

PES believes that the decommissioned wells do not need to be replaced and recommends modifying the compliance monitoring plan to remove these wells from further monitoring. As discussed above, the groundwater being monitored by these wells will be removed during the excavation activities, eliminating the need to replace the wells. In addition, continued monitoring can be performed utilizing wells SES-MW25 through SES-MW27, located downgradient of the wells being decommissioned.

The CAP specifies that compliance monitoring will be complete if groundwater analytical results for compliance monitoring wells show four consecutive sampling events with vinyl chloride concentrations at or below the cleanup level. PES understands that after completion of the re-development activities, SRMKII will propose to Ecology to conduct semi-annual sampling of the three down-gradient off-site wells SES-MW25 through SES-MW27 for two years. If these results are below the applicable cleanup levels, SRMKII will request that the Consent Decree be dismissed.

**Mr. Dave Tomson**  
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PES Environmental, Inc.

If vinyl chloride concentrations in SES-MW25, SES-MW26, or SES-MW27 are above the applicable cleanup level, semi-annual sampling will continue to be performed until four consecutive rounds indicate concentrations are below the cleanup level.

PES appreciates the opportunity to be of service on this project. If you have any questions regarding this letter, or need any additional information, please feel free to contact either of us at (206) 529-3980.

Very truly yours,

**PES ENVIRONMENTAL, INC.**



Kelly L. Rankich  
Project Engineer



Daniel A. Balbiani, P.E.  
Principal Engineer

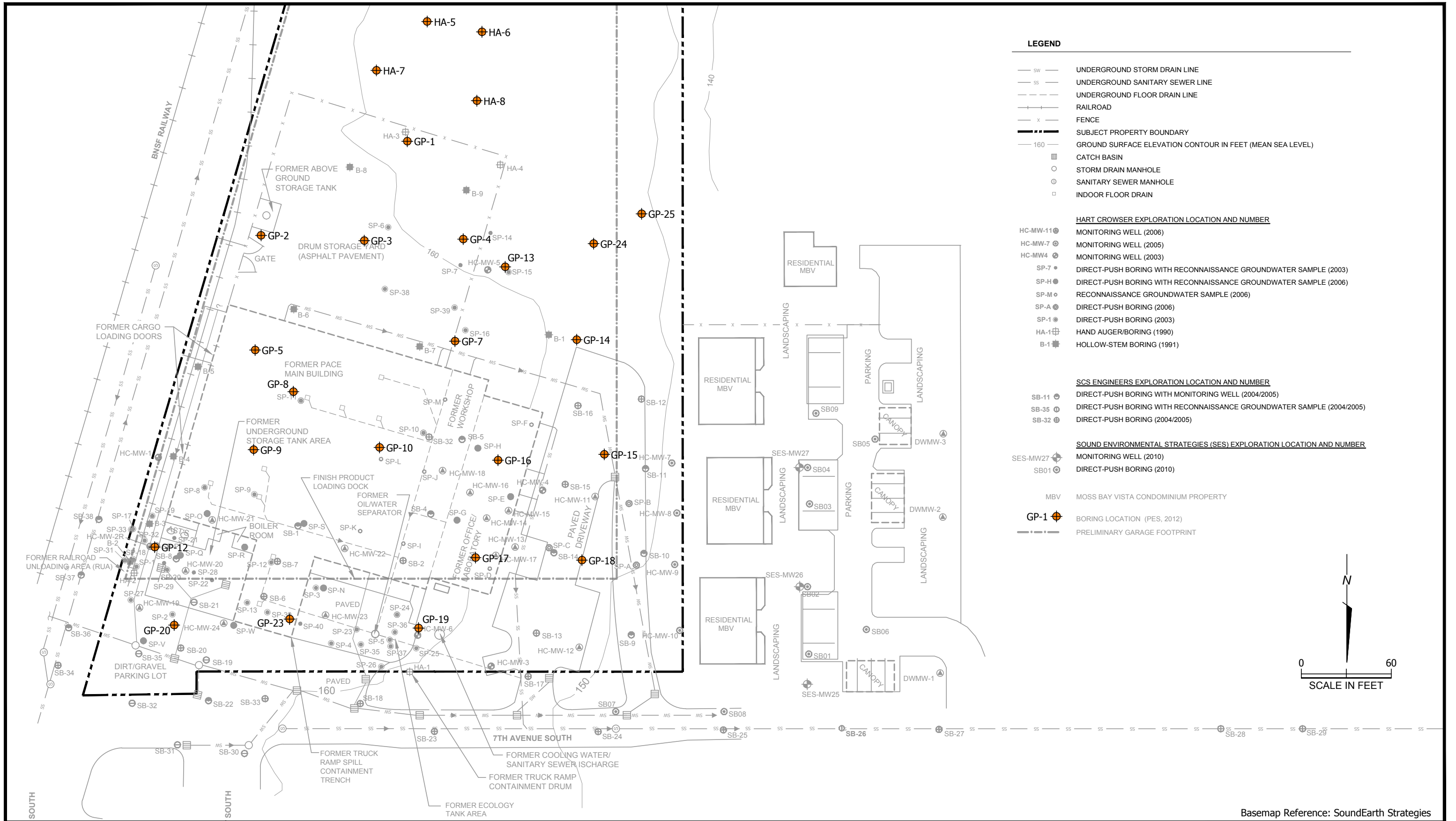
- Attachments:
- Figure 1 – Site Location Map
  - Figure 2 – Soil Assessment Boring Locations
  - Figure 3 – Proposed Excavation Areas and Cross-Section Location
  - Figure 4 – Cross-Section A-A'
  - Table 1 – Summary of Analytical Results – Total Petroleum Hydrocarbons
  - Table 2 – Summary of Analytical Results – Detected VOCs
  - Table 3 – Summary of Analytical Results – Organochlorine Pesticides
  - Attachment A – Soil Boring Logs
  - Attachment B – Laboratory Analytical Reports and Data Validation Memoranda

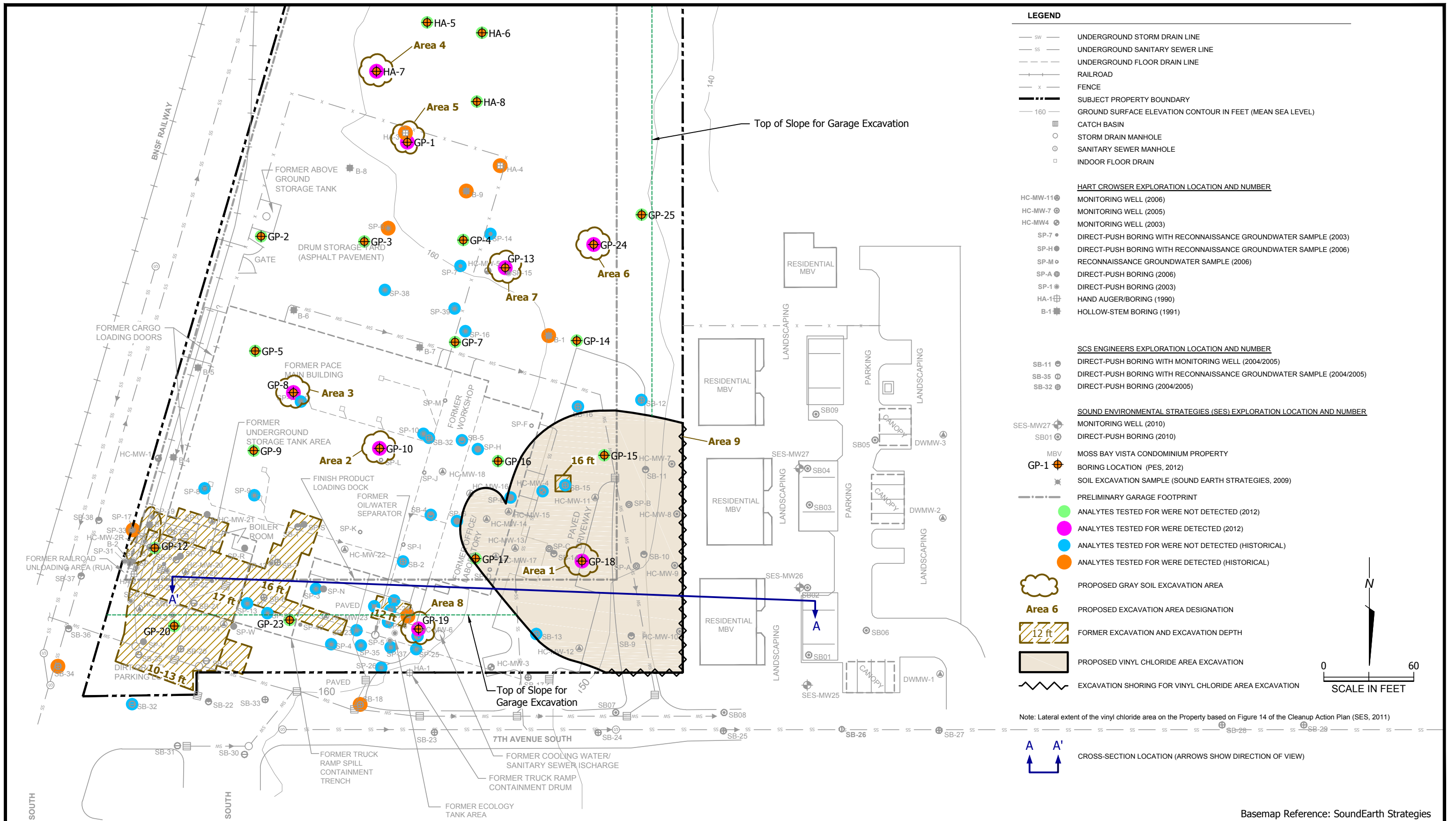


**PES Environmental, Inc.**  
Engineering & Environmental Services

**Site Location Map**  
Former Pace National Property  
500 7th Avenue South  
Kirkland, Washington

FIGURE  
**1**





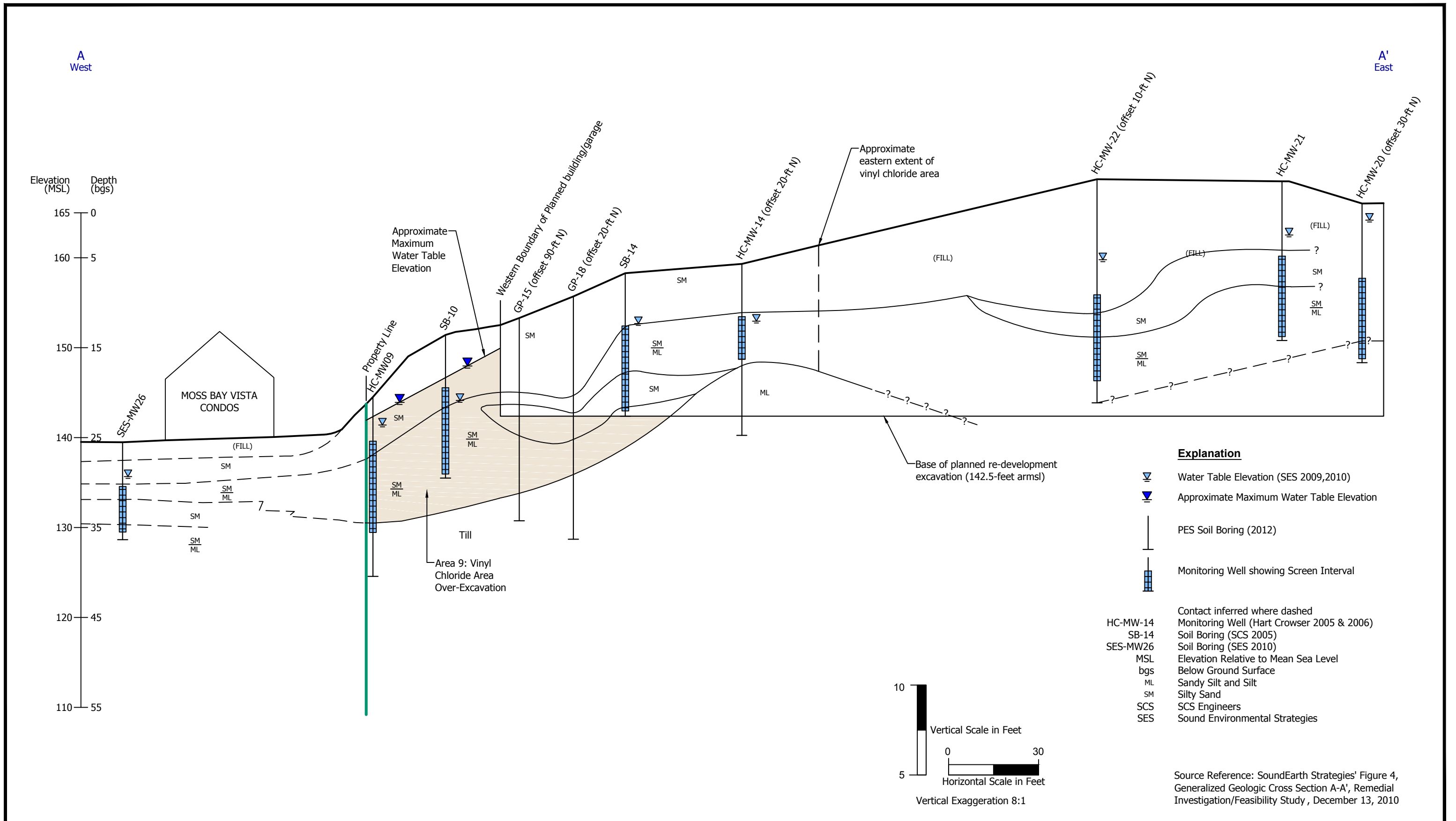


Table 1

**Summary of Soil Analytical Results - Total Petroleum Hydrocarbons  
Former Pace National Property  
500 7th Avenue South, Kirkland, WA**

Boring ID	Sample ID	Sample Date	Depth (ft bgs)	Estimated Elevation (ft amsl)	GRO (mg/kg)	Gasoline (mg/kg)	DRO (mg/kg)	Fuel Oil (mg/kg)	HO (mg/kg)
GP-1	GP-1-1	08/17/12	1	157	5.49 U	5.49 U	23.2 U	23.2 U	57.9 U
	GP-1-7.5	08/17/12	7.5	150.5	NA	NA	NA	NA	NA
	GP-1-17.5	08/17/12	17.5	140.5	4.99 U	4.99 U	23.6 U	23.6 U	58.9 U
GP-2	GP-2-6.5	08/17/12	6.5	159.5	5.79 U	5.79 U	21.6 U	21.6 U	53.9 U
	GP-2-14	08/17/12	14	152	5.81 U	5.81 U	23.8 U	23.8 U	59.6 U
GP-3	GP-3-6.5	08/17/12	6.5	159.5	4.69 U	4.69 U	23.1 U	23.1 U	57.8 U
	GP-3-19	08/17/12	19	147	5.82 U	5.82 U	23.6 U	23.6 U	58.9 U
GP-4	GP-4-8	08/14/12	8	150	5.06 U	5.06 U	21.5 U	21.5 U	53.8 U
	GP-4-18	08/14/12	18	140	6.58 U	6.58 U	18.9 U	18.9 U	47.2 U
GP-5	GP-5-7	08/17/12	7	158	4.38 U	4.38 U	20.9 U	20.9 U	52.3 U
	GP-5-18	08/17/12	18	147	9.34 U	9.34 U	22.9 U	22.9 U	57.2 U
GP-7	GP-7-3	08/13/12	3	162	5.32 U	5.32 U	19.6 U	19.6 U	49.0 U
	GP-7-12.5	08/13/12	12.5	152.5	7.26 U	7.26 U	23.8 U	23.8 U	59.6 U
	GP-7-22.5	08/13/12	22.5	142.5	7.09 U	7.09 U	23.9 U	23.9 U	59.7 U
GP-8	GP-8-7	08/17/12	7	162	NA	NA	NA	NA	NA
	GP-8-10	08/17/12	10	159	5.58 U	5.58 U	21.3 U	21.3 U	53.2 U
	GP-8-15	08/17/12	15	154	NA	NA	NA	NA	NA
	GP-8-24	08/17/12	24	145	4.38 U	4.38 U	23.7 U	23.7 U	59.3 U
GP-9	GP-9-4.5	08/15/12	4.5	164.5	6.29 U	6.29 U	21.2 U	21.2 U	52.9 U
	GP-9-13	08/15/12	13	156	5.30 U	5.30 U	19.6 U	19.6 U	49.0 U
	GP-9-24	08/15/12	24	145	5.65 U	5.65 U	24.4 U	24.4 U	60.9 U
GP-10	GP-10-2.5	08/17/12	2.5	166.5	4.05 UJ	4.05 UJ	18.7 U	18.7 U	46.7 U
	GP-10-14.5	08/17/12	14.5	154.5	<b>6,070</b>	4.44 U	21.1 U	<b>5,890</b>	52.7 U
	GP-10-22	08/17/12	22	147	4.57 U	4.57 U	22.1 U	22.1 U	55.2 U
GP-12	GP-12-3	08/15/12	3	162	6.33 U	6.33 U	17.3 U	17.3 U	43.2 U
	GP-12-11.5	08/15/12	11.5	153.5	4.74 U	4.74 U	20.2 U	20.2 U	50.5 U
	GP-12-20	08/15/12	20	145	4.83 U	4.83 U	23.5 U	23.5 U	58.7 U
GP-13	GP-13-6	08/14/12	6	152	<b>851</b>	6.73 U	24.9 U	<b>13,000</b>	62.3 U
	GP-13-9.5	08/14/12	9.5	148.5	4.29 U	4.29 U	21.2 U	21.2 U	53.1 U
	GP-13-12	08/14/12	12	146	6.41 U	6.41 U	22.5 U	22.5 U	56.3 U
	GP-13-23	08/14/12	23	135	6.66 U	6.66 U	22.5 U	22.5 U	56.3 U
GP-14	GP-14-3	08/17/12	3	153	5.09 U	5.09 U	20.2 U	20.2 U	50.6 U
	GP-14-12.5	08/17/12	12.5	143.5	5.77 U	5.77 U	22.3 U	22.3 U	55.8 U
GP-15	GP-15-3	08/13/12	3	153	5.63 U	5.63 U	19.6 U	19.6 U	49.1 U
	GP-15-11	08/13/12	11	145	5.72 U	5.72 U	20.8 U	20.8 U	51.9 U
	GP-15-23	08/13/12	23	133	6.14 U	6.14 U	19.8 U	19.8 U	49.4 U
GP-16	GP-16-6	08/13/12	3	157	6.20 U	6.20 U	20.0 U	20.0 U	49.9 U
	GP-16-8.5	08/13/12	8.5	151.5	5.94 U	5.94 U	22.1 U	22.1 U	55.2 U
	GP-16-19	08/13/12	19	141	6.65 U	6.65 U	21.6 U	21.6 U	53.9 U

**Table 1**  
**Summary of Soil Analytical Results - Total Petroleum Hydrocarbons**  
**Former Pace National Property**  
**500 7th Avenue South, Kirkland, WA**

Boring ID	Sample ID	Sample Date	Depth (ft bgs)	Estimated Elevation (ft amsl)	GRO (mg/kg)	Gasoline (mg/kg)	DRO (mg/kg)	Fuel Oil (mg/kg)	HO (mg/kg)
GP-17	GP-17-6.5	08/13/12	6.5	153.5	6.14 U	6.14 U	18.7 U	18.7 U	46.8 U
	GP-17-19	08/13/12	19	141	7.92 U	7.92 U	22.7 U	22.7 U	56.7 U
	GP-17-28	08/13/12	28	132	6.76 U	6.76 U	22.0 U	22.0 U	55.1 U
GP-18	GP-18-6	08/13/12	6	152	5.92 U	5.92 U	<b>661</b>	25.4 U	<b>109</b>
	GP-18-12	08/13/12	12	146	NA	NA	23.6 U	23.6 U	<b>102</b>
	GP-18-18	08/13/12	18	140	4.99 U	4.99 U	21.8 U	21.8 U	54.6 U
	GP-18-27	08/13/12	27	131	5.16 U	5.16 U	24.0 U	24.0 U	59.9 U
GP-19	GP-19-1.5	08/15/12	1.5	163.5	7.44 U	7.44 U	<b>17.8</b>	17.1 U	42.8 U
	GP-19-9	08/15/12	9	156	4.58 U	4.58 U	17.9 U	17.9 U	44.7 U
	GP-19-20.5	08/15/12	20.5	144.5	5.53 U	5.53 U	24.5 U	24.5 U	61.3 U
GP-20	GP-20-11.5	08/15/12	11.5	152.5	5.77 U	5.77 U	23.9 U	23.9 U	59.8 U
	GP-20-23	08/15/12	23	141	6.05 U	6.05 U	24.3 U	24.3 U	60.7 U
GP-23	GP-23-7.5	08/15/12	7.5	157.5	5.82 U	5.82 U	21.9 U	21.9 U	54.7 U
	GP-23-16	08/15/12	16	149	5.38 U	5.38 U	23.2 U	23.2 U	58.0 U
GP-24	GP-24-0.5	08/14/12	0.5	157.5	5.92 U	5.92 U	20.4 U	20.4 U	<b>176</b>
	GP-24-5.5	08/14/12	5.5	152.5	NA	NA	22.8 U	22.8 U	56.9 U
	GP-24-11	08/14/12	11	147	7.50 U	7.50 U	21.4 U	21.4 U	53.5 U
GP-25	GP-25-3	08/14/12	3	155	5.81 U	5.81 U	21.6 U	21.6 U	53.9 U
	GP-25-12.5	08/14/12	12.5	145.5	7.47 U	7.47 U	21.4 U	21.4 U	53.4 U
HA-5	HA-5-2	08/14/12	2	NA	4.80 U	4.80 U	20.5 U	20.5 U	51.4 U
HA-6	HA-6-2	08/14/12	2	NA	6.21 U	6.21 U	19.6 U	19.6 U	49.0 U
HA-7	HA-7-2	08/14/12	2	NA	4.74 U	4.74 U	22.0 U	22.0 U	55.1 U
	HA-7-6	08/14/12	6	NA	NA	NA	NA	NA	NA
HA-8	HA-8-2	08/14/12	2	NA	6.00 U	6.00 U	17.8 U	17.8 U	44.6 U

Notes:

- 1) mg/kg = milligrams per kilogram or parts per million
- 2) U = not detected at or above the method reporting limit (MRL) shown
- 3) NA = Not analyzed
- 4) J = estimated value due to holding time exceedance
- 5) Detected results shown in **bold**
- 6) ft bgs = feet below ground surface
- 7) ft amsl = feet above mean sea level, using an estimated surface elevation
- 8) Gasoline Range Organics (GRO) analysis by Ecology Method NWTPH-Gx
- 9) Diesel Range Organics (DRO) and Heavy Oil (HO) analysis by Ecology Method NWTPH-Dx with silica gel cleanup





**Table 2**  
**Summary of Soil Analytical Results - Detected VOCs**  
**Former Pace National Property**  
**500 7th Avenue South, Kirkland, WA**

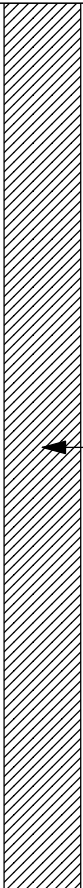

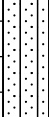



Boring ID	Sample ID	Sample Date	Depth (ft bgs)	Estimated Elevation (ft amsl)	cis-1,2-dichloroethene (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Iso-Propylbenzene (mg/kg)	n-Propylbenzene (mg/kg)	1,3,5-Trimethylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	4-Isopropyltoluene (mg/kg)	n-Butylbenzene (mg/kg)	1,2,4-Trimethylbenzene (mg/kg)	Naphthalene (mg/kg)
GP-19	GP-19-1.5	08/15/12	1.5	163.5	0.0297 U	0.0297 U	0.0297 U	0.0446 U	0.0297 U	0.119 U	0.0297 U	0.0297 U	0.0297 U	0.0297 U	0.0297 U	0.0297 U	0.0446 U
	GP-19-9	08/15/12	9	156	0.0183 U	0.0183 U	0.0183 U	0.0275 U	0.0183 U	0.0733 U	0.0183 U	0.0183 U	0.0183 U	0.0183 U	0.0183 U	0.0183 U	0.0275 U
	GP-19-20.5	08/15/12	20.5	144.5	0.0221 U	0.0221 U	0.0221 U	0.0332 U	0.0221 U	0.0884 U	0.0221 U	0.0221 U	0.0221 U	0.0221 U	0.0221 U	0.0221 U	0.0332 U
GP-20	GP-20-11.5	08/15/12	11.5	152.5	0.0231 U	0.0231 U	0.0231 U	0.0346 U	0.0231 U	0.0923 U	0.0231 U	0.0231 U	0.0231 U	0.0231 U	0.0231 U	0.0231 U	0.0346 U
	GP-20-23	08/15/12	23	141	0.0242 U	0.0242 U	0.0242 U	0.0363 U	0.0242 U	0.0968 U	0.0242 U	0.0242 U	0.0242 U	0.0242 U	0.0242 U	0.0242 U	0.0363 U
GP-23	GP-23-7.5	08/15/12	7.5	157.5	0.0233 U	0.0233 U	0.0233 U	0.0349 U	0.0233 U	0.0932 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0349 U
	GP-23-16	08/15/12	16	149	0.0215 U	0.0215 U	0.0215 U	0.0323 U	0.0215 U	0.0861 U	0.0215 U	0.0215 U	0.0215 U	0.0215 U	0.0215 U	0.0215 U	0.0323 U
GP-24	GP-24-0.5	08/14/12	0.5	157.5	0.0237 U	0.0237 U	0.0237 U	0.0355 U	0.0237 U	0.0355 U	0.0237 U	0.0237 U	0.0237 U	0.0237 U	0.0237 U	0.0237 U	0.0355 U
	GP-24-5.5	08/14/12	5.5	152.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-24-11	08/14/12	11	147	0.0300 U	0.0300 U	0.0300 U	0.0450 U	0.0300 U	0.0450 U	0.0300 U	0.0300 U	0.0300 U	0.0300 U	0.0300 U	0.0300 U	0.0450 U
GP-25	GP-25-3	08/14/12	3	155	0.0233 U	0.0233 U	0.0233 U	0.0349 U	0.0233 U	0.0930 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0349 U
	GP-25-12.5	08/14/12	12.5	145.5	0.0299 U	0.0299 U	0.0299 U	0.0448 U	0.0299 U	0.120 U	0.0299 U	0.0299 U	0.0299 U	0.0299 U	0.0299 U	0.0299 U	0.0448 U
HA-5	HA-5-2	08/14/12	2	NA	0.0192 U	0.0192 U	0.0192 U	0.0288 U	0.0192 U	0.0767 U	0.0192 U	0.0192 U	0.0192 U	0.0192 U	0.0192 U	0.0192 U	0.0288 U
HA-6	HA-6-2	08/14/12	2	NA	0.0248 U	0.0248 U	0.0248 U	0.0372 U	0.0248 U	0.0993 U	0.0248 U	0.0248 U	0.0248 U	0.0248 U	0.0248 U	0.0248 U	0.0372 U
HA-7	HA-7-2	08/14/12	2	NA	0.0190 U	0.0190 U	0.0190 U	0.0285 U	<b>0.0190</b>	0.0285 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0285 U
	HA-7-6	08/14/12	6	NA	NA	0.0188 U	0.0188 U	0.0282 U	0.0188 U	NA	NA	NA	NA	NA	NA	NA	NA
HA-8	HA-8-2	08/14/12	2	NA	0.0240 U	0.0240 U	0.0240 U	0.0360 U	0.0240 U	0.0960 U	0.0240 U	0.0240 U	0.0240 U	0.0240 U	0.0240 U	0.0240 U	0.0360 U

- Notes:
- 1) mg/kg = milligrams per kilogram or parts per million
  - 2) U = not detected at or above the method reporting limit shown.
  - 3) NA = Not analyzed
  - 4) Detected results shown in **bold**
  - 5) ft bgs = feet below ground surface.
  - 6) ft amsl = feet above mean sea level, using an estimated surface elevation
  - 7) Volatile Organic Compound (VOC) analysis by EPA Method 8260B.
  - 8) Detected VOCs are summarized in this table; see laboratory analytical reports for entire VOC analytical results

**Table 3**  
**Summary of Soil Analytical Results - Organochlorine Pesticides**  
**Former Pace National Property**  
**500 7th Avenue South, Kirkland, WA**

Boring ID	Sample ID	Sample Date	Depth (ft bgs)	Estimated Elevation (ft amsl)	alpha-chlordane (mg/kg)	gamma-chlordane (mg/kg)
GP-19	GP-19-1.5	08/15/12	1.5	163.5	<b>0.0164</b>	<b>0.0242</b>
	GP-19-9	08/15/12	9	156	0.00933 U	0.00933 U
Notes: 1) mg/kg = milligrams per kilogram or parts per million 2) U = not detected at or above the method reporting limit (MRL) shown 3) Detected results shown in <b>bold</b> 4) ft bgs = feet below ground surface 5) ft amsl = feet above mean sea level, using an estimated surface elevation 6) Organochlorine pesticide analysis by USEPA Method 8081. 7) Detected organochlorine pesticide results are summarized in this table; see the laboratory analytical report for the entire analytical results						

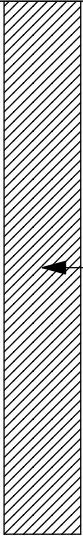








Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	GP-1-1	0.0			0		ASPHALT
		0.0		48			BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
		0.0			5		@ 6 feet: wet, 6-inch interbed of abundant organic material
	GP-1-7.5	0.0		60			BLUISH GRAY SILT WITH SAND (ML), moist, firm, little fine to coarse sand, low to medium plasticity
		0.0			10		@ 9.5 feet: tan and bluish gray
	GP-1-12.5	0.0		60			GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
		0.0			15		
	GP-1-17.5	0.0		60			
		0.0			20		
	GP-1-24	0.0		60		25	
	0.0				30		
	0.0				35		
	0.0				40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

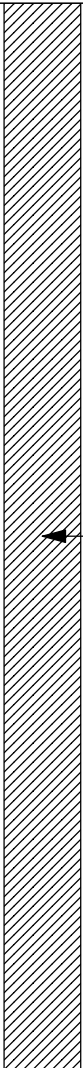



Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>					0		Asphalt Surface
	GP-2-2	0.0			60		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel @ 1.2 feet: 4-inch interbed of organic material
	GP-2-6.5	0.0			5		BLUISH GRAY SILT WITH SAND (ML), moist, firm, little fine to coarse sand, few organics, low to medium plasticity @ 3.5 feet: 4-inch interbed of organic material, piece of plastic sheet in organic material
	GP-2-11	0.0			10		GRAY SILTY SAND (SM), wet, fine, some fines
	GP-2-14	0.0			60		BLUISH GRAY SILT WITH SAND (ML), moist, firm, little fine to coarse sand, low to medium plasticity @ 7.5 feet: tan and bluish gray
					60		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity @ 10.2 feet: 8-inch interbed of silty sand
					15		Bottom of boring @ 15 feet.
					20		
					25		
					30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 15 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

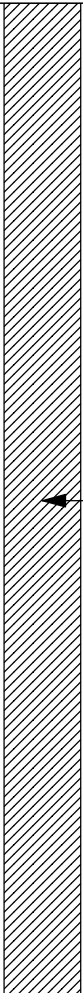


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>		0.0			0		ASPHALT, BROKEN ROCK, AND GRAVEL
	GP-3-2	0.0			60		BLUISH GRAY SILT WITH SAND (ML), moist, firm, little fine to coarse sand, few organics, low to medium plasticity
	GP-3-6.5	0.0			5		TANISH GRAY SILTY SAND (SM), moist, dense, fine, some fines
		0.0			60		@ 7 to 7.5 feet: grades to silt
	GP-3-13	0.0			10		TAN AND GRAY SILT (ML), moist, firm, few fine sand, medium plasticity @ 9.2 feet: bluish gray @ 10 feet: gray, dry, hard, trace fine sand
		0.0			15		
		0.0			60		
	GP-3-19	0.0			20		INTERBEDDED GRAY SILT (ML), moist, hard, trace fine sand, high plasticity AND GRAY SILTY SAND (SM), wet, dense, fine, some fines
	GP-3-22.5	0.0			60		
	GP-3-29	0.0			25		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
0.0				60			
					30		Bottom of boring @ 30 feet.
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 30 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

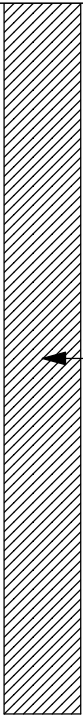


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>					0		ASPHALT, BROKEN ROCK	
	GP-4-3	0.0 0.0 0.0		60			GRAY SILT WITH SAND (ML), moist, hard, little fine to coarse sand, trace fine gravel @ 4 feet: 3-inch interbed of dark brown organic material	
	GP-4-8	0.0 0.0 0.0		60	5		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to coarse, little fines @ 5 feet: wet, gray, dense, some fines @ 7.5 feet: tanish gray, fine to medium, trace coarse sand, trace fine gravel	
	GP-4-13	0.0 0.0 0.0		60	10		BLUISH GRAY SILT (ML), moist, very hard, trace fine sand, high plasticity	
	GP-4-18	0.0 0.0 0.0		60	15		INTERBEDDED GRAY SILT (ML), moist, hard, trace fine sand, high plasticity AND GRAY SILTY SAND (SM), moist, dense, fine, some fines	
	GP-4-23	0.0 0.0 0.0		60	20		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity @ 24 feet: 4-inch interbed of gray silty sand	
	GP-4-27	0.0 0.0 0.0		36	25			
						30		Bottom of boring @ 28 feet.
						35		
						40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 28 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600



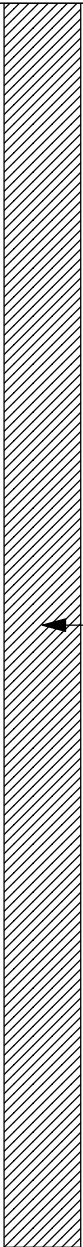
Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>					0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
	GP-5-3.5	0.0		54			@ 3.5 to 4 feet: grades to sand
		0.0				5	GRAYISH BROWN SAND (SP), moist, loose, fine to medium, few fines
	GP-5-7	0.0					@ 5 feet: 3-inch interbed of organic material
		0.0				60	TANISH GRAY SILT (ML), moist, firm, little fine to coarse sand
		0.0					@ 7.5 feet: few fine sand
		0.0					@ 8.5 feet: bluish gray
	GP-5-13	0.0				10	@ 10 to 16 feet: gray, very hard, high placticity, occasional interbeds of silty sand and thin discontinuous lenses of sand with silt
		0.0				15	
	GP-5-18	0.0				60	GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
	0.0				20		Bottom of boring @ 20 feet.
					25		
					30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 20 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600



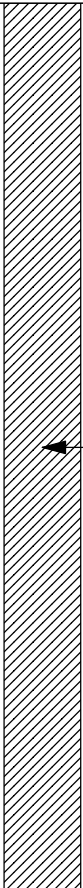


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>					0		ASPHALT, BROKEN ROCK	
	GP-7-3	0.0 0.0 0.0		60	0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel @ 3 feet: dark gray, fine to coarse, some fines @ 4 to 5.5 feet: few organic material @ 6.5 feet: wet	
	GP-7-7	0.0 0.0	1.0	60	5		GRAYISH BROWN SAND WITH SILT (SP), wet, loose, fine to medium, few fines	
		0.0 0.0				10		GRAY SANDY SILT (ML), wet, firm, some fine to coarse sand, low plasticity
	GP-7-12.5	0.0 0.0		60	10		GRAYISH BROWN SAND WITH SILT (SP), moist, loose, fine to medium, few fines	
		0.0 0.0				15		BROWN SILT (ML), dry to moist, hard, trace fine sand, iron oxide staining throughout @ 12.5 feet: gray
	GP-7-17.5	0.0 0.0		60	15		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity	
	GP-7-22.5	0.0 0.0		60	20			
	GP-7-27.5	0.0 0.0		60	25			
	GP-7-34	0.0 0.0		60	30			
					35		Bottom of boring @ 35 feet.	
					40			

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 35 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/13/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

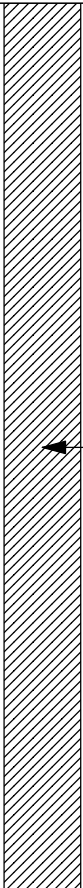







Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>	GP-8-2	0.0 0.0		60	0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel	
	GP-8-7	0.0 0.0		60	5		GRAYISH BROWN SAND (SP), moist, loose, fine to medium, few fines	
	GP-8-10	0.0 0.0		60	10		BROWN SILTY SAND (SM), wet, dense, fine, some fines, trace fine gravel	
	GP-8-15	0.0 0.0		60	15		TAN AND GRAY SILT (ML), moist, firm, few fine sand, medium plasticity	
	GP-8-24	0.0 0.0		60	20		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity	
			0.0 0.0		60		@ 20 to 25 feet: scattered thin discontinuous lenses of sand	
			0.0 0.0		60	25		Bottom of boring @ 25 feet (refusal).
			0.0 0.0		60	30		
			0.0 0.0		60	35		
			0.0 0.0		60	40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

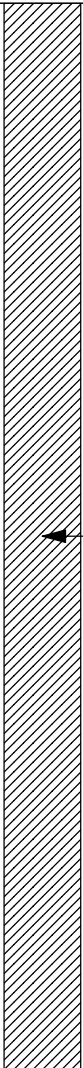








Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>	GP-9-4.5	0.0			0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel	
		0.0		54				
	GP-9-9	0.0				5		GRAYISH BROWN SAND WITH SILT (SP), wet, loose, fine to medium, few fines @ 6 feet: 2-inch interbed of organic material
		0.0		60				
	GP-9-13	0.0				10		TAN AND GRAY SILT (ML), moist, firm, few fine sand, medium plasticity
		0.0		60				
	GP-9-17	0.0				15		INTERBEDDED GRAY SILT (ML), moist, hard, trace fine sand, high plasticity AND GRAY SILTY SAND (SM), moist, dense, fine, some fines
0.0			60					
GP-9-24	0.0				20		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity	
	0.0		60					
		0.0			25		Bottom of boring @ 25 feet.	
		0.0			30			
		0.0			35			
		0.0			40			

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/15/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

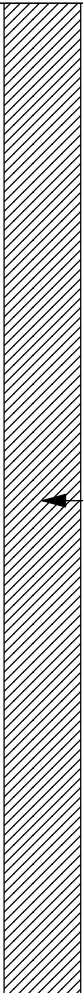



Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 Bentonite	GP-10-2.5	0.0			0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
		0.0			54		
	GP-10-14.5	0.0			5		GRAYISH BROWN SAND WITH SILT (SP), moist, loose, fine to medium, few fines @ 10. 3 feet: 4-inch interbed of organic material
		0.0			48		
	GP-10-18	0.3			10		BROWN SILTY SAND (SM), wet, dense, fine to medium, some fines
		0.6			60		
	GP-10-22	10.1			15		GRAY SAND WITH SILT (SP), wet, dense, fine to medium, strong hydrocarbon odor
		62.1			60		
	GP-10-25	65.1			15		GRAY SILT (ML), moist, hard, high plasticity, occasional interbeds of silty sand and thin discontinuous lenses of sand with silt
		32.1			60		
GP-10-29	15.1			20		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity	
	6.2			60			
		0.4					
		0.3					
		1.3					
		1.2					
		0.3					
		0.5					
		0.0			25		
		0.0			60		
		0.0			30		
		0.0					Bottom of boring @ 30 feet.

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 30 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

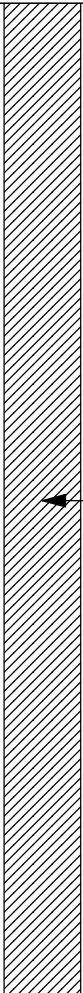


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>		0.0			0		GRAY SAND WITH SILT AND GRAVEL (SW), dry, loose, fine to coarse, few fines, little fine gravel
	GP-12-3	0.0		42			
		0.0			5		@ 5 to 7.5 feet: some gravel
	GP-12-7	1.2		30			@ 6.5 feet: wet
		0.0			10		@ 9 feet: medium to coarse sand, few fine to coarse gravel
	GP-12-11.5	0.0		48			GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
	GP-12-14	0.0		15			
		0.0			0		
	GP-12-20	0.0		20			
		0.0			60		
	0.0			25			@ 26 feet: 12-inch interbed of silty sand
	GP-12-27	0.0		36			
		0.0			30		Bottom of boring @ 28 feet.
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 28 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/15/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

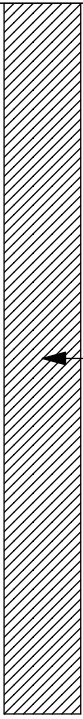


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>					0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
	GP-13-3	0.6 0.6 0.6		30			
					5		GRAY SANDY SILT (ML), moist, firm, some fine to coarse sand, trace fine gravel, few organics @ 5 feet: 6-inch interbed of black organic material, strong chemical odor, wet
	GP-13-6	24.3 63.7 22.8		60			@ 7 feet: bluish gray, very hard, little fine to coarse sand, trace fine gravel
	GP-13-9.5	17.9 2.8		10			@ 10 feet: grayish brown, soft, some fine to coarse sand
	GP-13-12	38.3 51.7		60			TANISH BROWN SILTY SAND (SM), wet, dense, some fines
		3.6 2.3		15			GRAY SILT WITH SAND (ML), dry, hard, little fine to coarse sand
	GP-13-15	1.9 1.3		60			@ 15 feet: trace fine sand
	GP-13-18	0.6 1.0		60			@ 17.5 feet: little fine to coarse sand
		0.5 0.5		20			@ 21 feet: 6-inch interbed of fine to coarse sand
	GP-13-23	0.1 0.1 0.0 0.0		60			GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
	GP-13-27.5	0.0 0.0 0.0		36			Bottom of boring @ 28 feet.

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 28 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access

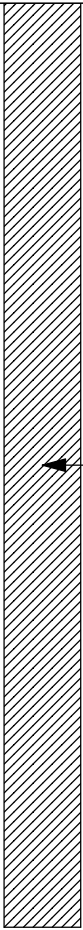


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>	GP-14-3	0.0	X	48	0	[Symbol: Dotted pattern]	BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel	
		0.0			5		@ 3 feet: 8-inch interbed of soft silt	
	GP-14-8	0.0	X	60	5	[Symbol: Horizontal lines]	@ 5 feet: wet	
		0.0			6		DARK BROWN ORGANIC MATERIAL	
	GP-14-12.5	0.0	X	60	10	[Symbol: Vertical lines]	BLUISH GRAY SILT (ML), moist, firm, few to little fine to medium sand, few organics, low to medium plasticity	
		0.0			11		@ 10 feet: tan and bluish gray	
	GP-14-19	0.0	X	60	15	[Symbol: Vertical lines]	GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity	
		0.0			20		Bottom of boring @ 20 feet.	
			0.0			25		
			0.0			30		
		0.0			35			
		0.0			40			

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 20 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/17/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600



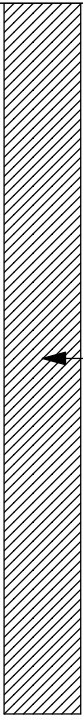
Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>					0		ASPHALT AND BROKEN ROCK
	GP-15-3	0.7		24			BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
		0.6			5		@ 5 feet: brown, abundant organics
	GP-15-7.5	0.8		60			GRAYISH BROWN SAND WITH SILT (SP), moist, loose, fine to medium, few fines, trace organics
		0.1			10		@ 10 feet: gray
	GP-15-11	1.2		60			GRAY SILTY SAND (SM), moist, dense, fine to medium, little fines, few fine gravel
		0.7			15		@ 13.5 feet: wet @ 15 to 16 feet: brown, iron oxide staining
		0.6			20		GRAY SILT (ML), moist, very hard, few fine sand, low plasticity
	GP-15-19	0.4		60			DARK GRAY SAND WITH SILT (SP), wet, dense, fine, few fines
		0.5			25		BROWN SILT (ML), moist, very hard, few fine sand, low plasticity @ 25 feet: gray
	0.4					Bottom of boring @ 26 feet.	
	GP-15-23	0.4		60			
		0.4					
	GP-15-26	0.4		12			
					30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 26 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/13/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600



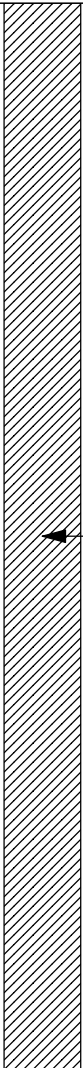


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	GP-16-3	0.6		24	0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
		0.0			5		GRAYISH BROWN SAND WITH SILT (SP), moist, loose, fine to medium, few fines
	GP-16-8.5	0.0		60			TANISH GRAY SANDY SILT (ML), moist, very hard, some fine to medium sand, iron oxide staining throughout
		0.3			10		
	GP-16-12.5	0.1		60			@ 12.5 feet: bluish gray
	GP-16-15	0.0			15		
	0.0			60			@ 17.5 feet: trace fine sand, medium plasticity
	GP-16-19	0.0		20			Bottom of boring @ 20 feet (refusal).
					25		
					30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 20 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/13/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

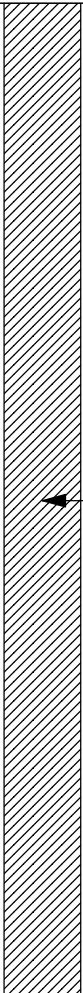








Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>					0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to coarse, little fines, trace fine gravel	
	GP-17-3	0.3 0.2 0.4		24			@ 4.5 feet: wet	
	GP-17-6.5	0.6 0.4		60	5		GRAYISH BROWN SAND WITH SILT (SP), wet, loose, fine to medium, few fines	
	GP-17-14.5	0.5 0.3 0.1 0.1 0.0 0.2 0.3		60	10		BROWNISH TAN SILT (ML), moist, very hard, few to little fine sand, medium plasticity	
	GP-17-19	0.2 0.3		60	15		BLUISH GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity	
	GP-17-23	0.2 0.2 0.3		60	20			
	GP-17-28	0.1 0.2 0.2		60	25			
		0.1 0.2		60	30			
								Bottom of boring @ 30 feet.
						35		
					40			

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 30 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/13/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

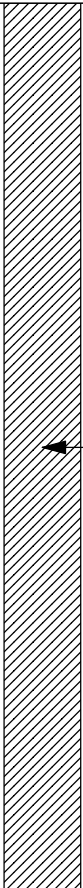


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	GP-18-3	0.2	30	60	0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to coarse, little fines, few fine gravel @ 1.5 feet: moist
		0.6			3		@ 4 feet: gray, dense, some fines, trace fine gravel, trace organic material
	GP-18-6	3.2	60	60	5		@ 8 feet: few fine to coarse gravel
		0.3			10		@ 11 feet: dark brown
	GP-18-12	0.2	60	60	15		GRAYISH BROWN SAND WITH SILT (SP), wet, loose, fine to medium, few fines
		1.8			15		GRAY SILTY SAND (SM), wet, dense, fine to medium, little fines
	GP-18-18	0.5	60	60	20		TAN SILT (ML), moist, hard, few fine sand, low plasticity
		0.3			20		BLUISH GRAY SAND WITH SILT (SP), wet, dense, fine, few fines, iron oxide staining
	GP-18-23	0.1	60	60	25		BLUISH GRAY SILT (ML), moist, very hard, few fine sand, non plastic
		0.1			25		
GP-18-27	0.1	36	36	30		Bottom of boring @ 28 feet.	
	0.1			30			

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 28 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/13/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

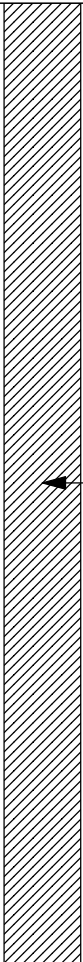


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	GP-19-1.5	3.2	35.1	48	0	[Symbol: Dotted pattern]	LIGHT BROWN SAND WITH SILT (SP), dry, loose, fine to medium, few fines, few fine to coarse gravel, trace organics
		10.1			5		
	GP-19-9	3.6	4.7	8.5	42	[Symbol: Vertical lines]	BROWNISH GRAY SILTY SAND (SM), dry, dense, fine to medium, little fines, few fine gravel  @ 9 feet: gray, moist @ 10 feet: dark brown, mostly organic material @ 11 feet: gray, dense, fine to coarse, some fines
		0.0			10		
		0.0			60		
	GP-19-12.5	0.0	0.1	0.0	60	[Symbol: Vertical lines]	BLUISH GRAY SILT (ML), moist, firm, few fine to coarse sand, trace fine gravel, low to medium plasticity
		0.0			15		
	GP-19-20	0.0	0.0	0.0	0	[Symbol: Vertical lines]	GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
		0.0			20		
	GP-19-24	0.0	0.0	0.0	60	[Symbol: Vertical lines]	Bottom of boring @ 25 feet (refusal).
0.0		25					
					30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/15/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access

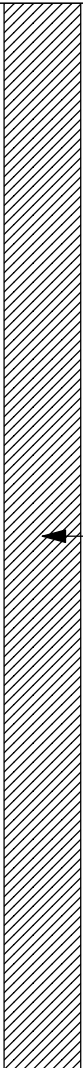


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>		0.0			0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
	GP-20-3	0.0		42			
		0.0			5		@ 4 feet: little fine to coarse gravel
	GP-20-7	0.0					
		0.0			60		GRAY SILT WITH SAND (ML), moist, firm, little fine to coarse sand, trace fine gravel, low plasticity
	GP-20-11.5	0.0			10		
		0.0			60		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
	GP-20-17	0.0			15		
		0.0			60		
	GP-20-23	0.0			20		
	0.0			60			
	0.0			25			
	0.0			24			Bottom of boring @ 27 feet (refusal).
		0.0			30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 27 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/15/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600

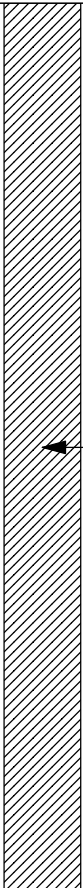


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	GP-23-3	0.0	X	54	0	[Symbol]	BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
		0.0			5		
	GP-23-7.5	0.0	X	48	5	[Symbol]	@ 7 feet: gray
		0.0			10		
	GP-23-11	0.0	X	60	10	[Symbol]	GRAY SILT WITH SAND (ML), moist, firm, little fine sand, trace coarse sand @ 10 to 11 feet: 12-inch interbed of silty sand @ 11 feet: tan, little fine sand, trace organic material @ 12 feet: bluish gray
		0.3			15		
	GP-23-16	0.0	X	60	15	[Symbol]	GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
		0.0			20		
	GP-23-23	0.0	X	60	20	[Symbol]	
		0.0			25		
GP-23-28	0.0	X	36	25	[Symbol]		
	0.0			30			
							Bottom of boring @ 30 feet.
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 30 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/15/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access

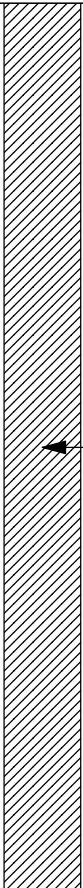


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	GP-24-0.5	0.0 0.1		54	0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel
		0.5 1.3					BROWN SILT WITH SAND (ML), wet, soft, little fine to medium sand, trace fine gravel
	GP-24-5.5	1.3			5		GRAYISH BROWN SILTY SAND (SM), wet, dense, fine to coarse, some fines
		0.0 0.0					
	GP-24-11	0.0			10		GRAY SILT WITH SAND (ML), wet, very hard, little fine to coarse sand, low plasticity
		0.1 0.1					
		0.1				15	
	GP-24-17	0.1			60		GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
		0.0 0.0					
	GP-24-23	0.0			60	20	
	0.0 0.0						
		0.0			25		Bottom of boring @ 25 feet.
					30		
					35		
					40		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access



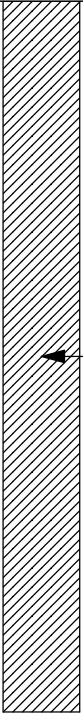
Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description	
 <p>Bentonite</p>					0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, few fine gravel	
	GP-25-3	0.0		54				
		0.0				5		GRAYISH BROWN SILT (ML), moist, firm, few to little fine to medium sand, iron oxide staining throughout
	GP-25-8	0.0		60				
		0.0				10		
	GP-25-12.5	0.0		60				GRAY ELASTIC SILT (MH), moist, very hard, trace fine sand, high plasticity
		0.1			15			
		0.0			20			
	GP-25-18	0.0		60				
		0.0			25			
	GP-25-24	0.0		60				
		0.0			30			
		0.0			35			
		0.0			40			
							Bottom of boring @ 25 feet.	

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe 6600



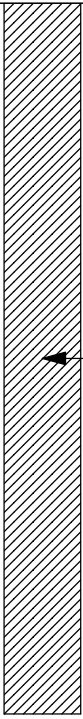


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	HA-5-2	0.0			0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little to some fines, trace fine gravel
		0.0			60		
	HA-5-6	0.0			5		@ 5.5 feet: wet
	HA-5-9	0.0			60		BLUISH GRAY SILT (ML), moist, firm, few fine sand, medium plasticity
		0.0			10		Bottom of boring @ 10 feet.
		0.0			15		
		0.0			20		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 10 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access

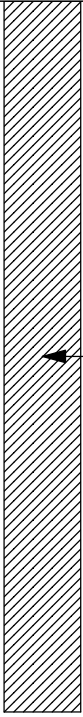


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	HA-6-2	0.0			0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to medium, little fines, trace fine gravel
		0.1			60		@ 3.5 feet: some fines, iron oxide staining throughout
		0.0					@ 5 feet: wet
	HA-6-6	0.0			5		
		0.0					
		0.0			60		
	HA-6-9	0.1					BLUISH GRAY SILT (ML), moist, firm, few fine sand, medium plasticity
		0.0			10		Bottom of boring @ 10 feet.
					15		
					20		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 10 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access

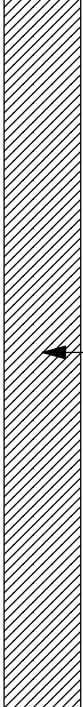


Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	HA-7-2	0.0			0		BROWNISH GRAY SILTY SAND (SM), dry, loose, fine to coarse, some fines, trace fine gravel, few organic material
		0.0					@ 2.5 feet: 12-inch interbed of moist, bluish gray silt
		0.0			60		@ 3.5 feet: moist
		0.0					@ 4.2 feet: 10-inch interbed of sand with silt
	HA-7-6	0.0			5		
	HA-7-9	0.0			60		BLUISH GRAY SILT (ML), moist, hard, trace fine sand, medium plasticity
		0.0			10		Bottom of boring @ 10 feet.
					15		
					20		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 10 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access



Completion Details	Soil Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
 <p>Bentonite</p>	HA-8-2	0.0			0		BROWNISH GRAY SILTY SAND (SM), moist, loose, fine to coarse, some fines, trace fine gravel, few organic material
		0.0			60		<p>@ 4 to 5 feet: abundant organic material</p> <p>@ 5 feet: gray, wet</p>
	HA-8-6	0.0			5		
	HA-8-9	0.1			60		
		0.0			10		Bottom of boring @ 10 feet.
		0.0			15		
		0.0			20		

Project: Former Pace National  
 Project Number: 1006.008.01  
 Site Location: Kirkland, Washington  
 Logged By: L. Doody  
 Sample Method: Five foot acetate liners

Total Boring Depth: 10 feet  
 Diameter of Boring: 2 inches  
 Date Drilled: 8/14/12  
 Drilled By: Cascade Drilling  
 Drill Method: Geoprobe Limited Access



1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**PES Environmental, Inc.**  
Kelly Rankich  
1215 Fourth Avenue, Suite 1350  
Seattle, Washington 98161

**RE: Former Pace Kirkland**  
**Lab ID: 1208075**

September 11, 2012

**Attention Kelly Rankich:**

Fremont Analytical, Inc. received 23 sample(s) on 8/13/2012 for the analyses presented in the following report.

***Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***  
***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Volatile Organic Compounds by EPA Method 8260***

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,

A handwritten signature in black ink, appearing to read "M. Dee".

Michael Dee  
Sr. Chemist / Principal



Date: 09/11/2012

**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland  
**Lab Order:** 1208075

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1208075-001	GP-18-3	08/13/2012 8:30 AM	08/13/2012 3:45 PM
1208075-002	GP-18-6	08/13/2012 8:50 AM	08/13/2012 3:45 PM
1208075-003	GP-18-12	08/13/2012 9:00 AM	08/13/2012 3:45 PM
1208075-004	GP-18-18	08/13/2012 9:10 AM	08/13/2012 3:45 PM
1208075-005	GP-18-23	08/13/2012 9:20 AM	08/13/2012 3:45 PM
1208075-006	GP-18-27	08/13/2012 9:30 AM	08/13/2012 3:45 PM
1208075-007	GP-15-3	08/13/2012 9:45 AM	08/13/2012 3:45 PM
1208075-008	GP-15-7.5	08/13/2012 10:00 AM	08/13/2012 3:45 PM
1208075-009	GP-15-11	08/13/2012 10:05 AM	08/13/2012 3:45 PM
1208075-010	GP-15-19	08/13/2012 10:15 AM	08/13/2012 3:45 PM
1208075-011	GP-15-23	08/13/2012 10:25 AM	08/13/2012 3:45 PM
1208075-012	GP-15-26	08/13/2012 10:30 AM	08/13/2012 3:45 PM
1208075-013	GP-17-3	08/13/2012 11:00 AM	08/13/2012 3:45 PM
1208075-014	GP-17-6.5	08/13/2012 11:05 AM	08/13/2012 3:45 PM
1208075-015	GP-17-14.5	08/13/2012 11:15 AM	08/13/2012 3:45 PM
1208075-016	GP-17-19	08/13/2012 11:30 AM	08/13/2012 3:45 PM
1208075-017	GP-17-23	08/13/2012 11:40 AM	08/13/2012 3:45 PM
1208075-018	GP-17-28	08/13/2012 11:45 AM	08/13/2012 3:45 PM
1208075-019	GP-16-3	08/13/2012 12:40 PM	08/13/2012 3:45 PM
1208075-020	GP-16-8.5	08/13/2012 12:45 PM	08/13/2012 3:45 PM
1208075-021	GP-16-12.5	08/13/2012 1:00 PM	08/13/2012 3:45 PM
1208075-022	GP-16-15	08/13/2012 1:10 PM	08/13/2012 3:45 PM
1208075-023	GP-16-19	08/13/2012 2:00 PM	08/13/2012 3:45 PM

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

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**CLIENT:** PES Environmental, Inc.**Project:** Former Pace Kirkland

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are 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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-002B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-004B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-006B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-007B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-009B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-011B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-014B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-016B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-018B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-019B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-020B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-023B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208075-003B) required Silica Gel Cleanup Procedure.

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

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## Case Narrative

WO#: 1208075

Date: 9/11/2012

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**CLIENT:** PES Environmental, Inc.

**Project:** Former Pace Kirkland

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GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).





# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 8:50:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-002

**Matrix:** Soil

**Client Sample ID:** GP-18-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	25.4		mg/Kg-dry	1	8/15/2012 6:56:00 PM
Diesel Range Organics (C12-C24)	661	25.4		mg/Kg-dry	1	8/15/2012 6:56:00 PM
Heavy Oil	109	63.6		mg/Kg-dry	1	8/15/2012 6:56:00 PM
Surr: 2-Fluorobiphenyl	126	50-150		%REC	1	8/15/2012 6:56:00 PM
Surr: o-Terphenyl	136	50-150		%REC	1	8/15/2012 6:56:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5384

Analyst: EM

Gasoline	ND	5.92		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Gasoline Range Organics C6-C12	ND	5.92		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Surr: 1,2-Dichloroethane-d4	94.5	65-135		%REC	1	8/17/2012 1:59:00 PM
Surr: Fluorobenzene	96.2	65-135		%REC	1	8/17/2012 1:59:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0711		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Chloromethane	ND	0.0711		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Vinyl chloride	ND	0.00237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Bromomethane	ND	0.107		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Chloroethane	ND	0.0711		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1-Dichloroethene	ND	0.0592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Methylene chloride	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
trans-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1-Dichloroethane	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
2,2-Dichloropropane	ND	0.0592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
cis-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Chloroform	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1-Dichloropropene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Carbon tetrachloride	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2-Dichloroethane (EDC)	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Benzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Trichloroethene (TCE)	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 8:50:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-002

**Matrix:** Soil

**Client Sample ID:** GP-18-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2-Dichloropropane	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Bromodichloromethane	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Dibromomethane	ND	0.0474		mg/Kg-dry	1	8/17/2012 1:59:00 PM
cis-1,3-Dichloropropene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Toluene	0.137	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
trans-1,3-Dichloropropylene	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1,2-Trichloroethane	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,3-Dichloropropane	ND	0.0592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Tetrachloroethene (PCE)	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Dibromochloromethane	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2-Dibromoethane (EDB)	ND	0.00592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Chlorobenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Ethylbenzene	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
m,p-Xylene	0.107	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
o-Xylene	0.0563	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Styrene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Isopropylbenzene	ND	0.0948		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Bromoform	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
n-Propylbenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Bromobenzene	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,3,5-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
2-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
4-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
tert-Butylbenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2,3-Trichloropropane	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2,4-Trichlorobenzene	ND	0.0592		mg/Kg-dry	1	8/17/2012 1:59:00 PM
sec-Butylbenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
4-Isopropyltoluene	0.0622	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,3-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,4-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
n-Butylbenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 8:50:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-002

**Matrix:** Soil

**Client Sample ID:** GP-18-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2,4-Trimethylbenzene	0.0652	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Hexachlorobutadiene	ND	0.118		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Naphthalene	0.0871	0.0355		mg/Kg-dry	1	8/17/2012 1:59:00 PM
1,2,3-Trichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/17/2012 1:59:00 PM
Surr: 1-Bromo-4-fluorobenzene	97.5	63.1-141		%REC	1	8/17/2012 1:59:00 PM
Surr: Dibromofluoromethane	87.9	67.6-119		%REC	1	8/17/2012 1:59:00 PM
Surr: Toluene-d8	99.5	78.5-126		%REC	1	8/17/2012 1:59:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	19.1			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:00:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-003

**Matrix:** Soil

**Client Sample ID:** GP-18-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3041

Analyst: BR

Diesel (Fuel Oil)	ND	23.6		mg/Kg-dry	1	8/27/2012 10:49:00 AM
Diesel Range Organics (C12-C24)	ND	23.6		mg/Kg-dry	1	8/27/2012 10:49:00 AM
Heavy Oil	102	59.0		mg/Kg-dry	1	8/27/2012 10:49:00 AM
Surr: 2-Fluorobiphenyl	133	50-150		%REC	1	8/27/2012 10:49:00 AM
Surr: o-Terphenyl	127	50-150		%REC	1	8/27/2012 10:49:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3048

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0664		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Chloromethane	ND	0.0664		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Vinyl chloride	ND	0.00221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Bromomethane	ND	0.0996		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Chloroethane	ND	0.0664		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1-Dichloroethene	ND	0.0554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Methylene chloride	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
trans-1,2-Dichloroethene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1-Dichloroethane	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
2,2-Dichloropropane	ND	0.0554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
cis-1,2-Dichloroethene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Chloroform	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1-Dichloropropene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Carbon tetrachloride	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2-Dichloroethane (EDC)	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Benzene	0.0426	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Trichloroethene (TCE)	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2-Dichloropropane	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Bromodichloromethane	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Dibromomethane	ND	0.0443		mg/Kg-dry	1	8/26/2012 7:44:00 AM
cis-1,3-Dichloropropene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Toluene	0.167	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
trans-1,3-Dichloropropylene	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1,2-Trichloroethane	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:00:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-003

**Matrix:** Soil

**Client Sample ID:** GP-18-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3048

Analyst: EM

1,3-Dichloropropane	ND	0.0554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Tetrachloroethene (PCE)	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Dibromochloromethane	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2-Dibromoethane (EDB)	ND	0.00554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Chlorobenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Ethylbenzene	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
m,p-Xylene	0.107	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
o-Xylene	0.0548	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Styrene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Isopropylbenzene	ND	0.0886		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Bromoform	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
n-Propylbenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Bromobenzene	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,3,5-Trimethylbenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
2-Chlorotoluene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
4-Chlorotoluene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
tert-Butylbenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2,3-Trichloropropane	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2,4-Trichlorobenzene	ND	0.0554		mg/Kg-dry	1	8/26/2012 7:44:00 AM
sec-Butylbenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
4-Isopropyltoluene	0.131	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,3-Dichlorobenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,4-Dichlorobenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
n-Butylbenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2-Dichlorobenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2,4-Trimethylbenzene	0.0731	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Hexachlorobutadiene	ND	0.111		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Naphthalene	0.0936	0.0332		mg/Kg-dry	1	8/26/2012 7:44:00 AM
1,2,3-Trichlorobenzene	ND	0.0221		mg/Kg-dry	1	8/26/2012 7:44:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	8/26/2012 7:44:00 AM
Surr: Dibromofluoromethane	99.5	67.6-119		%REC	1	8/26/2012 7:44:00 AM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/26/2012 7:44:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:00:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-003

**Matrix:** Soil

**Client Sample ID:** GP-18-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Sample Moisture (Percent Moisture)**

Batch ID: R5494

Analyst: AO

Percent Moisture	17.5			wt%	1	8/27/2012 9:35:43 AM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-004

**Matrix:** Soil

**Client Sample ID:** GP-18-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	21.8		mg/Kg-dry	1	8/15/2012 7:24:00 PM
Diesel Range Organics (C12-C24)	ND	21.8		mg/Kg-dry	1	8/15/2012 7:24:00 PM
Heavy Oil	ND	54.6		mg/Kg-dry	1	8/15/2012 7:24:00 PM
Surr: 2-Fluorobiphenyl	102	50-150		%REC	1	8/15/2012 7:24:00 PM
Surr: o-Terphenyl	107	50-150		%REC	1	8/15/2012 7:24:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5384

Analyst: EM

Gasoline	ND	4.99		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Gasoline Range Organics C6-C12	ND	4.99		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Surr: 1,2-Dichloroethane-d4	94.4	65-135		%REC	1	8/17/2012 2:34:00 PM
Surr: Fluorobenzene	92.7	65-135		%REC	1	8/17/2012 2:34:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2971

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0598		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Chloromethane	ND	0.0598		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Vinyl chloride	ND	0.00199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Bromomethane	ND	0.0897		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Chloroethane	ND	0.0598		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1-Dichloroethene	ND	0.0499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Methylene chloride	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
trans-1,2-Dichloroethene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1-Dichloroethane	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
2,2-Dichloropropane	ND	0.0499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
cis-1,2-Dichloroethene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Chloroform	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1-Dichloropropene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Carbon tetrachloride	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2-Dichloroethane (EDC)	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Benzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Trichloroethene (TCE)	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-004

**Matrix:** Soil

**Client Sample ID:** GP-18-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2971

Analyst: EM

1,2-Dichloropropane	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Bromodichloromethane	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Dibromomethane	ND	0.0399		mg/Kg-dry	1	8/17/2012 2:34:00 PM
cis-1,3-Dichloropropene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Toluene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
trans-1,3-Dichloropropylene	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1,2-Trichloroethane	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,3-Dichloropropane	ND	0.0499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Tetrachloroethene (PCE)	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Dibromochloromethane	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2-Dibromoethane (EDB)	ND	0.00499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Chlorobenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Ethylbenzene	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
m,p-Xylene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
o-Xylene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Styrene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Isopropylbenzene	ND	0.0798		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Bromoform	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
n-Propylbenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Bromobenzene	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,3,5-Trimethylbenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
2-Chlorotoluene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
4-Chlorotoluene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
tert-Butylbenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2,3-Trichloropropane	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2,4-Trichlorobenzene	ND	0.0499		mg/Kg-dry	1	8/17/2012 2:34:00 PM
sec-Butylbenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
4-Isopropyltoluene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,3-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,4-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
n-Butylbenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-004

**Matrix:** Soil

**Client Sample ID:** GP-18-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2971

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Hexachlorobutadiene	ND	0.0997		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Naphthalene	ND	0.0299		mg/Kg-dry	1	8/17/2012 2:34:00 PM
1,2,3-Trichlorobenzene	ND	0.0199		mg/Kg-dry	1	8/17/2012 2:34:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.2	63.1-141		%REC	1	8/17/2012 2:34:00 PM
Surr: Dibromofluoromethane	91.0	67.6-119		%REC	1	8/17/2012 2:34:00 PM
Surr: Toluene-d8	102	78.5-126		%REC	1	8/17/2012 2:34:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	17.2			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-006

**Matrix:** Soil

**Client Sample ID:** GP-18-27

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	24.0		mg/Kg-dry	1	8/15/2012 7:52:00 PM
Diesel Range Organics (C12-C24)	ND	24.0		mg/Kg-dry	1	8/15/2012 7:52:00 PM
Heavy Oil	ND	59.9		mg/Kg-dry	1	8/15/2012 7:52:00 PM
Surr: 2-Fluorobiphenyl	103	50-150		%REC	1	8/15/2012 7:52:00 PM
Surr: o-Terphenyl	103	50-150		%REC	1	8/15/2012 7:52:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5384

Analyst: EM

Gasoline	ND	5.16		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Gasoline Range Organics C6-C12	ND	5.16		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Surr: 1,2-Dichloroethane-d4	93.2	65-135		%REC	1	8/17/2012 3:10:00 PM
Surr: Fluorobenzene	93.3	65-135		%REC	1	8/17/2012 3:10:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0620		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Chloromethane	ND	0.0620		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Vinyl chloride	ND	0.00207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Bromomethane	ND	0.0929		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Chloroethane	ND	0.0620		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1-Dichloroethene	ND	0.0516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Methylene chloride	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
trans-1,2-Dichloroethene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1-Dichloroethane	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
2,2-Dichloropropane	ND	0.0516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
cis-1,2-Dichloroethene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Chloroform	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1-Dichloropropene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Carbon tetrachloride	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2-Dichloroethane (EDC)	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Benzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Trichloroethene (TCE)	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-006

**Matrix:** Soil

**Client Sample ID:** GP-18-27

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2-Dichloropropane	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Bromodichloromethane	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Dibromomethane	ND	0.0413		mg/Kg-dry	1	8/17/2012 3:10:00 PM
cis-1,3-Dichloropropene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Toluene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
trans-1,3-Dichloropropylene	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1,2-Trichloroethane	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,3-Dichloropropane	ND	0.0516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Tetrachloroethene (PCE)	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Dibromochloromethane	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2-Dibromoethane (EDB)	ND	0.00516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Chlorobenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Ethylbenzene	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
m,p-Xylene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
o-Xylene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Styrene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Isopropylbenzene	ND	0.0826		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Bromoform	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
n-Propylbenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Bromobenzene	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,3,5-Trimethylbenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
2-Chlorotoluene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
4-Chlorotoluene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
tert-Butylbenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2,3-Trichloropropane	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2,4-Trichlorobenzene	ND	0.0516		mg/Kg-dry	1	8/17/2012 3:10:00 PM
sec-Butylbenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
4-Isopropyltoluene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,3-Dichlorobenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,4-Dichlorobenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
n-Butylbenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2-Dichlorobenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-006

**Matrix:** Soil

**Client Sample ID:** GP-18-27

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Hexachlorobutadiene	ND	0.103		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Naphthalene	ND	0.0310		mg/Kg-dry	1	8/17/2012 3:10:00 PM
1,2,3-Trichlorobenzene	ND	0.0207		mg/Kg-dry	1	8/17/2012 3:10:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.9	63.1-141		%REC	1	8/17/2012 3:10:00 PM
Surr: Dibromofluoromethane	82.0	67.6-119		%REC	1	8/17/2012 3:10:00 PM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/17/2012 3:10:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	18.0			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-007

**Matrix:** Soil

**Client Sample ID:** GP-15-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	19.6		mg/Kg-dry	1	8/15/2012 8:20:00 PM
Diesel Range Organics (C12-C24)	ND	19.6		mg/Kg-dry	1	8/15/2012 8:20:00 PM
Heavy Oil	ND	49.1		mg/Kg-dry	1	8/15/2012 8:20:00 PM
Surr: 2-Fluorobiphenyl	99.0	50-150		%REC	1	8/15/2012 8:20:00 PM
Surr: o-Terphenyl	97.8	50-150		%REC	1	8/15/2012 8:20:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5384

Analyst: EM

Gasoline	ND	5.63		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Gasoline Range Organics C6-C12	ND	5.63		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Surr: 1,2-Dichloroethane-d4	97.9	65-135		%REC	1	8/17/2012 4:25:00 PM
Surr: Fluorobenzene	96.9	65-135		%REC	1	8/17/2012 4:25:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0675		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Chloromethane	ND	0.0675		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Vinyl chloride	ND	0.00225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Bromomethane	ND	0.101		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Chloroethane	ND	0.0675		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1-Dichloroethene	ND	0.0563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Methylene chloride	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
trans-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1-Dichloroethane	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
2,2-Dichloropropane	ND	0.0563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
cis-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Chloroform	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1-Dichloropropene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Carbon tetrachloride	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2-Dichloroethane (EDC)	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Benzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Trichloroethene (TCE)	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-007

**Matrix:** Soil

**Client Sample ID:** GP-15-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2-Dichloropropane	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Bromodichloromethane	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Dibromomethane	ND	0.0450		mg/Kg-dry	1	8/17/2012 4:25:00 PM
cis-1,3-Dichloropropene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Toluene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
trans-1,3-Dichloropropylene	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1,2-Trichloroethane	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,3-Dichloropropane	ND	0.0563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Tetrachloroethene (PCE)	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Dibromochloromethane	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2-Dibromoethane (EDB)	ND	0.00563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Chlorobenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Ethylbenzene	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
m,p-Xylene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
o-Xylene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Styrene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Isopropylbenzene	ND	0.0900		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Bromoform	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
n-Propylbenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Bromobenzene	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,3,5-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
2-Chlorotoluene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
4-Chlorotoluene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
tert-Butylbenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2,3-Trichloropropane	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2,4-Trichlorobenzene	ND	0.0563		mg/Kg-dry	1	8/17/2012 4:25:00 PM
sec-Butylbenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
4-Isopropyltoluene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,3-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,4-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
n-Butylbenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-007

**Matrix:** Soil

**Client Sample ID:** GP-15-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Hexachlorobutadiene	ND	0.113		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Naphthalene	ND	0.0338		mg/Kg-dry	1	8/17/2012 4:25:00 PM
1,2,3-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	8/17/2012 4:25:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	8/17/2012 4:25:00 PM
Surr: Dibromofluoromethane	82.5	67.6-119		%REC	1	8/17/2012 4:25:00 PM
Surr: Toluene-d8	101	78.5-126		%REC	1	8/17/2012 4:25:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	6.92			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 10:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-009

**Matrix:** Soil

**Client Sample ID:** GP-15-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	20.8		mg/Kg-dry	1	8/15/2012 9:16:00 PM
Diesel Range Organics (C12-C24)	ND	20.8		mg/Kg-dry	1	8/15/2012 9:16:00 PM
Heavy Oil	ND	51.9		mg/Kg-dry	1	8/15/2012 9:16:00 PM
Surr: 2-Fluorobiphenyl	101	50-150		%REC	1	8/15/2012 9:16:00 PM
Surr: o-Terphenyl	102	50-150		%REC	1	8/15/2012 9:16:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5384

Analyst: EM

Gasoline	ND	5.72		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Gasoline Range Organics C6-C12	ND	5.72		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Surr: 1,2-Dichloroethane-d4	95.8	65-135		%REC	1	8/17/2012 5:03:00 PM
Surr: Fluorobenzene	93.5	65-135		%REC	1	8/17/2012 5:03:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0686		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Chloromethane	ND	0.0686		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Vinyl chloride	ND	0.00229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Bromomethane	ND	0.103		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Chloroethane	ND	0.0686		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1-Dichloroethene	ND	0.0572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Methylene chloride	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
trans-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1-Dichloroethane	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
2,2-Dichloropropane	ND	0.0572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
cis-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Chloroform	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1-Dichloropropene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Carbon tetrachloride	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2-Dichloroethane (EDC)	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Benzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Trichloroethene (TCE)	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 10:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-009

**Matrix:** Soil

**Client Sample ID:** GP-15-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2-Dichloropropane	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Bromodichloromethane	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Dibromomethane	ND	0.0457		mg/Kg-dry	1	8/17/2012 5:03:00 PM
cis-1,3-Dichloropropene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Toluene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
trans-1,3-Dichloropropylene	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1,2-Trichloroethane	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,3-Dichloropropane	ND	0.0572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Tetrachloroethene (PCE)	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Dibromochloromethane	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2-Dibromoethane (EDB)	ND	0.00572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Chlorobenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Ethylbenzene	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
m,p-Xylene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
o-Xylene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Styrene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Isopropylbenzene	ND	0.0915		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Bromoform	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
n-Propylbenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Bromobenzene	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,3,5-Trimethylbenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
2-Chlorotoluene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
4-Chlorotoluene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
tert-Butylbenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2,3-Trichloropropane	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2,4-Trichlorobenzene	ND	0.0572		mg/Kg-dry	1	8/17/2012 5:03:00 PM
sec-Butylbenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
4-Isopropyltoluene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,3-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,4-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
n-Butylbenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 10:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-009

**Matrix:** Soil

**Client Sample ID:** GP-15-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Hexachlorobutadiene	ND	0.114		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Naphthalene	ND	0.0343		mg/Kg-dry	1	8/17/2012 5:03:00 PM
1,2,3-Trichlorobenzene	ND	0.0229		mg/Kg-dry	1	8/17/2012 5:03:00 PM
Surr: 1-Bromo-4-fluorobenzene	94.9	63.1-141		%REC	1	8/17/2012 5:03:00 PM
Surr: Dibromofluoromethane	86.0	67.6-119		%REC	1	8/17/2012 5:03:00 PM
Surr: Toluene-d8	99.0	78.5-126		%REC	1	8/17/2012 5:03:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	13.8			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 10:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-011

**Matrix:** Soil

**Client Sample ID:** GP-15-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	19.8		mg/Kg-dry	1	8/15/2012 9:44:00 PM
Diesel Range Organics (C12-C24)	ND	19.8		mg/Kg-dry	1	8/15/2012 9:44:00 PM
Heavy Oil	ND	49.4		mg/Kg-dry	1	8/15/2012 9:44:00 PM
Surr: 2-Fluorobiphenyl	96.7	50-150		%REC	1	8/15/2012 9:44:00 PM
Surr: o-Terphenyl	99.8	50-150		%REC	1	8/15/2012 9:44:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5384

Analyst: EM

Gasoline	ND	6.14		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Gasoline Range Organics C6-C12	ND	6.14		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Surr: 1,2-Dichloroethane-d4	95.3	65-135		%REC	1	8/17/2012 5:42:00 PM
Surr: Fluorobenzene	95.3	65-135		%REC	1	8/17/2012 5:42:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0737		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Chloromethane	ND	0.0737		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Vinyl chloride	ND	0.00246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Bromomethane	ND	0.111		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Chloroethane	ND	0.0737		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1-Dichloroethene	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Methylene chloride	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
trans-1,2-Dichloroethene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1-Dichloroethane	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
2,2-Dichloropropane	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
cis-1,2-Dichloroethene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Chloroform	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1-Dichloropropene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Carbon tetrachloride	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2-Dichloroethane (EDC)	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Benzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Trichloroethene (TCE)	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 10:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-011

**Matrix:** Soil

**Client Sample ID:** GP-15-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2-Dichloropropane	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Bromodichloromethane	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Dibromomethane	ND	0.0491		mg/Kg-dry	1	8/17/2012 5:42:00 PM
cis-1,3-Dichloropropene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Toluene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
trans-1,3-Dichloropropylene	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1,2-Trichloroethane	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,3-Dichloropropane	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Tetrachloroethene (PCE)	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Dibromochloromethane	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2-Dibromoethane (EDB)	ND	0.00614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Chlorobenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Ethylbenzene	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
m,p-Xylene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
o-Xylene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Styrene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Isopropylbenzene	ND	0.0983		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Bromoform	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
n-Propylbenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Bromobenzene	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,3,5-Trimethylbenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
2-Chlorotoluene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
4-Chlorotoluene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
tert-Butylbenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2,3-Trichloropropane	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2,4-Trichlorobenzene	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:42:00 PM
sec-Butylbenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
4-Isopropyltoluene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,3-Dichlorobenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,4-Dichlorobenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
n-Butylbenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2-Dichlorobenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 10:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-011

**Matrix:** Soil

**Client Sample ID:** GP-15-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2984

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Hexachlorobutadiene	ND	0.123		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Naphthalene	ND	0.0369		mg/Kg-dry	1	8/17/2012 5:42:00 PM
1,2,3-Trichlorobenzene	ND	0.0246		mg/Kg-dry	1	8/17/2012 5:42:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	8/17/2012 5:42:00 PM
Surr: Dibromofluoromethane	86.9	67.6-119		%REC	1	8/17/2012 5:42:00 PM
Surr: Toluene-d8	99.8	78.5-126		%REC	1	8/17/2012 5:42:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	19.4			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-014

**Matrix:** Soil

**Client Sample ID:** GP-17-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	18.7		mg/Kg-dry	1	8/15/2012 10:11:00 PM
Diesel Range Organics (C12-C24)	ND	18.7		mg/Kg-dry	1	8/15/2012 10:11:00 PM
Heavy Oil	ND	46.8		mg/Kg-dry	1	8/15/2012 10:11:00 PM
Surr: 2-Fluorobiphenyl	94.2	50-150		%REC	1	8/15/2012 10:11:00 PM
Surr: o-Terphenyl	95.8	50-150		%REC	1	8/15/2012 10:11:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.14		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Gasoline Range Organics C6-C12	ND	6.14		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Surr: 1,2-Dichloroethane-d4	81.8	65-135		%REC	1	8/17/2012 5:29:00 AM
Surr: Fluorobenzene	104	65-135		%REC	1	8/17/2012 5:29:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0736		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Chloromethane	ND	0.0736		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Vinyl chloride	ND	0.00245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Bromomethane	ND	0.110		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Chloroethane	ND	0.0736		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1-Dichloroethene	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Methylene chloride	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
trans-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1-Dichloroethane	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
2,2-Dichloropropane	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
cis-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Chloroform	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1-Dichloropropene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Carbon tetrachloride	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2-Dichloroethane (EDC)	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Benzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Trichloroethene (TCE)	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-014

**Matrix:** Soil

**Client Sample ID:** GP-17-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Bromodichloromethane	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Dibromomethane	ND	0.0491		mg/Kg-dry	1	8/17/2012 5:29:00 AM
cis-1,3-Dichloropropene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Toluene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
trans-1,3-Dichloropropylene	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1,2-Trichloroethane	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,3-Dichloropropane	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Tetrachloroethene (PCE)	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Dibromochloromethane	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2-Dibromoethane (EDB)	ND	0.00614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Chlorobenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Ethylbenzene	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
m,p-Xylene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
o-Xylene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Styrene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Isopropylbenzene	ND	0.0982		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Bromoform	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
n-Propylbenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Bromobenzene	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,3,5-Trimethylbenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
2-Chlorotoluene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
4-Chlorotoluene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
tert-Butylbenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2,3-Trichloropropane	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2,4-Trichlorobenzene	ND	0.0614		mg/Kg-dry	1	8/17/2012 5:29:00 AM
sec-Butylbenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
4-Isopropyltoluene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,3-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,4-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
n-Butylbenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-014

**Matrix:** Soil

**Client Sample ID:** GP-17-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Hexachlorobutadiene	ND	0.123		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Naphthalene	ND	0.0368		mg/Kg-dry	1	8/17/2012 5:29:00 AM
1,2,3-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	8/17/2012 5:29:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.8	63.1-141		%REC	1	8/17/2012 5:29:00 AM
Surr: Dibromofluoromethane	95.0	67.6-119		%REC	1	8/17/2012 5:29:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/17/2012 5:29:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	6.88			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-016

**Matrix:** Soil

**Client Sample ID:** GP-17-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	22.7		mg/Kg-dry	1	8/15/2012 10:39:00 PM
Diesel Range Organics (C12-C24)	ND	22.7		mg/Kg-dry	1	8/15/2012 10:39:00 PM
Heavy Oil	ND	56.7		mg/Kg-dry	1	8/15/2012 10:39:00 PM
Surr: 2-Fluorobiphenyl	91.8	50-150		%REC	1	8/15/2012 10:39:00 PM
Surr: o-Terphenyl	92.3	50-150		%REC	1	8/15/2012 10:39:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	7.92		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Gasoline Range Organics C6-C12	ND	7.92		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Surr: 1,2-Dichloroethane-d4	79.6	65-135		%REC	1	8/17/2012 6:01:00 AM
Surr: Fluorobenzene	104	65-135		%REC	1	8/17/2012 6:01:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0950		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Chloromethane	ND	0.0950		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Vinyl chloride	ND	0.00317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Bromomethane	ND	0.142		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Chloroethane	ND	0.0950		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1-Dichloroethene	ND	0.0792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Methylene chloride	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
trans-1,2-Dichloroethene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1-Dichloroethane	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
2,2-Dichloropropane	ND	0.0792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
cis-1,2-Dichloroethene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Chloroform	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1-Dichloropropene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Carbon tetrachloride	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2-Dichloroethane (EDC)	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Benzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Trichloroethene (TCE)	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-016

**Matrix:** Soil

**Client Sample ID:** GP-17-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Bromodichloromethane	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Dibromomethane	ND	0.0633		mg/Kg-dry	1	8/17/2012 6:01:00 AM
cis-1,3-Dichloropropene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Toluene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
trans-1,3-Dichloropropylene	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1,2-Trichloroethane	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,3-Dichloropropane	ND	0.0792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Tetrachloroethene (PCE)	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Dibromochloromethane	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2-Dibromoethane (EDB)	ND	0.00792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Chlorobenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Ethylbenzene	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
m,p-Xylene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
o-Xylene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Styrene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Isopropylbenzene	ND	0.127		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Bromoform	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
n-Propylbenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Bromobenzene	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,3,5-Trimethylbenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
2-Chlorotoluene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
4-Chlorotoluene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
tert-Butylbenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2,3-Trichloropropane	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2,4-Trichlorobenzene	ND	0.0792		mg/Kg-dry	1	8/17/2012 6:01:00 AM
sec-Butylbenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
4-Isopropyltoluene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,3-Dichlorobenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,4-Dichlorobenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
n-Butylbenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2-Dichlorobenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-016

**Matrix:** Soil

**Client Sample ID:** GP-17-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Hexachlorobutadiene	ND	0.158		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Naphthalene	ND	0.0475		mg/Kg-dry	1	8/17/2012 6:01:00 AM
1,2,3-Trichlorobenzene	ND	0.0317		mg/Kg-dry	1	8/17/2012 6:01:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	8/17/2012 6:01:00 AM
Surr: Dibromofluoromethane	94.3	67.6-119		%REC	1	8/17/2012 6:01:00 AM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/17/2012 6:01:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	18.9			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-018

**Matrix:** Soil

**Client Sample ID:** GP-17-28

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	22.0		mg/Kg-dry	1	8/15/2012 11:07:00 PM
Diesel Range Organics (C12-C24)	ND	22.0		mg/Kg-dry	1	8/15/2012 11:07:00 PM
Heavy Oil	ND	55.1		mg/Kg-dry	1	8/15/2012 11:07:00 PM
Surr: 2-Fluorobiphenyl	92.7	50-150		%REC	1	8/15/2012 11:07:00 PM
Surr: o-Terphenyl	93.4	50-150		%REC	1	8/15/2012 11:07:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.76		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Gasoline Range Organics C6-C12	ND	6.76		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Surr: 1,2-Dichloroethane-d4	81.4	65-135		%REC	1	8/17/2012 6:33:00 AM
Surr: Fluorobenzene	105	65-135		%REC	1	8/17/2012 6:33:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0812		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Chloromethane	ND	0.0812		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Vinyl chloride	ND	0.00271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Bromomethane	ND	0.122		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Chloroethane	ND	0.0812		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1-Dichloroethene	ND	0.0676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Methylene chloride	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
trans-1,2-Dichloroethene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1-Dichloroethane	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
2,2-Dichloropropane	ND	0.0676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
cis-1,2-Dichloroethene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Chloroform	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1-Dichloropropene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Carbon tetrachloride	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2-Dichloroethane (EDC)	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Benzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Trichloroethene (TCE)	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-018

**Matrix:** Soil

**Client Sample ID:** GP-17-28

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Bromodichloromethane	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Dibromomethane	ND	0.0541		mg/Kg-dry	1	8/17/2012 6:33:00 AM
cis-1,3-Dichloropropene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Toluene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
trans-1,3-Dichloropropylene	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1,2-Trichloroethane	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,3-Dichloropropane	ND	0.0676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Tetrachloroethene (PCE)	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Dibromochloromethane	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2-Dibromoethane (EDB)	ND	0.00676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Chlorobenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Ethylbenzene	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
m,p-Xylene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
o-Xylene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Styrene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Isopropylbenzene	ND	0.108		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Bromoform	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
n-Propylbenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Bromobenzene	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,3,5-Trimethylbenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
2-Chlorotoluene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
4-Chlorotoluene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
tert-Butylbenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2,3-Trichloropropane	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2,4-Trichlorobenzene	ND	0.0676		mg/Kg-dry	1	8/17/2012 6:33:00 AM
sec-Butylbenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
4-Isopropyltoluene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,3-Dichlorobenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,4-Dichlorobenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
n-Butylbenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2-Dichlorobenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 11:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-018

**Matrix:** Soil

**Client Sample ID:** GP-17-28

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Hexachlorobutadiene	ND	0.135		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Naphthalene	ND	0.0406		mg/Kg-dry	1	8/17/2012 6:33:00 AM
1,2,3-Trichlorobenzene	ND	0.0271		mg/Kg-dry	1	8/17/2012 6:33:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	8/17/2012 6:33:00 AM
Surr: Dibromofluoromethane	94.6	67.6-119		%REC	1	8/17/2012 6:33:00 AM
Surr: Toluene-d8	101	78.5-126		%REC	1	8/17/2012 6:33:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	21.9			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 12:40:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-019

**Matrix:** Soil

**Client Sample ID:** GP-16-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	20.0		mg/Kg-dry	1	8/15/2012 11:34:00 PM
Diesel Range Organics (C12-C24)	ND	20.0		mg/Kg-dry	1	8/15/2012 11:34:00 PM
Heavy Oil	ND	49.9		mg/Kg-dry	1	8/15/2012 11:34:00 PM
Surr: 2-Fluorobiphenyl	99.3	50-150		%REC	1	8/15/2012 11:34:00 PM
Surr: o-Terphenyl	100	50-150		%REC	1	8/15/2012 11:34:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.20		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Gasoline Range Organics C6-C12	ND	6.20		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Surr: 1,2-Dichloroethane-d4	76.5	65-135		%REC	1	8/17/2012 7:37:00 AM
Surr: Fluorobenzene	101	65-135		%REC	1	8/17/2012 7:37:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0744		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Chloromethane	ND	0.0744		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Vinyl chloride	ND	0.00248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Bromomethane	ND	0.112		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Chloroethane	ND	0.0744		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1-Dichloroethene	ND	0.0620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Methylene chloride	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
trans-1,2-Dichloroethene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1-Dichloroethane	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
2,2-Dichloropropane	ND	0.0620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
cis-1,2-Dichloroethene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Chloroform	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1-Dichloropropene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Carbon tetrachloride	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2-Dichloroethane (EDC)	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Benzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Trichloroethene (TCE)	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 12:40:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-019

**Matrix:** Soil

**Client Sample ID:** GP-16-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Bromodichloromethane	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Dibromomethane	ND	0.0496		mg/Kg-dry	1	8/17/2012 7:37:00 AM
cis-1,3-Dichloropropene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Toluene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
trans-1,3-Dichloropropylene	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1,2-Trichloroethane	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,3-Dichloropropane	ND	0.0620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Tetrachloroethene (PCE)	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Dibromochloromethane	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2-Dibromoethane (EDB)	ND	0.00620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Chlorobenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Ethylbenzene	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
m,p-Xylene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
o-Xylene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Styrene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Isopropylbenzene	ND	0.0991		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Bromoform	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
n-Propylbenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Bromobenzene	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,3,5-Trimethylbenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
2-Chlorotoluene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
4-Chlorotoluene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
tert-Butylbenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2,3-Trichloropropane	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2,4-Trichlorobenzene	ND	0.0620		mg/Kg-dry	1	8/17/2012 7:37:00 AM
sec-Butylbenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
4-Isopropyltoluene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,3-Dichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,4-Dichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
n-Butylbenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2-Dichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 12:40:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-019

**Matrix:** Soil

**Client Sample ID:** GP-16-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Hexachlorobutadiene	ND	0.124		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Naphthalene	ND	0.0372		mg/Kg-dry	1	8/17/2012 7:37:00 AM
1,2,3-Trichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/17/2012 7:37:00 AM
Surr: 1-Bromo-4-fluorobenzene	95.4	63.1-141		%REC	1	8/17/2012 7:37:00 AM
Surr: Dibromofluoromethane	93.6	67.6-119		%REC	1	8/17/2012 7:37:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/17/2012 7:37:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	6.94			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-020

**Matrix:** Soil

**Client Sample ID:** GP-16-8.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	22.1		mg/Kg-dry	1	8/16/2012 12:30:00 AM
Diesel Range Organics (C12-C24)	ND	22.1		mg/Kg-dry	1	8/16/2012 12:30:00 AM
Heavy Oil	ND	55.2		mg/Kg-dry	1	8/16/2012 12:30:00 AM
Surr: 2-Fluorobiphenyl	90.6	50-150		%REC	1	8/16/2012 12:30:00 AM
Surr: o-Terphenyl	91.2	50-150		%REC	1	8/16/2012 12:30:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	5.94		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Gasoline Range Organics C6-C12	ND	5.94		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Surr: 1,2-Dichloroethane-d4	79.0	65-135		%REC	1	8/17/2012 8:09:00 AM
Surr: Fluorobenzene	106	65-135		%REC	1	8/17/2012 8:09:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0713		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Chloromethane	ND	0.0713		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Vinyl chloride	ND	0.00238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Bromomethane	ND	0.107		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Chloroethane	ND	0.0713		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1-Dichloroethene	ND	0.0594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Methylene chloride	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
trans-1,2-Dichloroethene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1-Dichloroethane	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
2,2-Dichloropropane	ND	0.0594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
cis-1,2-Dichloroethene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Chloroform	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1-Dichloropropene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Carbon tetrachloride	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2-Dichloroethane (EDC)	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Benzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Trichloroethene (TCE)	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-020

**Matrix:** Soil

**Client Sample ID:** GP-16-8.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>						
					Batch ID: 2985	Analyst: EM
1,2-Dichloropropane	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Bromodichloromethane	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Dibromomethane	ND	0.0475		mg/Kg-dry	1	8/17/2012 8:09:00 AM
cis-1,3-Dichloropropene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Toluene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
trans-1,3-Dichloropropylene	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1,2-Trichloroethane	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,3-Dichloropropane	ND	0.0594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Tetrachloroethene (PCE)	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Dibromochloromethane	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2-Dibromoethane (EDB)	ND	0.00594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Chlorobenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Ethylbenzene	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
m,p-Xylene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
o-Xylene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Styrene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Isopropylbenzene	ND	0.0951		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Bromoform	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
n-Propylbenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Bromobenzene	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,3,5-Trimethylbenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
2-Chlorotoluene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
4-Chlorotoluene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
tert-Butylbenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2,3-Trichloropropane	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2,4-Trichlorobenzene	ND	0.0594		mg/Kg-dry	1	8/17/2012 8:09:00 AM
sec-Butylbenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
4-Isopropyltoluene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,3-Dichlorobenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,4-Dichlorobenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
n-Butylbenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2-Dichlorobenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-020

**Matrix:** Soil

**Client Sample ID:** GP-16-8.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Hexachlorobutadiene	ND	0.119		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Naphthalene	ND	0.0357		mg/Kg-dry	1	8/17/2012 8:09:00 AM
1,2,3-Trichlorobenzene	ND	0.0238		mg/Kg-dry	1	8/17/2012 8:09:00 AM
Surr: 1-Bromo-4-fluorobenzene	89.4	63.1-141		%REC	1	8/17/2012 8:09:00 AM
Surr: Dibromofluoromethane	92.6	67.6-119		%REC	1	8/17/2012 8:09:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	8/17/2012 8:09:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	18.6			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-023

**Matrix:** Soil

**Client Sample ID:** GP-16-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2968

Analyst: SG

Diesel (Fuel Oil)	ND	21.6		mg/Kg-dry	1	8/16/2012 12:57:00 AM
Diesel Range Organics (C12-C24)	ND	21.6		mg/Kg-dry	1	8/16/2012 12:57:00 AM
Heavy Oil	ND	53.9		mg/Kg-dry	1	8/16/2012 12:57:00 AM
Surr: 2-Fluorobiphenyl	91.8	50-150		%REC	1	8/16/2012 12:57:00 AM
Surr: o-Terphenyl	94.4	50-150		%REC	1	8/16/2012 12:57:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.65		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Gasoline Range Organics C6-C12	ND	6.65		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Surr: 1,2-Dichloroethane-d4	78.4	65-135		%REC	1	8/17/2012 8:41:00 AM
Surr: Fluorobenzene	104	65-135		%REC	1	8/17/2012 8:41:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0798		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Chloromethane	ND	0.0798		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Vinyl chloride	ND	0.00266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Bromomethane	ND	0.120		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Chloroethane	ND	0.0798		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1-Dichloroethene	ND	0.0665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Methylene chloride	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
trans-1,2-Dichloroethene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1-Dichloroethane	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
2,2-Dichloropropane	ND	0.0665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
cis-1,2-Dichloroethene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Chloroform	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1-Dichloropropene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Carbon tetrachloride	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2-Dichloroethane (EDC)	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Benzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Trichloroethene (TCE)	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-023

**Matrix:** Soil

**Client Sample ID:** GP-16-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Bromodichloromethane	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Dibromomethane	ND	0.0532		mg/Kg-dry	1	8/17/2012 8:41:00 AM
cis-1,3-Dichloropropene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Toluene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
trans-1,3-Dichloropropylene	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1,2-Trichloroethane	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,3-Dichloropropane	ND	0.0665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Tetrachloroethene (PCE)	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Dibromochloromethane	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2-Dibromoethane (EDB)	ND	0.00665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Chlorobenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Ethylbenzene	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
m,p-Xylene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
o-Xylene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Styrene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Isopropylbenzene	ND	0.106		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Bromoform	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
n-Propylbenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Bromobenzene	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,3,5-Trimethylbenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
2-Chlorotoluene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
4-Chlorotoluene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
tert-Butylbenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2,3-Trichloropropane	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2,4-Trichlorobenzene	ND	0.0665		mg/Kg-dry	1	8/17/2012 8:41:00 AM
sec-Butylbenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
4-Isopropyltoluene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,3-Dichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,4-Dichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
n-Butylbenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2-Dichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208075

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208075-023

**Matrix:** Soil

**Client Sample ID:** GP-16-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Hexachlorobutadiene	ND	0.133		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Naphthalene	ND	0.0399		mg/Kg-dry	1	8/17/2012 8:41:00 AM
1,2,3-Trichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/17/2012 8:41:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.4	63.1-141		%REC	1	8/17/2012 8:41:00 AM
Surr: Dibromofluoromethane	93.4	67.6-119		%REC	1	8/17/2012 8:41:00 AM
Surr: Toluene-d8	101	78.5-126		%REC	1	8/17/2012 8:41:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5324

Analyst: AO

Percent Moisture	17.1			wt%	1	8/15/2012 12:59:07 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>1208075-007BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/15/2012</b>	RunNo: <b>5337</b>							
Client ID: <b>GP-15-3</b>	Batch ID: <b>2968</b>	Analysis Date: <b>8/15/2012</b>	SeqNo: <b>104475</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	19.5						0	0	30	
Diesel Range Organics (C12-C24)	ND	19.5						0	0	30	
Heavy Oil	ND	48.7						0	0	30	
Surr: 2-Fluorobiphenyl	18.9		19.46		96.9	50	150		0		
Surr: o-Terphenyl	19.0		19.46		97.5	50	150		0		

Sample ID: <b>LCS-2968</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/15/2012</b>	RunNo: <b>5337</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2968</b>	Analysis Date: <b>8/15/2012</b>	SeqNo: <b>104487</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	580	20.0	500.0	0	116	65	135				
Surr: 2-Fluorobiphenyl	26.9		20.00		135	50	150				
Surr: o-Terphenyl	27.9		20.00		139	50	150				

Sample ID: <b>MB-2968</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/15/2012</b>	RunNo: <b>5337</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2968</b>	Analysis Date: <b>8/15/2012</b>	SeqNo: <b>104488</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	24.0		20.00		120	50	150				
Surr: o-Terphenyl	25.6		20.00		128	50	150				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits





**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>LCS-3041</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>107253</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	493	20.0	500.0	0	98.6	65	135				
Surr: 2-Fluorobiphenyl	25.9		20.00		129	50	150				
Surr: o-Terphenyl	25.4		20.00		127	50	150				

Sample ID: <b>MB-3041</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>107254</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	25.7		20.00		128	50	150				
Surr: o-Terphenyl	25.0		20.00		125	50	150				

Sample ID: <b>1208084-003BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/27/2012</b>	SeqNo: <b>108414</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	21.0						0	0	30	
Diesel Range Organics (C12-C24)	ND	21.0						0	0	30	
Heavy Oil	ND	52.6						0	0	30	
Surr: 2-Fluorobiphenyl	29.0		21.04		138	50	150		0		
Surr: o-Terphenyl	28.2		21.04		134	50	150		0		

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208075-018ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>GP-17-28</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105240</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	6.76						0	0	30	
Gasoline Range Organics C6-C12	ND	6.76						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.524		0.6764		77.4	65	135		0		
Surr: Fluorobenzene	0.672		0.6764		99.3	65	135		0		

Sample ID: <b>LCS-R5370</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105248</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	25.7	5.00	25.00	0	103	65	135				
Surr: 1,2-Dichloroethane-d4	0.440		0.5000		88.0	65	135				
Surr: Fluorobenzene	0.532		0.5000		106	65	135				

Sample ID: <b>MB-R5370</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105249</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.397		0.5000		79.4	65	135				
Surr: Fluorobenzene	0.520		0.5000		104	65	135				

Sample ID: <b>1208075-006ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5384</b>							
Client ID: <b>GP-18-27</b>	Batch ID: <b>R5384</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105407</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.16						0	0	30	
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**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208075-006ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5384</b>							
Client ID: <b>GP-18-27</b>	Batch ID: <b>R5384</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105407</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline Range Organics C6-C12	ND	5.16						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.494		0.5164		95.7	65	135		0		
Surr: Fluorobenzene	0.486		0.5164		94.2	65	135		0		

Sample ID: <b>LCS-R5384</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5384</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5384</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105412</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	27.4	5.00	25.00	0	110	65	135				
Surr: 1,2-Dichloroethane-d4	0.466		0.5000		93.2	65	135				
Surr: Fluorobenzene	0.491		0.5000		98.2	65	135				

Sample ID: <b>MB-R5384</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5384</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5384</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105413</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.477		0.5000		95.4	65	135				
Surr: Fluorobenzene	0.495		0.5000		99.0	65	135				

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105759</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	6.00						0	0	30	
Gasoline Range Organics C6-C12	ND	6.00						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>R5370</b>	Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105759</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 1,2-Dichloroethane-d4	0.609		0.6000		102	65	135		0		
Surr: Fluorobenzene	0.593		0.6000		98.8	65	135		0		

**Qualifiers:**
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
J Analyte detected below quantitation limits
ND Not detected at the Reporting Limit

R RPD outside accepted recovery limits
RL Reporting Limit
S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208093-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105195</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.974	0.0675	1.124	0	86.6	43.5	121				
Chloromethane	1.01	0.0675	1.124	0	89.7	45	130				
Vinyl chloride	0.837	0.00225	1.124	0	74.5	51.2	146				
Bromomethane	0.624	0.101	1.124	0	55.5	70	130				S
Trichlorofluoromethane (CFC-11)	0.574	0.0562	1.124	0	51.1	52.2	132				S
Chloroethane	0.691	0.0675	1.124	0	61.5	43.8	117				
1,1-Dichloroethene	1.09	0.0562	1.124	0	96.6	61.9	141				
Methylene chloride	0.675	0.0225	1.124	0.01237	59.0	54.7	142				
trans-1,2-Dichloroethene	1.21	0.0225	1.124	0	107	52	136				
Methyl tert-butyl ether (MTBE)	1.00	0.0562	1.124	0	89.1	54.4	132				
1,1-Dichloroethane	0.967	0.0225	1.124	0	86.0	51.8	141				
2,2-Dichloropropane	0.839	0.0562	1.124	0	74.6	36	123				
cis-1,2-Dichloroethene	1.09	0.0225	1.124	0	97.4	58.6	136				
Chloroform	1.02	0.0225	1.124	0	91.1	53.2	129				
1,1,1-Trichloroethane (TCA)	1.28	0.0225	1.124	0	114	58.3	145				
1,1-Dichloropropene	1.24	0.0225	1.124	0	110	55.1	138				
Carbon tetrachloride	1.21	0.0225	1.124	0	108	53.3	144				
1,2-Dichloroethane (EDC)	1.11	0.0337	1.124	0	98.5	51.3	139				
Benzene	1.13	0.0225	1.124	0	101	63.5	133				
Trichloroethene (TCE)	1.22	0.0337	1.124	0	109	68.6	132				
1,2-Dichloropropane	1.11	0.0225	1.124	0	99.0	59	136				
Bromodichloromethane	1.16	0.0225	1.124	0	103	50.7	141				
Dibromomethane	1.03	0.0450	1.124	0	91.8	50.6	137				
cis-1,3-Dichloropropene	1.11	0.0225	1.124	0	98.4	52.3	129				
Toluene	1.21	0.0225	1.124	0	108	67.8	129				
trans-1,3-Dichloropropylene	0.978	0.0337	1.124	0	87.0	52.2	138				
1,1,2-Trichloroethane	0.847	0.0337	1.124	0	75.4	51.6	137				
1,3-Dichloropropane	1.07	0.0562	1.124	0	94.9	53.1	134				
Tetrachloroethene (PCE)	1.17	0.0225	1.124	0	104	44.1	141				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208093-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105195</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	1.01	0.0337	1.124	0	89.4	55.3	140				
1,2-Dibromoethane (EDB)	0.963	0.00562	1.124	0	85.7	50.4	136				
Chlorobenzene	1.12	0.0225	1.124	0	100	60	133				
1,1,1,2-Tetrachloroethane	1.06	0.0337	1.124	0	94.5	53.1	142				
Ethylbenzene	1.11	0.0337	1.124	0	98.7	54.5	134				
m,p-Xylene	2.20	0.0225	2.248	0	97.8	53.1	132				
o-Xylene	1.10	0.0225	1.124	0	97.8	53.3	139				
Styrene	1.12	0.0225	1.124	0	99.2	51.1	132				
Isopropylbenzene	1.19	0.0899	1.124	0	106	58.9	138				
Bromoform	0.902	0.0225	1.124	0	80.3	57.9	130				
1,1,2,2-Tetrachloroethane	0.916	0.0225	1.124	0	81.5	51.9	131				
n-Propylbenzene	1.11	0.0225	1.124	0	98.8	53.6	140				
Bromobenzene	1.05	0.0337	1.124	0	93.8	54.2	140				
1,3,5-Trimethylbenzene	1.12	0.0225	1.124	0	99.8	51.8	136				
2-Chlorotoluene	1.06	0.0225	1.124	0	94.0	51.6	136				
4-Chlorotoluene	1.06	0.0225	1.124	0	94.1	50.1	139				
tert-Butylbenzene	1.19	0.0225	1.124	0	105	50.5	135				
1,2,3-Trichloropropane	0.840	0.0225	1.124	0	74.8	50.5	131				
1,2,4-Trichlorobenzene	0.960	0.0562	1.124	0	85.4	50.8	130				
sec-Butylbenzene	1.06	0.0225	1.124	0	94.3	52.6	141				
4-Isopropyltoluene	1.10	0.0225	1.124	0	97.9	52.9	134				
1,3-Dichlorobenzene	1.17	0.0225	1.124	0	104	52.6	131				
1,4-Dichlorobenzene	1.07	0.0225	1.124	0	95.1	52.9	129				
n-Butylbenzene	1.15	0.0225	1.124	0	103	52.6	130				
1,2-Dichlorobenzene	1.08	0.0225	1.124	0	96.2	55.8	129				
1,2-Dibromo-3-chloropropane	0.894	0.0337	1.124	0	79.5	53	129				
1,2,4-Trimethylbenzene	1.01	0.0225	1.124	0	90.0	50.6	137				
Hexachlorobutadiene	0.990	0.112	1.124	0	88.1	51.5	130				
Naphthalene	0.934	0.0337	1.124	0	83.1	52.3	124				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208093-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105195</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	0.865	0.0225	1.124	0	76.9	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.543		0.5621		96.6	63.1	141				
Surr: Dibromofluoromethane	0.485		0.5621		86.3	67.6	119				
Surr: Toluene-d8	0.575		0.5621		102	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Sample ID: <b>1208099-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105200</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0639						0	0	30	
Chloromethane	ND	0.0639						0	0	30	
Vinyl chloride	ND	0.00213						0	0	30	
Bromomethane	ND	0.0958						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0532						0	0	30	
Chloroethane	ND	0.0639						0	0	30	
1,1-Dichloroethene	ND	0.0532						0	0	30	
Methylene chloride	ND	0.0213						0	0	30	
trans-1,2-Dichloroethene	ND	0.0213						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0532						0	0	30	
1,1-Dichloroethane	ND	0.0213						0	0	30	
2,2-Dichloropropane	ND	0.0532						0	0	30	
cis-1,2-Dichloroethene	ND	0.0213						0	0	30	
Chloroform	ND	0.0213						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0213						0	0	30	
1,1-Dichloropropene	ND	0.0213						0	0	30	
Carbon tetrachloride	ND	0.0213						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0319						0	0	30	

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208099-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105200</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0213						0	0	30	
Trichloroethene (TCE)	ND	0.0319						0	0	30	
1,2-Dichloropropane	ND	0.0213						0	0	30	
Bromodichloromethane	ND	0.0213						0	0	30	
Dibromomethane	ND	0.0426						0	0	30	
cis-1,3-Dichloropropene	ND	0.0213						0	0	30	
Toluene	ND	0.0213						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0319						0	0	30	
1,1,2-Trichloroethane	ND	0.0319						0	0	30	
1,3-Dichloropropane	ND	0.0532						0	0	30	
Tetrachloroethene (PCE)	ND	0.0213						0	0	30	
Dibromochloromethane	ND	0.0319						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00532						0	0	30	
Chlorobenzene	ND	0.0213						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0319						0	0	30	
Ethylbenzene	ND	0.0319						0	0	30	
m,p-Xylene	ND	0.0213						0	0	30	
o-Xylene	ND	0.0213						0	0	30	
Styrene	ND	0.0213						0	0	30	
Isopropylbenzene	ND	0.0852						0	0	30	
Bromoform	ND	0.0213						0	0	30	
1,1,1,2,2-Tetrachloroethane	ND	0.0213						0	0	30	
n-Propylbenzene	ND	0.0213						0	0	30	
Bromobenzene	ND	0.0319						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0213						0	0	30	
2-Chlorotoluene	ND	0.0213						0	0	30	
4-Chlorotoluene	ND	0.0213						0	0	30	
tert-Butylbenzene	ND	0.0213						0	0	30	
1,2,3-Trichloropropane	ND	0.0213						0	0	30	

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208099-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105200</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,4-Trichlorobenzene	ND	0.0532						0	0	30	
sec-Butylbenzene	ND	0.0213						0	0	30	
4-Isopropyltoluene	ND	0.0213						0	0	30	
1,3-Dichlorobenzene	ND	0.0213						0	0	30	
1,4-Dichlorobenzene	ND	0.0213						0	0	30	
n-Butylbenzene	ND	0.0213						0	0	30	
1,2-Dichlorobenzene	ND	0.0213						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0319						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0213						0	0	30	
Hexachlorobutadiene	ND	0.106						0	0	30	
Naphthalene	ND	0.0319						0	0	30	
1,2,3-Trichlorobenzene	ND	0.0213						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.517		0.5323		97.1	63.1	141		0		
Surr: Dibromofluoromethane	0.491		0.5323		92.3	67.6	119		0		
Surr: Toluene-d8	0.539		0.5323		101	78.5	126		0		

Sample ID: <b>LCS-2984</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105202</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.730	0.0600	1.000	0	73.0	41.5	132				
Chloromethane	0.903	0.0600	1.000	0	90.3	52.3	129				
Vinyl chloride	0.938	0.00200	1.000	0	93.8	51.1	134				
Bromomethane	0.970	0.0900	1.000	0	97.0	54.6	148				
Trichlorofluoromethane (CFC-11)	0.888	0.0500	1.000	0	88.8	59.7	131				
Chloroethane	0.896	0.0600	1.000	0	89.6	53.9	135				
1,1-Dichloroethene	1.02	0.0500	1.000	0	102	58	139				
Methylene chloride	0.910	0.0200	1.000	0	91.0	58.7	141				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2984</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105202</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	0.990	0.0200	1.000	0	99.0	70	130				
Methyl tert-butyl ether (MTBE)	0.966	0.0500	1.000	0	96.6	70	130				
1,1-Dichloroethane	1.01	0.0200	1.000	0	101	67.6	127				
2,2-Dichloropropane	0.796	0.0500	1.000	0	79.6	40.1	133				
cis-1,2-Dichloroethene	0.987	0.0200	1.000	0	98.7	70	130				
Chloroform	0.991	0.0200	1.000	0	99.0	64	127				
1,1,1-Trichloroethane (TCA)	1.05	0.0200	1.000	0	105	68.9	132				
1,1-Dichloropropene	1.05	0.0200	1.000	0	105	70	130				
Carbon tetrachloride	1.03	0.0200	1.000	0	103	56.3	141				
1,2-Dichloroethane (EDC)	1.04	0.0300	1.000	0	104	69.4	131				
Benzene	0.976	0.0200	1.000	0	97.6	72.3	125				
Trichloroethene (TCE)	1.12	0.0300	1.000	0	112	73.5	130				
1,2-Dichloropropane	0.988	0.0200	1.000	0	98.8	70	130				
Bromodichloromethane	1.06	0.0200	1.000	0	106	70	130				
Dibromomethane	0.980	0.0400	1.000	0	98.0	70	130				
cis-1,3-Dichloropropene	1.03	0.0200	1.000	0	103	58.7	141				
Toluene	1.05	0.0200	1.000	0	105	73.6	126				
trans-1,3-Dichloropropylene	0.981	0.0300	1.000	0	98.1	55.3	142				
1,1,2-Trichloroethane	0.914	0.0300	1.000	0	91.4	70	130				
1,3-Dichloropropane	0.996	0.0500	1.000	0	99.6	70	130				
Tetrachloroethene (PCE)	1.05	0.0200	1.000	0	105	55.2	151				
Dibromochloromethane	0.960	0.0300	1.000	0	96.0	71.5	142				
1,2-Dibromoethane (EDB)	1.01	0.00500	1.000	0	101	70	130				
Chlorobenzene	1.03	0.0200	1.000	0	103	74.2	122				
1,1,1,2-Tetrachloroethane	0.953	0.0300	1.000	0	95.3	70	130				
Ethylbenzene	0.987	0.0300	1.000	0	98.7	70	130				
m,p-Xylene	2.02	0.0200	2.000	0	101	70	130				
o-Xylene	1.03	0.0200	1.000	0	103	70	130				
Styrene	1.06	0.0200	1.000	0	106	70	130				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2984</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>
Client ID: <b>LCSS</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105202</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	1.06	0.0800	1.000	0	106	70	130				
Bromoform	0.973	0.0200	1.000	0	97.3	70.9	147				
1,1,2,2-Tetrachloroethane	0.875	0.0200	1.000	0	87.5	61.9	136				
n-Propylbenzene	1.04	0.0200	1.000	0	104	70	130				
Bromobenzene	1.05	0.0300	1.000	0	105	52.7	146				
1,3,5-Trimethylbenzene	1.04	0.0200	1.000	0	104	70	130				
2-Chlorotoluene	0.964	0.0200	1.000	0	96.4	70	130				
4-Chlorotoluene	1.03	0.0200	1.000	0	103	70	130				
tert-Butylbenzene	1.05	0.0200	1.000	0	105	70	130				
1,2,3-Trichloropropane	0.895	0.0200	1.000	0	89.5	61.7	138				
1,2,4-Trichlorobenzene	1.06	0.0500	1.000	0	106	57.5	138				
sec-Butylbenzene	1.00	0.0200	1.000	0	100	70	130				
4-Isopropyltoluene	1.06	0.0200	1.000	0	106	52	149				
1,3-Dichlorobenzene	1.13	0.0200	1.000	0	113	70	130				
1,4-Dichlorobenzene	1.07	0.0200	1.000	0	107	70	130				
n-Butylbenzene	1.09	0.0200	1.000	0	109	59.2	136				
1,2-Dichlorobenzene	1.09	0.0200	1.000	0	109	70	130				
1,2-Dibromo-3-chloropropane	0.975	0.0300	1.000	0	97.5	60.6	137				
1,2,4-Trimethylbenzene	0.995	0.0200	1.000	0	99.5	70	130				
Hexachlorobutadiene	0.942	0.100	1.000	0	94.2	54.7	137				
Naphthalene	0.999	0.0300	1.000	0	99.9	53.2	136				
1,2,3-Trichlorobenzene	0.932	0.0200	1.000	0	93.2	51	140				
Surr: 1-Bromo-4-fluorobenzene	0.512		0.5000		102	63.1	141				
Surr: Dibromofluoromethane	0.496		0.5000		99.2	67.6	119				
Surr: Toluene-d8	0.500		0.5000		99.9	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2984</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105203</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2984</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105203</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2984</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105203</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.488		0.5000		97.7	63.1	141				
Surr: Dibromofluoromethane	0.452		0.5000		90.4	67.6	119				
Surr: Toluene-d8	0.499		0.5000		99.7	78.5	126				

Sample ID: <b>1208075-018ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>GP-17-28</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105227</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0812						0	0	30	
Chloromethane	ND	0.0812						0	0	30	
Vinyl chloride	ND	0.00271						0	0	30	
Bromomethane	ND	0.122						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0676						0	0	30	
Chloroethane	ND	0.0812						0	0	30	
1,1-Dichloroethene	ND	0.0676						0	0	30	
Methylene chloride	ND	0.0271						0	0	30	
trans-1,2-Dichloroethene	ND	0.0271						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0676						0	0	30	
1,1-Dichloroethane	ND	0.0271						0	0	30	
2,2-Dichloropropane	ND	0.0676						0	0	30	
cis-1,2-Dichloroethene	ND	0.0271						0	0	30	
Chloroform	ND	0.0271						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0271						0	0	30	
1,1-Dichloropropene	ND	0.0271						0	0	30	
Carbon tetrachloride	ND	0.0271						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0406						0	0	30	
Benzene	ND	0.0271						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208075-018ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>GP-17-28</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105227</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichloroethene (TCE)	ND	0.0406						0	0	30	
1,2-Dichloropropane	ND	0.0271						0	0	30	
Bromodichloromethane	ND	0.0271						0	0	30	
Dibromomethane	ND	0.0541						0	0	30	
cis-1,3-Dichloropropene	ND	0.0271						0	0	30	
Toluene	ND	0.0271						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0406						0	0	30	
1,1,2-Trichloroethane	ND	0.0406						0	0	30	
1,3-Dichloropropane	ND	0.0676						0	0	30	
Tetrachloroethene (PCE)	ND	0.0271						0	0	30	
Dibromochloromethane	ND	0.0406						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00676						0	0	30	
Chlorobenzene	ND	0.0271						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0406						0	0	30	
Ethylbenzene	ND	0.0406						0	0	30	
m,p-Xylene	ND	0.0271						0	0	30	
o-Xylene	ND	0.0271						0	0	30	
Styrene	ND	0.0271						0	0	30	
Isopropylbenzene	ND	0.108						0	0	30	
Bromoform	ND	0.0271						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0271						0	0	30	
n-Propylbenzene	ND	0.0271						0	0	30	
Bromobenzene	ND	0.0406						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0271						0	0	30	
2-Chlorotoluene	ND	0.0271						0	0	30	
4-Chlorotoluene	ND	0.0271						0	0	30	
tert-Butylbenzene	ND	0.0271						0	0	30	
1,2,3-Trichloropropane	ND	0.0271						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0676						0	0	30	

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208075-018ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>GP-17-28</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105227</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

sec-Butylbenzene	ND	0.0271						0	0	30	
4-Isopropyltoluene	ND	0.0271						0	0	30	
1,3-Dichlorobenzene	ND	0.0271						0	0	30	
1,4-Dichlorobenzene	ND	0.0271						0	0	30	
n-Butylbenzene	ND	0.0271						0	0	30	
1,2-Dichlorobenzene	ND	0.0271						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0406						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0271						0	0	30	
Hexachlorobutadiene	ND	0.135						0	0	30	
Naphthalene	ND	0.0406						0	0	30	
1,2,3-Trichlorobenzene	ND	0.0271						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.637		0.6399		99.6	63.1	141		0		
Surr: Dibromofluoromethane	0.647		0.6399		101	67.6	119		0		
Surr: Toluene-d8	0.698		0.6399		109	78.5	126		0		

Sample ID: <b>1208084-035AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105234</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	1.16	0.0850	1.417	0	82.1	43.5	121				
Chloromethane	1.16	0.0850	1.417	0	82.2	45	130				
Vinyl chloride	1.28	0.00283	1.417	0	90.2	51.2	146				
Bromomethane	0.779	0.128	1.417	0	55.0	70	130				S
Trichlorofluoromethane (CFC-11)	0.368	0.0709	1.417	0	26.0	52.2	132				S
Chloroethane	0.442	0.0850	1.417	0	31.2	43.8	117				S
1,1-Dichloroethene	0.624	0.0709	1.417	0	44.1	61.9	141				S
Methylene chloride	0.762	0.0283	1.417	0	53.8	54.7	142				S
trans-1,2-Dichloroethene	1.07	0.0283	1.417	0	75.4	52	136				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-035AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105234</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.964	0.0709	1.417	0	68.0	54.4	132				
1,1-Dichloroethane	1.05	0.0283	1.417	0	74.4	51.8	141				
2,2-Dichloropropane	1.48	0.0709	1.417	0	105	36	123				
cis-1,2-Dichloroethene	1.29	0.0283	1.417	0	91.3	58.6	136				
Chloroform	1.24	0.0283	1.417	0	87.8	53.2	129				
1,1,1-Trichloroethane (TCA)	1.28	0.0283	1.417	0	90.1	58.3	145				
1,1-Dichloropropene	1.28	0.0283	1.417	0	90.7	55.1	138				
Carbon tetrachloride	1.31	0.0283	1.417	0	92.6	53.3	144				
1,2-Dichloroethane (EDC)	1.09	0.0425	1.417	0	76.7	51.3	139				
Benzene	1.23	0.0283	1.417	0	86.8	63.5	133				
Trichloroethene (TCE)	1.29	0.0425	1.417	0	91.1	68.6	132				
1,2-Dichloropropane	1.28	0.0283	1.417	0	90.4	59	136				
Bromodichloromethane	1.21	0.0283	1.417	0	85.1	50.7	141				
Dibromomethane	1.20	0.0567	1.417	0	84.8	50.6	137				
cis-1,3-Dichloropropene	0.825	0.0283	1.417	0	58.3	52.3	129				
Toluene	1.32	0.0283	1.417	0	93.5	67.8	129				
trans-1,3-Dichloropropylene	0.825	0.0425	1.417	0	58.3	52.2	138				
1,1,2-Trichloroethane	1.28	0.0425	1.417	0	90.6	51.6	137				
1,3-Dichloropropane	1.24	0.0709	1.417	0	87.6	53.1	134				
Tetrachloroethene (PCE)	1.25	0.0283	1.417	0	88.5	44.1	141				
Dibromochloromethane	1.19	0.0425	1.417	0	84.2	55.3	140				
1,2-Dibromoethane (EDB)	1.28	0.00709	1.417	0	90.6	50.4	136				
Chlorobenzene	1.38	0.0283	1.417	0	97.6	60	133				
1,1,1,2-Tetrachloroethane	1.38	0.0425	1.417	0	97.3	53.1	142				
Ethylbenzene	1.37	0.0425	1.417	0	96.8	54.5	134				
m,p-Xylene	2.58	0.0283	2.834	0	91.1	53.1	132				
o-Xylene	1.34	0.0283	1.417	0	94.5	53.3	139				
Styrene	1.32	0.0283	1.417	0	92.9	51.1	132				
Isopropylbenzene	1.41	0.113	1.417	0	99.3	58.9	138				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-035AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105234</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	1.20	0.0283	1.417	0	84.6	57.9	130				
1,1,2,2-Tetrachloroethane	1.24	0.0283	1.417	0	87.8	51.9	131				
n-Propylbenzene	1.27	0.0283	1.417	0	89.5	53.6	140				
Bromobenzene	1.41	0.0425	1.417	0	99.2	54.2	140				
1,3,5-Trimethylbenzene	1.31	0.0283	1.417	0	92.2	51.8	136				
2-Chlorotoluene	1.23	0.0283	1.417	0	86.9	51.6	136				
4-Chlorotoluene	1.30	0.0283	1.417	0	91.6	50.1	139				
tert-Butylbenzene	1.60	0.0283	1.417	0	113	50.5	135				
1,2,3-Trichloropropane	1.22	0.0283	1.417	0	86.3	50.5	131				
1,2,4-Trichlorobenzene	1.19	0.0709	1.417	0	84.1	50.8	130				
sec-Butylbenzene	1.39	0.0283	1.417	0	98.1	52.6	141				
4-Isopropyltoluene	1.43	0.0283	1.417	0	101	52.9	134				
1,3-Dichlorobenzene	1.22	0.0283	1.417	0	86.4	52.6	131				
1,4-Dichlorobenzene	1.22	0.0283	1.417	0	86.4	52.9	129				
n-Butylbenzene	1.20	0.0283	1.417	0	84.6	52.6	130				
1,2-Dichlorobenzene	1.14	0.0283	1.417	0	80.4	55.8	129				
1,2-Dibromo-3-chloropropane	0.859	0.0425	1.417	0	60.7	53	129				
1,2,4-Trimethylbenzene	1.35	0.0283	1.417	0	95.6	50.6	137				
Hexachlorobutadiene	1.21	0.142	1.417	0	85.3	51.5	130				
Naphthalene	1.06	0.0425	1.417	0	75.0	52.3	124				
1,2,3-Trichlorobenzene	1.16	0.0283	1.417	0	81.7	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.708		0.7086		99.9	63.1	141				
Surr: Dibromofluoromethane	0.658		0.7086		92.8	67.6	119				
Surr: Toluene-d8	0.718		0.7086		101	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2985</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105235</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.944	0.0600	1.000	0	94.4	41.5	132				
Chloromethane	0.940	0.0600	1.000	0	94.0	52.3	129				
Vinyl chloride	1.04	0.00200	1.000	0	104	51.1	134				
Bromomethane	1.06	0.0900	1.000	0	106	54.6	148				
Trichlorofluoromethane (CFC-11)	1.12	0.0500	1.000	0	112	59.7	131				
Chloroethane	1.14	0.0600	1.000	0	114	53.9	135				
1,1-Dichloroethene	1.13	0.0500	1.000	0	113	58	139				
Methylene chloride	1.11	0.0200	1.000	0	111	58.7	141				
trans-1,2-Dichloroethene	1.14	0.0200	1.000	0	114	70	130				
Methyl tert-butyl ether (MTBE)	1.11	0.0500	1.000	0	111	70	130				
1,1-Dichloroethane	1.13	0.0200	1.000	0	113	67.6	127				
2,2-Dichloropropane	0.911	0.0500	1.000	0	91.1	40.1	133				
cis-1,2-Dichloroethene	1.18	0.0200	1.000	0	118	70	130				
Chloroform	1.14	0.0200	1.000	0	114	64	127				
1,1,1-Trichloroethane (TCA)	1.11	0.0200	1.000	0	111	68.9	132				
1,1-Dichloropropene	1.12	0.0200	1.000	0	112	70	130				
Carbon tetrachloride	1.21	0.0200	1.000	0	121	56.3	141				
1,2-Dichloroethane (EDC)	1.06	0.0300	1.000	0	106	69.4	131				
Benzene	1.03	0.0200	1.000	0	103	72.3	125				
Trichloroethene (TCE)	1.22	0.0300	1.000	0	122	73.5	130				
1,2-Dichloropropane	1.12	0.0200	1.000	0	112	70	130				
Bromodichloromethane	1.12	0.0200	1.000	0	112	70	130				
Dibromomethane	1.12	0.0400	1.000	0	112	70	130				
cis-1,3-Dichloropropene	0.840	0.0200	1.000	0	84.0	58.7	141				
Toluene	1.10	0.0200	1.000	0	110	73.6	126				
trans-1,3-Dichloropropylene	0.840	0.0300	1.000	0	84.0	55.3	142				
1,1,2-Trichloroethane	1.10	0.0300	1.000	0	110	70	130				
1,3-Dichloropropane	1.08	0.0500	1.000	0	108	70	130				
Tetrachloroethene (PCE)	1.31	0.0200	1.000	0	131	55.2	151				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2985</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>
Client ID: <b>LCSS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105235</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	1.18	0.0300	1.000	0	118	71.5	142				
1,2-Dibromoethane (EDB)	1.12	0.00500	1.000	0	112	70	130				
Chlorobenzene	1.13	0.0200	1.000	0	113	74.2	122				
1,1,1,2-Tetrachloroethane	1.22	0.0300	1.000	0	122	70	130				
Ethylbenzene	1.21	0.0300	1.000	0	121	70	130				
m,p-Xylene	2.17	0.0200	2.000	0	108	70	130				
o-Xylene	1.17	0.0200	1.000	0	117	70	130				
Styrene	1.21	0.0200	1.000	0	121	70	130				
Isopropylbenzene	1.17	0.0800	1.000	0	117	70	130				
Bromoform	1.18	0.0200	1.000	0	118	70.9	147				
1,1,2,2-Tetrachloroethane	1.03	0.0200	1.000	0	103	61.9	136				
n-Propylbenzene	1.06	0.0200	1.000	0	106	70	130				
Bromobenzene	1.23	0.0300	1.000	0	123	52.7	146				
1,3,5-Trimethylbenzene	1.07	0.0200	1.000	0	107	70	130				
2-Chlorotoluene	1.07	0.0200	1.000	0	107	70	130				
4-Chlorotoluene	1.08	0.0200	1.000	0	108	70	130				
tert-Butylbenzene	1.10	0.0200	1.000	0	110	70	130				
1,2,3-Trichloropropane	1.14	0.0200	1.000	0	114	61.7	138				
1,2,4-Trichlorobenzene	1.11	0.0500	1.000	0	111	57.5	138				
sec-Butylbenzene	1.17	0.0200	1.000	0	117	70	130				
4-Isopropyltoluene	1.18	0.0200	1.000	0	118	52	149				
1,3-Dichlorobenzene	1.10	0.0200	1.000	0	110	70	130				
1,4-Dichlorobenzene	1.10	0.0200	1.000	0	110	70	130				
n-Butylbenzene	1.05	0.0200	1.000	0	105	59.2	136				
1,2-Dichlorobenzene	1.08	0.0200	1.000	0	108	70	130				
1,2-Dibromo-3-chloropropane	0.970	0.0300	1.000	0	97.0	60.6	137				
1,2,4-Trimethylbenzene	1.21	0.0200	1.000	0	121	70	130				
Hexachlorobutadiene	1.07	0.100	1.000	0	107	54.7	137				
Naphthalene	1.09	0.0300	1.000	0	109	53.2	136				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2985</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105235</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	1.17	0.0200	1.000	0	117	51	140				
Surr: 1-Bromo-4-fluorobenzene	0.492		0.5000		98.3	63.1	141				
Surr: Dibromofluoromethane	0.480		0.5000		96.0	67.6	119				
Surr: Toluene-d8	0.511		0.5000		102	78.5	126				

Sample ID: <b>MB-2985</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105236</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2985</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105236</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2985</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105236</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.479		0.5000		95.7	63.1	141				
Surr: Dibromofluoromethane	0.465		0.5000		93.0	67.6	119				
Surr: Toluene-d8	0.518		0.5000		104	78.5	126				

Sample ID: <b>1208075-006ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>GP-18-27</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105389</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0620						0	0	30	
Chloromethane	ND	0.0620						0	0	30	
Vinyl chloride	ND	0.00207						0	0	30	
Bromomethane	ND	0.0929						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0516						0	0	30	
Chloroethane	ND	0.0620						0	0	30	
1,1-Dichloroethene	ND	0.0516						0	0	30	
Methylene chloride	ND	0.0207						0	0	30	
trans-1,2-Dichloroethene	ND	0.0207						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208075-006ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>							
Client ID: <b>GP-18-27</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105389</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.0516						0	0	30	
1,1-Dichloroethane	ND	0.0207						0	0	30	
2,2-Dichloropropane	ND	0.0516						0	0	30	
cis-1,2-Dichloroethene	ND	0.0207						0	0	30	
Chloroform	ND	0.0207						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0207						0	0	30	
1,1-Dichloropropene	ND	0.0207						0	0	30	
Carbon tetrachloride	ND	0.0207						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0310						0	0	30	
Benzene	ND	0.0207						0	0	30	
Trichloroethene (TCE)	ND	0.0310						0	0	30	
1,2-Dichloropropane	ND	0.0207						0	0	30	
Bromodichloromethane	ND	0.0207						0	0	30	
Dibromomethane	ND	0.0413						0	0	30	
cis-1,3-Dichloropropene	ND	0.0207						0	0	30	
Toluene	ND	0.0207						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0310						0	0	30	
1,1,2-Trichloroethane	ND	0.0310						0	0	30	
1,3-Dichloropropane	ND	0.0516						0	0	30	
Tetrachloroethene (PCE)	ND	0.0207						0	0	30	
Dibromochloromethane	ND	0.0310						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00516						0	0	30	
Chlorobenzene	ND	0.0207						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0310						0	0	30	
Ethylbenzene	ND	0.0310						0	0	30	
m,p-Xylene	ND	0.0207						0	0	30	
o-Xylene	ND	0.0207						0	0	30	
Styrene	ND	0.0207						0	0	30	
Isopropylbenzene	ND	0.0826						0	0	30	

**Qualifiers:** 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      J Analyte detected below quantitation limits      ND Not detected at the Reporting Limit  
R RPD outside accepted recovery limits      RL Reporting Limit      S Spike recovery outside accepted recovery limits





**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208075-006ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5366</b>
Client ID: <b>GP-18-27</b>	Batch ID: <b>2984</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105389</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.0207						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0207						0	0	30	
n-Propylbenzene	ND	0.0207						0	0	30	
Bromobenzene	ND	0.0310						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0207						0	0	30	
2-Chlorotoluene	ND	0.0207						0	0	30	
4-Chlorotoluene	ND	0.0207						0	0	30	
tert-Butylbenzene	ND	0.0207						0	0	30	
1,2,3-Trichloropropane	ND	0.0207						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0516						0	0	30	
sec-Butylbenzene	ND	0.0207						0	0	30	
4-Isopropyltoluene	ND	0.0207						0	0	30	
1,3-Dichlorobenzene	ND	0.0207						0	0	30	
1,4-Dichlorobenzene	ND	0.0207						0	0	30	
n-Butylbenzene	ND	0.0207						0	0	30	
1,2-Dichlorobenzene	ND	0.0207						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0310						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0207						0	0	30	
Hexachlorobutadiene	ND	0.103						0	0	30	
Naphthalene	ND	0.0310						0	0	30	
1,2,3-Trichlorobenzene	ND	0.0207						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.507		0.5164		98.1	63.1	141		0		
Surr: Dibromofluoromethane	0.440		0.5164		85.2	67.6	119		0		
Surr: Toluene-d8	0.517		0.5164		100	78.5	126		0		

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105776</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0720						0	0	30	
Chloromethane	ND	0.0720						0	0	30	
Vinyl chloride	ND	0.00240						0	0	30	
Bromomethane	ND	0.108						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0600						0	0	30	
Chloroethane	ND	0.0720						0	0	30	
1,1-Dichloroethene	ND	0.0600						0	0	30	
Methylene chloride	ND	0.0240						0	0	30	
trans-1,2-Dichloroethene	ND	0.0240						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0600						0	0	30	
1,1-Dichloroethane	ND	0.0240						0	0	30	
2,2-Dichloropropane	ND	0.0600						0	0	30	
cis-1,2-Dichloroethene	ND	0.0240						0	0	30	
Chloroform	ND	0.0240						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0240						0	0	30	
1,1-Dichloropropene	ND	0.0240						0	0	30	
Carbon tetrachloride	ND	0.0240						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0360						0	0	30	
Benzene	ND	0.0240						0	0	30	
Trichloroethene (TCE)	ND	0.0360						0	0	30	
1,2-Dichloropropane	ND	0.0240						0	0	30	
Bromodichloromethane	ND	0.0240						0	0	30	*
Dibromomethane	ND	0.0480						0	0	30	
cis-1,3-Dichloropropene	ND	0.0240						0	0	30	
Toluene	ND	0.0240						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0360						0	0	30	
1,1,2-Trichloroethane	ND	0.0360						0	0	30	
1,3-Dichloropropane	ND	0.0600						0	0	30	
Tetrachloroethene (PCE)	ND	0.0240						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105776</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.0360						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00600						0	0	30	
Chlorobenzene	ND	0.0240						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0360						0	0	30	
Ethylbenzene	ND	0.0360						0	0	30	
m,p-Xylene	ND	0.0240						0	0	30	
o-Xylene	ND	0.0240						0	0	30	
Styrene	ND	0.0240						0	0	30	
Isopropylbenzene	ND	0.0960						0	0	30	
Bromoform	ND	0.0240						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0240						0	0	30	
n-Propylbenzene	ND	0.0240						0	0	30	
Bromobenzene	ND	0.0360						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0240						0	0	30	
2-Chlorotoluene	ND	0.0240						0	0	30	
4-Chlorotoluene	ND	0.0240						0	0	30	
tert-Butylbenzene	ND	0.0240						0	0	30	
1,2,3-Trichloropropane	ND	0.0240						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0600						0	0	30	
sec-Butylbenzene	ND	0.0240						0	0	30	
4-Isopropyltoluene	ND	0.0240						0	0	30	
1,3-Dichlorobenzene	ND	0.0240						0	0	30	
1,4-Dichlorobenzene	ND	0.0240						0	0	30	
n-Butylbenzene	ND	0.0240						0	0	30	
1,2-Dichlorobenzene	ND	0.0240						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0360						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0240						0	0	30	
Hexachlorobutadiene	ND	0.120						0	0	30	
Naphthalene	ND	0.0360						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105776</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0240						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.609		0.6000		102	63.1	141		0		
Surr: Dibromofluoromethane	0.596		0.6000		99.4	67.6	119		0		
Surr: Toluene-d8	0.595		0.6000		99.2	78.5	126		0		

**NOTES:**  
\* Flagged value is not within established control limits

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0638						0	0	30	
Chloromethane	ND	0.0638						0	0	30	
Vinyl chloride	ND	0.00213						0	0	30	
Bromomethane	ND	0.0957						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0532						0	0	30	
Chloroethane	ND	0.0638						0	0	30	
1,1-Dichloroethene	ND	0.0532						0	0	30	
Methylene chloride	ND	0.0213						0	0	30	
trans-1,2-Dichloroethene	ND	0.0213						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0532						0	0	30	
1,1-Dichloroethane	ND	0.0213						0	0	30	
2,2-Dichloropropane	ND	0.0532						0	0	30	
cis-1,2-Dichloroethene	ND	0.0213						0	0	30	
Chloroform	ND	0.0213						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0213						0	0	30	
1,1-Dichloropropene	ND	0.0213						0	0	30	
Carbon tetrachloride	ND	0.0213						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0319						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0213						0	0	30	
Trichloroethene (TCE)	ND	0.0319						0	0	30	
1,2-Dichloropropane	ND	0.0213						0	0	30	
Bromodichloromethane	ND	0.0213						0	0	30	
Dibromomethane	ND	0.0425						0	0	30	
cis-1,3-Dichloropropene	ND	0.0213						0	0	30	
Toluene	0.0314	0.0213						0.03083	1.71	30	
trans-1,3-Dichloropropylene	ND	0.0319						0	0	30	
1,1,2-Trichloroethane	ND	0.0319						0	0	30	
1,3-Dichloropropane	ND	0.0532						0	0	30	
Tetrachloroethene (PCE)	ND	0.0213						0	0	30	
Dibromochloromethane	ND	0.0319						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00532						0	0	30	
Chlorobenzene	ND	0.0213						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0319						0	0	30	
Ethylbenzene	ND	0.0319						0	0	30	
m,p-Xylene	ND	0.0213						0	0	30	
o-Xylene	ND	0.0213						0	0	30	
Styrene	ND	0.0213						0	0	30	
Isopropylbenzene	ND	0.0851						0	0	30	
Bromoform	ND	0.0213						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0213						0	0	30	
n-Propylbenzene	0.0250	0.0213						0.02339	6.59	30	
Bromobenzene	ND	0.0319						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0213						0	0	30	
2-Chlorotoluene	ND	0.0213						0	0	30	
4-Chlorotoluene	ND	0.0213						0	0	30	
tert-Butylbenzene	ND	0.0213						0	0	30	
1,2,3-Trichloropropane	ND	0.0213						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	0.0532						0	0	30	
sec-Butylbenzene	ND	0.0213						0	0	30	
4-Isopropyltoluene	ND	0.0213						0	0	30	
1,3-Dichlorobenzene	ND	0.0213						0	0	30	
1,4-Dichlorobenzene	ND	0.0213						0	0	30	
n-Butylbenzene	0.0356	0.0213						0.03455	3.03	30	
1,2-Dichlorobenzene	ND	0.0213						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0319						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0213						0	0	30	
Hexachlorobutadiene	ND	0.106						0	0	30	
Naphthalene	ND	0.0319						0	0	30	
1,2,3-Trichlorobenzene	ND	0.0213						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.579		0.5316		109	63.1	141		0		
Surr: Dibromofluoromethane	0.455		0.5316		85.6	67.6	119		0		
Surr: Toluene-d8	0.554		0.5316		104	78.5	126		0		

Sample ID: <b>1208134-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108339</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.698	0.0655	1.092	0	64.0	43.5	121				
Chloromethane	0.738	0.0655	1.092	0	67.6	45	130				
Vinyl chloride	0.492	0.00218	1.092	0	45.1	51.2	146				S
Bromomethane	0.241	0.0983	1.092	0	22.1	70	130				S
Trichlorofluoromethane (CFC-11)	0.693	0.0546	1.092	0	63.5	52.2	132				
Chloroethane	0.608	0.0655	1.092	0	55.7	43.8	117				
1,1-Dichloroethene	0.826	0.0546	1.092	0	75.6	61.9	141				
Methylene chloride	0.765	0.0218	1.092	0	70.0	54.7	142				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208134-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108339</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	0.875	0.0218	1.092	0	80.1	52	136				
Methyl tert-butyl ether (MTBE)	0.822	0.0546	1.092	0	75.3	54.4	132				
1,1-Dichloroethane	0.962	0.0218	1.092	0	88.1	51.8	141				
2,2-Dichloropropane	0.690	0.0546	1.092	0	63.2	36	123				
cis-1,2-Dichloroethene	0.817	0.0218	1.092	0	74.8	58.6	136				
Chloroform	0.767	0.0218	1.092	0	70.3	53.2	129				
1,1,1-Trichloroethane (TCA)	0.882	0.0218	1.092	0	80.8	58.3	145				
1,1-Dichloropropene	0.875	0.0218	1.092	0	80.1	55.1	138				
Carbon tetrachloride	0.880	0.0218	1.092	0	80.6	53.3	144				
1,2-Dichloroethane (EDC)	0.835	0.0328	1.092	0	76.5	51.3	139				
Benzene	0.854	0.0218	1.092	0	78.2	63.5	133				
Trichloroethene (TCE)	0.926	0.0328	1.092	0	84.8	68.6	132				
1,2-Dichloropropane	0.855	0.0218	1.092	0	78.3	59	136				
Bromodichloromethane	0.840	0.0218	1.092	0	76.9	50.7	141				
Dibromomethane	0.804	0.0437	1.092	0	73.7	50.6	137				
cis-1,3-Dichloropropene	0.783	0.0218	1.092	0	71.7	52.3	129				
Toluene	0.839	0.0218	1.092	0	76.9	67.8	129				
trans-1,3-Dichloropropylene	0.761	0.0328	1.092	0	69.7	52.2	138				
1,1,2-Trichloroethane	0.817	0.0328	1.092	0	74.9	51.6	137				
1,3-Dichloropropane	0.793	0.0546	1.092	0	72.6	53.1	134				
Tetrachloroethene (PCE)	0.892	0.0218	1.092	0	81.7	44.1	141				
Dibromochloromethane	0.790	0.0328	1.092	0	72.4	55.3	140				
1,2-Dibromoethane (EDB)	0.805	0.00546	1.092	0	73.7	50.4	136				
Chlorobenzene	0.795	0.0218	1.092	0	72.8	60	133				
1,1,1,2-Tetrachloroethane	0.763	0.0328	1.092	0	69.9	53.1	142				
Ethylbenzene	0.775	0.0328	1.092	0	71.0	54.5	134				
m,p-Xylene	1.54	0.0218	2.184	0	70.7	53.1	132				
o-Xylene	0.777	0.0218	1.092	0	71.1	53.3	139				
Styrene	0.781	0.0218	1.092	0	71.6	51.1	132				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208134-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108339</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	0.815	0.0874	1.092	0	74.6	58.9	138				
Bromoform	0.710	0.0218	1.092	0	65.1	57.9	130				
1,1,2,2-Tetrachloroethane	0.657	0.0218	1.092	0	60.2	51.9	131				
n-Propylbenzene	0.779	0.0218	1.092	0	71.3	53.6	140				
Bromobenzene	0.765	0.0328	1.092	0	70.1	54.2	140				
1,3,5-Trimethylbenzene	0.810	0.0218	1.092	0	74.2	51.8	136				
2-Chlorotoluene	0.793	0.0218	1.092	0	72.6	51.6	136				
4-Chlorotoluene	0.770	0.0218	1.092	0	70.5	50.1	139				
tert-Butylbenzene	0.801	0.0218	1.092	0	73.3	50.5	135				
1,2,3-Trichloropropane	0.744	0.0218	1.092	0	68.2	50.5	131				
1,2,4-Trichlorobenzene	0.722	0.0546	1.092	0	66.2	50.8	130				
sec-Butylbenzene	0.840	0.0218	1.092	0	76.9	52.6	141				
4-Isopropyltoluene	0.816	0.0218	1.092	0	74.7	52.9	134				
1,3-Dichlorobenzene	0.710	0.0218	1.092	0	65.0	52.6	131				
1,4-Dichlorobenzene	0.706	0.0218	1.092	0	64.7	52.9	129				
n-Butylbenzene	0.703	0.0218	1.092	0	64.4	52.6	130				
1,2-Dichlorobenzene	0.718	0.0218	1.092	0	65.8	55.8	129				
1,2-Dibromo-3-chloropropane	0.626	0.0328	1.092	0	57.3	53	129				
1,2,4-Trimethylbenzene	0.803	0.0218	1.092	0	73.6	50.6	137				
Hexachlorobutadiene	0.813	0.109	1.092	0	74.5	51.5	130				
Naphthalene	0.693	0.0328	1.092	0	63.5	52.3	124				
1,2,3-Trichlorobenzene	0.727	0.0218	1.092	0	66.6	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.587		0.5461		108	63.1	141				
Surr: Dibromofluoromethane	0.491		0.5461		89.9	67.6	119				
Surr: Toluene-d8	0.569		0.5461		104	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3048</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.04	0.0600	1.000	0	104	37.7	136				
Chloromethane	1.08	0.0600	1.000	0	108	38.8	132				
Vinyl chloride	1.07	0.00200	1.000	0	107	56.1	130				
Bromomethane	0.876	0.0900	1.000	0	87.6	44.3	149				
Trichlorofluoromethane (CFC-11)	1.27	0.0500	1.000	0	127	61.8	130				
Chloroethane	1.20	0.0600	1.000	0	120	52.2	131				
1,1-Dichloroethene	1.17	0.0500	1.000	0	117	64.6	134				
Methylene chloride	1.18	0.0200	1.000	0	118	60.6	140				
trans-1,2-Dichloroethene	1.10	0.0200	1.000	0	110	68.7	127				
Methyl tert-butyl ether (MTBE)	1.09	0.0500	1.000	0	109	73.4	128				
1,1-Dichloroethane	1.23	0.0200	1.000	0	123	65.5	132				
2,2-Dichloropropane	0.986	0.0500	1.000	0	98.6	28.1	149				
cis-1,2-Dichloroethene	1.14	0.0200	1.000	0	114	71.6	123				
Chloroform	1.15	0.0200	1.000	0	115	67.5	129				
1,1,1-Trichloroethane (TCA)	1.11	0.0200	1.000	0	111	74.4	130				
1,1-Dichloropropene	1.11	0.0200	1.000	0	111	72.7	131				
Carbon tetrachloride	1.05	0.0200	1.000	0	105	73	136				
1,2-Dichloroethane (EDC)	1.10	0.0300	1.000	0	110	68.7	133				
Benzene	1.12	0.0200	1.000	0	112	74.6	124				
Trichloroethene (TCE)	1.15	0.0300	1.000	0	115	71.5	134				
1,2-Dichloropropane	1.14	0.0200	1.000	0	114	72.7	133				
Bromodichloromethane	1.11	0.0200	1.000	0	111	76.1	136				
Dibromomethane	1.12	0.0400	1.000	0	112	70	130				
cis-1,3-Dichloropropene	1.10	0.0200	1.000	0	110	59.1	143				
Toluene	1.11	0.0200	1.000	0	111	81.1	123				
trans-1,3-Dichloropropylene	1.06	0.0300	1.000	0	106	49.2	149				
1,1,2-Trichloroethane	1.10	0.0300	1.000	0	110	74.5	129				
1,3-Dichloropropane	1.09	0.0500	1.000	0	109	70	130				
Tetrachloroethene (PCE)	1.16	0.0200	1.000	0	116	64.4	150				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3048</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	1.10	0.0300	1.000	0	110	70.6	144				
1,2-Dibromoethane (EDB)	1.10	0.00500	1.000	0	110	70	130				
Chlorobenzene	1.05	0.0200	1.000	0	105	76.1	123				
1,1,1,2-Tetrachloroethane	1.04	0.0300	1.000	0	104	74.8	131				
Ethylbenzene	1.05	0.0300	1.000	0	105	74	129				
m,p-Xylene	2.09	0.0200	2.000	0	105	79.8	128				
o-Xylene	1.06	0.0200	1.000	0	106	77.3	128				
Styrene	1.05	0.0200	1.000	0	105	76.8	130				
Isopropylbenzene	1.04	0.0800	1.000	0	104	70	130				
Bromoform	1.02	0.0200	1.000	0	102	67	154				
1,1,2,2-Tetrachloroethane	1.00	0.0200	1.000	0	100	61.9	139				
n-Propylbenzene	1.04	0.0200	1.000	0	104	78	130				
Bromobenzene	1.04	0.0300	1.000	0	104	49.2	144				
1,3,5-Trimethylbenzene	1.07	0.0200	1.000	0	107	79.7	128				
2-Chlorotoluene	1.08	0.0200	1.000	0	108	76.7	129				
4-Chlorotoluene	1.06	0.0200	1.000	0	106	77.5	125				
tert-Butylbenzene	1.02	0.0200	1.000	0	102	74.2	128				
1,2,3-Trichloropropane	1.05	0.0200	1.000	0	105	67.9	136				
1,2,4-Trichlorobenzene	1.01	0.0500	1.000	0	101	65.6	137				
sec-Butylbenzene	1.08	0.0200	1.000	0	108	75.6	133				
4-Isopropyltoluene	1.07	0.0200	1.000	0	107	76.8	131				
1,3-Dichlorobenzene	1.01	0.0200	1.000	0	101	72.8	128				
1,4-Dichlorobenzene	1.03	0.0200	1.000	0	103	72.6	126				
n-Butylbenzene	0.972	0.0200	1.000	0	97.2	65.3	136				
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	72.8	126				
1,2-Dibromo-3-chloropropane	1.01	0.0300	1.000	0	101	64.3	135				
1,2,4-Trimethylbenzene	1.07	0.0200	1.000	0	107	77.5	129				
Hexachlorobutadiene	0.961	0.100	1.000	0	96.1	42	151				
Naphthalene	1.01	0.0300	1.000	0	101	64	130				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3048</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	1.00	0.0200	1.000	0	100	62.1	140				
Surr: 1-Bromo-4-fluorobenzene	0.532		0.5000		106	63.1	141				
Surr: Dibromofluoromethane	0.506		0.5000		101	67.6	119				
Surr: Toluene-d8	0.525		0.5000		105	78.5	126				

Sample ID: <b>MB-3048</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208075  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3048</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108356</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1208075  
 CLIENT: PES Environmental, Inc.  
 Project: Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3048</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108356</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.510		0.5000		102	63.1	141				
Surr: Dibromofluoromethane	0.466		0.5000		93.1	67.6	119				
Surr: Toluene-d8	0.518		0.5000		104	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **PES**

 Work Order Number: **1208075**

 Logged by: **Troy Zehr**

 Date Received: **8/13/2012 3:45:00 PM**

### Chain of Custody

1. Were custodial seals present? Yes  No  Not Required
2. Is Chain of Custody complete? Yes  No  Not Present
3. How was the sample delivered? Courier

### Log In

4. Coolers are present? Yes  No  NA
5. Was an attempt made to cool the samples? Yes  No  NA
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes  No  NA
7. Sample(s) in proper container(s)? Yes  No
8. Sufficient sample volume for indicated test(s)? Yes  No
9. Are samples properly preserved? Yes  No
10. Was preservative added to bottles? Yes  No  NA
11. Is there headspace present in VOA vials? Yes  No  NA
12. Did all sample containers arrive in good condition?(unbroken) Yes  No
13. Does paperwork match bottle labels? Yes  No
14. Are matrices correctly identified on Chain of Custody? Yes  No
15. Is it clear what analyses were requested? Yes  No
16. Were all holding times able to be met? Yes  No

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input style="width: 95%;" type="text"/>	Date:	<input style="width: 95%;" type="text"/>
By Whom:	<input style="width: 95%;" type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input style="width: 95%;" type="text"/>		
Client Instructions:	<input style="width: 95%;" type="text"/>		

18. Additional remarks/Discrepancies

### Item Information

Item #	Temp °C	Condition
Cooler 1	1.9	Good
Cooler 2	2.2	Good





3311 N. 35th Street  
 Seattle, WA 98103  
 Tel: 206-352-3790  
 Fax: 206-352-7178

Client: PES  
 Address: \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_

# Chain of Custody Record

Laboratory Project No./Internal: 2 of: 3  
 Page: \_\_\_\_\_

Project Name: FORMER PACE  
 Location: KIRKLAND WA  
 Collected by: CPeedy / K. SPRINGS

Project No.: 1006.006.02  
 Email: \_\_\_\_\_  
 Reports To (P/M): \_\_\_\_\_  
 Fax: \_\_\_\_\_

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	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 Tl Ti U V Zn	Comments/Description
1. GP-15-23	8/13	1025	Soil	X	!! HCLP Analyze KR
2. GP-15-26		1030		X	
3. GP-17-3		1100		X	Analyze KR
4. GP-17-6.5		1105		X	Analyze KR
5. GP-17-14.5		1115		X	Analyze KR
6. GP-17-19		1130		X	Analyze KR
7. GP-17-23		1140		X	Analyze KR
8. GP-17-28		1145		X	Analyze KR
9. GP-16-3		1240		X	Analyze KR
10. GP-16-8.5		1245		X	Analyze KR

Special Remarks: ALL SAMPLES ON HOLD  
SEE KELLY BANKICH

Received Date/Time: 8/13/12 15:45  
 Received Date/Time: \_\_\_\_\_

TAT → Next Day 2 Day 3 Day STD





**Fremont Analytical**

2311 N. 35th Street  
Seattle, WA 98113  
Tel: 206-352-3790  
Fax: 206-352-7178

Client: **PES**  
Address:  
City, State, Zip

**Chain of Custody Record**

Laboratory Project No (Internal): 3  
Page: 3 of 3  
**FORMER PACE**  
**DOODY / K SPRING STED**

Project Name:  
Location:  
Collected by:

Reports To (PM): **KEVIN R** Email:  
Fax:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (Per EPA 8160)	SMA (Per EPA 8210)	Distillation Residue (Per EPA 8210)	PCBs (Per EPA 8210)	Chlorides (Per EPA 8001)	Mercury (Per EPA 8210)	Lead (Per EPA 8210)	Other (Per EPA 8210)	Components/Identif
GR-16-12.5	8/13	1300	Soil	XX								HOLD 1
GR-16-15	8/13	1310		XX								Analyzer
GR-16-PA	8/13	1400		XX								

Special Remarks: **ALL SAMPLES ON HOLD SEE KELLY R**

Received: **Jay Jay** Date/Time: **8/13/12 15:45**

Received: **Jay Jay** Date/Time: **8/13/12 15:45**

Project No: **3**

Project Name: **FORMER PACE**

Location: **DOODY / K SPRING STED**

Collected by: **DOODY / K SPRING STED**

Reports To (PM): **KEVIN R**

Email:

Fax:

Client: **PES**

Address:

City, State, Zip:



1111 N. 35th Street  
 Seattle, WA 98103  
 Tel: 206-352-3790  
 Fax: 206-352-7178

Client: PES

Address: SEATTLE

City, State, Zip: SEATTLE

Chain of Custody Record

Inventory Project No (Invoiced): 1208075

Page: 1 of 1

Date: 8/13/12

Project Name: FORMER PACE KIRKLAND

Location: SEATTLE

Collected by: KELLY RANKICH

Project No: 1006006.07

Reports To (PNO): KELLY RANKICH

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	YOC	Ag	As	Ba	Be	Ca	Cl	Co	Cd	Cr	Hg	Mn	Mo	Ni	Pb	Sb	Se	Si	Ti	V	Zn
GP-18-3	8/13	830	SOIL	X	X																			
GP-18-6		850		X	X																			
GP-18-12		900		X	X																			
GP-18-18		910		X	X																			
GP-18-23		980		X	X																			
GP-18-27		920		X	X																			
GP-15-3		945		X	X																			
GP-15-7.5		1000		X	X																			
GP-15-11		1005		X	X																			
GP-15-19		1015		X	X																			

Comments (If any):  
 HOLD !!  
 Analyze (K)  
 Add Analyze VOC - Dx w/ Silica Gel  
 Analyze (K) Pu Kelly E  
 Analyze (K) RE Shshiz  
 Analyze (K)  
 Analyze (K)  
 Analyze (K)

Metals Analysis (Circle): Nitrate Nitrite Nitric Nitrous Sulfate Bromide Cadmium Fluoride  
 Priority Follow-ups: TAL Individual: Ag A As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Ni Pb Sb Se Si Sn Ti U V Zn  
 Anions (Circle): Nitrate Nitrite Nitric Nitrous Sulfate Bromide Cadmium Fluoride  
 Sample Disposal:  Return to client  Dispositively lab (to may be assessed samples are coded the 30 days)  
 Inequities: 8/13 1645  
 Signature: [Signature] Date/Time: 8/13/12 15:45  
 Received: [Signature] Date/Time: 8/13/12 15:45  
 Requisition: [Signature] Date/Time: 8/13/12 15:45  
 Special Instructions: ALL SAMPLES ON HOLD FOR PM REVIEW SEE KEY RANKICH FOR SAMPLES TO RUN  
 TAT -> Most by 2:00 3:00 5:00

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Di erubidort White Lab Yellow File Pink Original

## MEMORANDUM

**TO:** Project File **DATE:** September 10, 2012  
**FROM:** Jerry Harris  
**SUBJECT:** Laboratory Data Validation Review  
**PROJECT:** Former Pace Facility Kirkland, WA  
**PROJECT #:** 1006.008.01.003  
**TASK:** August 13, 2012 Soil Samples  
**LAB:** Fremont Analytical Service Request No. 1208075

---

Soil sampling was conducted at the former Pace facility in Kirkland, Washington on August 13, 2012. Twenty-three soil samples were collected from the site.

Thirteen (13) selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as diesel (fuel oil), diesel range organics (DRO), and heavy oil (HO) by the Northwest TPH-Dx method (NWTPH-Dx), TPH as gasoline by the NWTPH-Gx method, and volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260. The TPH-Dx analyses were performed in two extraction groups (IDs 2968 and 3041); the TPH-Gx analyses were performed in two extraction groups (IDs 5370 and 5384); and the VOC analyses were performed in three extraction groups (2984, 2985, and 3048). Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1208075.

The quality assurance review of the soil samples data is summarized below.

### DATA QUALIFICATIONS

Guidelines established by USEPA for 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 Organic Data Review (USEPA, 1999).

### DATA VALIDATION

#### Completeness

All samples were collected and analyzed as requested.

## **Sample Collection and Preservation**

The samples were collected in appropriately preserved containers supplied by the analytical laboratory. The laboratory reported that the samples were received in good condition. The laboratory received the samples in two coolers at temperatures of 1.9 and 2.2 degrees centigrade (°C). The latter cooler temperature was within the USEPA recommended temperature range of  $4^{\circ} \pm 2^{\circ}\text{C}$ . The former cooler temperature was 0.1°C below the recommended range. The samples in both coolers were appropriately preserved with ice and no shipping anomalies were identified by the laboratory. The samples were received by the laboratory on the day of sample collection within 1.75 hrs of the completion of the sample collection effort. Based upon this information, the 0.1°C exceedance in the first cooler is not considered sufficient cause to warrant qualification of the data because the samples were properly preserved and immediately transported directly to the laboratory on the day of sampling. No data qualifications were warranted based upon the laboratory receipt temperatures.

## **Holding Times**

### *NWTPH-Dx*

The extractions and analyses for the NWTPH-Dx method were performed within the recommended 14 day holding time limit for soil samples.

### *NWTPH-Gx*

The extractions and analyses for the NWTPH Gx method were performed within the recommended 14 day holding time limit for soil samples.

### *USEPA Method 8260*

The extractions and analyses for VOCs were performed within the recommended 14 day holding time limit for soil samples.

No data was qualified based upon holding times.

## **Initial Calibration**

Hard copies of the initial calibration data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in initial calibration results associated with the project analyses if they occur. No discrepancies were reported; therefore no data qualifications were required.

## **Continuing Calibration**

Hard copies of the continuing calibration verification (CCV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in continuing calibration results associated with the project analyses. No discrepancies were reported; therefore no data qualifications were required.

## **Method Blank Results**

### *NWTPH-Dx*

Two method blanks were analyzed with the two extraction groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the Method Reporting Limits (MRLs). No data qualifications were required.

### *NWTPH-Gx*

Two method blanks were analyzed with the two extraction groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were required.

### *USEPA Method 8260*

Three method blanks were analyzed with the three extraction groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were required.

## **Trip Blank Results**

No trip blanks were required or collected during this field event.

## **Field Duplicate Analyses**

No field duplicates were required or collected during this field event.

## **Laboratory Duplicate Analyses**

### *NWTPH-Dx*

The laboratory prepared two duplicate soil samples (one for each extraction group); one was a batch (non-project) duplicate and the second was prepared from primary sample GP-15-3. The primary and laboratory duplicate pairs were analyzed by the NWTPH Dx method. The relative percent differences (RPD) for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

### *NWTPH-Gx*

The laboratory prepared three duplicate soil samples for the two extraction groups. For extraction group 5370, one duplicate was prepared from primary sample GP-17-28 and the second duplicate was prepared from a batch (non-project) sample. For extraction group 5384, one duplicate sample was prepared from primary sample GP-18-27. The primary and laboratory duplicate pairs were analyzed by the NWTPH Gx method. The RPD for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

### *USEPA Method 8260*

The laboratory prepared two duplicate soil samples for batch 2984; one was a batch (non-project) duplicate and the second duplicate was prepared from project sample GP-18-27. The RPDs for

all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. For batch 2985, one duplicate was prepared from a batch (non-project) sample and the second duplicate was prepared from project sample GP-17-28. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. For batch 3048, one duplicate was prepared from a batch (non-project) sample. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

### **Surrogate Recoveries**

#### *NWTPH-Dx*

The surrogate percent recovery (%R) results for all NWTPH Dx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 70 to 130%R.

#### *NWTPH-Gx*

The surrogate %R results for all NWTPH Gx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

#### *USEPA Method 8260*

The surrogate %R results for all USEPA Method 8260 soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

### **Laboratory Control Samples**

#### *NWTPH-Dx*

Two laboratory control samples (LCS) were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *NWTPH-Gx*

Two laboratory control samples (LCS) were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *USEPA Method 8260*

Three LCSs were prepared and analyzed; one for batch 2984, one for batch 2985, and one for batch 3048. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

### **Matrix Spike/Matrix Spike Duplicates**

#### *NWTPH-Dx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Dx method.

### *NWTPH-Gx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Gx method.

### *USEPA Method 8260*

Three soil MSs were prepared and analyzed with the project samples; one for each of the analytical batches. Sample duplicates were analyzed in lieu of MSDs for the samples. This is acceptable. The MS %Rs for all target analytes in analytical batch 2984 were within the laboratory control limits except for bromomethane and trichlorofluoromethane. The %Rs for these compounds were below the lower control limit, indicating a potential matrix-induced variability in sample results for these compounds. However, because the MS for this analytical group was prepared from a batch (non-project) sample, the compounds were not detected in any project samples, and because there were no other quality control issues associated with these compounds in the remaining quality control data, the MS exceedances are not considered sufficient cause to warrant qualification of the data. No data in analytical group 2984 were qualified. For analytical batch 2985, the MS %Rs for all target analytes were within the laboratory control limits except for bromomethane, trichlorofluoromethane, 1,1-dichloroethene, methylene chloride and chloroethane. However, because the MS for this analytical group was prepared from a batch (non-project) sample, the compounds were not detected in any project samples, and because there were no other quality control issues associated with these compounds in the remaining quality control data, the MS exceedances are not considered sufficient cause to warrant qualification of the data. No data in analytical group 2985 were qualified. The MS %Rs for all target analytes in analytical batch 3048 were within the laboratory control limits except for bromomethane and vinyl chloride. The %Rs for these compounds were below the lower control limit, indicating a potential matrix-induced variability in sample results for these compounds. However, because the MS for this analytical group was prepared from a batch (non-project) sample, the compounds were not detected in any project samples, and because there were no other quality control issues associated with these compounds in the remaining quality control data, the MS exceedances are not considered sufficient cause to warrant qualification of the data. No data in analytical group 3048 were qualified.

### **Other Quality Control Issues**

The laboratory reported that sample GP-18-18 was analyzed in analysis group 2971; however, no quality control data was reported for this extraction group. The laboratory was contacted regarding this issue. The laboratory stated that the 2971 analysis group ID was in error and that the sample in question belonged to analysis group 2984 and all the quality control data for that group was applicable to GP-18-18. No qualifications of the data from this sample were warranted. No other laboratory quality control issues were identified in the laboratory report.

### **Quantitation Limits**

The MRLs were acceptable for the project; therefore, no data qualifiers were assigned.

### **Data Assessment**

No data were qualified. All data are judged to be acceptable for their intended use.



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F: (206) 352-7178  
info@fremontanalytical.com

**PES Environmental, Inc.**  
Kelly Rankich  
1215 Fourth Avenue, Suite 1350  
Seattle, Washington 98161

**RE: Former Pace Kirkland**  
**Lab ID: 1208084**

September 11, 2012

**Attention Kelly Rankich:**

Fremont Analytical, Inc. received 37 sample(s) on 8/14/2012 for the analyses presented in the following report.

***Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***  
***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Volatile Organic Compounds by EPA Method 8260***

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,

A handwritten signature in black ink, appearing to read "M. Dee".

Michael Dee  
Sr. Chemist / Principal





Date: 09/11/2012

**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland  
**Lab Order:** 1208084

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1208084-001	GP-13-3	08/14/2012 7:55 AM	08/15/2012 3:15 PM
1208084-002	GP-13-6	08/14/2012 8:05 AM	08/15/2012 3:15 PM
1208084-003	GP-13-9.5	08/14/2012 8:10 AM	08/15/2012 3:15 PM
1208084-004	GP-13-12	08/14/2012 8:20 AM	08/15/2012 3:15 PM
1208084-005	GP-13-15	08/14/2012 8:30 AM	08/15/2012 3:15 PM
1208084-006	GP-13-18	08/14/2012 8:35 AM	08/15/2012 3:15 PM
1208084-007	GP-13-23	08/14/2012 8:45 AM	08/15/2012 3:15 PM
1208084-008	GP-13-27.5	08/14/2012 8:50 AM	08/15/2012 3:15 PM
1208084-009	GP-24-0.5	08/14/2012 9:20 AM	08/15/2012 3:15 PM
1208084-010	GP-24-5.5	08/14/2012 9:30 AM	08/15/2012 3:15 PM
1208084-011	GP-24-11	08/14/2012 9:45 AM	08/15/2012 3:15 PM
1208084-012	GP-24-17	08/14/2012 9:50 AM	08/15/2012 3:15 PM
1208084-013	GP-24-23	08/14/2012 9:55 AM	08/15/2012 3:15 PM
1208084-014	GP-25-3	08/14/2012 10:25 AM	08/15/2012 3:15 PM
1208084-015	GP-25-8	08/14/2012 10:30 AM	08/15/2012 3:15 PM
1208084-016	GP-25-12.5	08/14/2012 10:45 AM	08/15/2012 3:15 PM
1208084-017	GP-25-18	08/14/2012 11:00 AM	08/15/2012 3:15 PM
1208084-018	GP-25-24	08/14/2012 11:05 AM	08/15/2012 3:15 PM
1208084-019	HA-8-2	08/14/2012 11:40 AM	08/15/2012 3:15 PM
1208084-020	HA-8-6	08/14/2012 11:45 AM	08/15/2012 3:15 PM
1208084-021	HA-8-9	08/14/2012 11:50 AM	08/15/2012 3:15 PM
1208084-022	HA-7-2	08/14/2012 1:10 PM	08/15/2012 3:15 PM
1208084-023	HA-7-6	08/14/2012 1:15 PM	08/15/2012 3:15 PM
1208084-024	HA-7-9	08/14/2012 1:20 PM	08/15/2012 3:15 PM
1208084-025	HA-6-2	08/14/2012 1:30 PM	08/15/2012 3:15 PM
1208084-026	HA-6-6	08/14/2012 1:35 PM	08/15/2012 3:15 PM
1208084-027	HA-6-9	08/14/2012 1:40 PM	08/15/2012 3:15 PM
1208084-028	HA-5-2	08/14/2012 2:00 PM	08/15/2012 3:15 PM
1208084-029	HA-5-6	08/14/2012 2:05 PM	08/15/2012 3:15 PM
1208084-030	HA-5-9	08/14/2012 2:10 PM	08/15/2012 3:15 PM
1208084-031	GP-7-3	08/13/2012 3:00 PM	08/15/2012 3:15 PM
1208084-032	GP-7-7	08/13/2012 3:10 PM	08/15/2012 3:15 PM
1208084-033	GP-7-12.5	08/13/2012 3:15 PM	08/15/2012 3:15 PM
1208084-034	GP-7-17.5	08/13/2012 3:20 PM	08/15/2012 3:15 PM
1208084-035	GP-7-22.5	08/13/2012 3:30 PM	08/15/2012 3:15 PM
1208084-036	GP-7-27.5	08/13/2012 3:50 PM	08/15/2012 3:15 PM

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

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**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland  
**Lab Order:** 1208084

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## Work Order Sample Summary

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Date/Time Collected</b>	<b>Date/Time Received</b>
1208084-037	GP-7-34	08/13/2012 4:00 PM	08/15/2012 3:15 PM

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

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**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are 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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-002B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-004B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-007B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-009B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-011B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-014B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-016B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-019B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-022B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-025B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-028B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-031B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-033B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-035B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-003B) required Silica Gel Cleanup

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**CLIENT:** PES Environmental, Inc.

**Project:** Former Pace Kirkland

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Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208084-010B) required Silica Gel Cleanup Procedure.

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-002

**Matrix:** Soil

**Client Sample ID:** GP-13-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	13,000	249	D	mg/Kg-dry	10	8/20/2012 1:34:00 PM
Diesel Range Organics (C12-C24)	ND	24.9		mg/Kg-dry	1	8/17/2012 10:15:00 PM
Heavy Oil	ND	62.3		mg/Kg-dry	1	8/17/2012 10:15:00 PM
Surr: 2-Fluorobiphenyl	128	50-150		%REC	1	8/17/2012 10:15:00 PM
Surr: o-Terphenyl	105	50-150		%REC	1	8/17/2012 10:15:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.73		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Gasoline Range Organics C6-C12	851	67.3	D	mg/Kg-dry	10	8/20/2012 9:57:00 PM
Surr: 1,2-Dichloroethane-d4	98.8	65-135		%REC	1	8/21/2012 5:55:00 AM
Surr: Fluorobenzene	95.5	65-135		%REC	1	8/21/2012 5:55:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0807	*	mg/Kg-dry	1	8/21/2012 5:55:00 AM
Chloromethane	ND	0.0807		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Vinyl chloride	ND	0.00269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Bromomethane	ND	0.121		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Chloroethane	ND	0.0807		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1-Dichloroethene	ND	0.0673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Methylene chloride	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
trans-1,2-Dichloroethene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1-Dichloroethane	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
2,2-Dichloropropane	ND	0.0673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
cis-1,2-Dichloroethene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Chloroform	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1-Dichloropropene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Carbon tetrachloride	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,2-Dichloroethane (EDC)	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Benzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Trichloroethene (TCE)	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-002

**Matrix:** Soil

**Client Sample ID:** GP-13-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Bromodichloromethane	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Dibromomethane	ND	0.0538		mg/Kg-dry	1	8/21/2012 5:55:00 AM
cis-1,3-Dichloropropene	ND	0.0269	*	mg/Kg-dry	1	8/21/2012 5:55:00 AM
Toluene	0.0801	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
trans-1,3-Dichloropropylene	ND	0.0404	*	mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1,2-Trichloroethane	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,3-Dichloropropane	ND	0.0673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Tetrachloroethene (PCE)	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Dibromochloromethane	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,2-Dibromoethane (EDB)	ND	0.00673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Chlorobenzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Ethylbenzene	0.402	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM
m,p-Xylene	1.53	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
o-Xylene	0.762	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Styrene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Isopropylbenzene	0.517	0.108		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Bromoform	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
n-Propylbenzene	0.886	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Bromobenzene	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,3,5-Trimethylbenzene	1.69	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
2-Chlorotoluene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
4-Chlorotoluene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
tert-Butylbenzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,2,3-Trichloropropane	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,2,4-Trichlorobenzene	ND	0.0673		mg/Kg-dry	1	8/21/2012 5:55:00 AM
sec-Butylbenzene	0.884	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
4-Isopropyltoluene	1.50	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,3-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,4-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
n-Butylbenzene	1.85	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,2-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0404		mg/Kg-dry	1	8/21/2012 5:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-002

**Matrix:** Soil

**Client Sample ID:** GP-13-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	5.79	0.269	D	mg/Kg-dry	10	8/20/2012 9:57:00 PM
Hexachlorobutadiene	ND	0.135		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Naphthalene	11.5	0.404	D	mg/Kg-dry	10	8/20/2012 9:57:00 PM
1,2,3-Trichlorobenzene	ND	0.0269		mg/Kg-dry	1	8/21/2012 5:55:00 AM
Surr: 1-Bromo-4-fluorobenzene	97.7	63.1-141		%REC	1	8/21/2012 5:55:00 AM
Surr: Dibromofluoromethane	101	67.6-119		%REC	1	8/21/2012 5:55:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/21/2012 5:55:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	24.0			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-003

**Matrix:** Soil

**Client Sample ID:** GP-13-9.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3041

Analyst: BR

Diesel (Fuel Oil)	ND	21.2		mg/Kg-dry	1	8/27/2012 9:28:00 AM
Diesel Range Organics (C12-C24)	ND	21.2		mg/Kg-dry	1	8/27/2012 9:28:00 AM
Heavy Oil	ND	53.1		mg/Kg-dry	1	8/27/2012 9:28:00 AM
Surr: 2-Fluorobiphenyl	129	50-150		%REC	1	8/27/2012 9:28:00 AM
Surr: o-Terphenyl	127	50-150		%REC	1	8/27/2012 9:28:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5512

Analyst: EM

Gasoline	ND	4.29		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Gasoline Range Organics C6-C12	ND	4.29		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Surr: 1,2-Dichloroethane-d4	87.3	65-135		%REC	1	8/26/2012 8:16:00 AM
Surr: Fluorobenzene	79.6	65-135		%REC	1	8/26/2012 8:16:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3048

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0515		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Chloromethane	ND	0.0515		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Vinyl chloride	ND	0.00172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Bromomethane	ND	0.0772		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Chloroethane	ND	0.0515		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1-Dichloroethene	ND	0.0429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Methylene chloride	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
trans-1,2-Dichloroethene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1-Dichloroethane	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
2,2-Dichloropropane	ND	0.0429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
cis-1,2-Dichloroethene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Chloroform	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1-Dichloropropene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Carbon tetrachloride	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2-Dichloroethane (EDC)	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Benzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Trichloroethene (TCE)	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-003

**Matrix:** Soil

**Client Sample ID:** GP-13-9.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3048

Analyst: EM

1,2-Dichloropropane	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Bromodichloromethane	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Dibromomethane	ND	0.0343		mg/Kg-dry	1	8/26/2012 8:16:00 AM
cis-1,3-Dichloropropene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Toluene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
trans-1,3-Dichloropropylene	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1,2-Trichloroethane	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,3-Dichloropropane	ND	0.0429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Tetrachloroethene (PCE)	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Dibromochloromethane	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2-Dibromoethane (EDB)	ND	0.00429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Chlorobenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Ethylbenzene	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
m,p-Xylene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
o-Xylene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Styrene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Isopropylbenzene	ND	0.0686		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Bromoform	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
n-Propylbenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Bromobenzene	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,3,5-Trimethylbenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
2-Chlorotoluene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
4-Chlorotoluene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
tert-Butylbenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2,3-Trichloropropane	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2,4-Trichlorobenzene	ND	0.0429		mg/Kg-dry	1	8/26/2012 8:16:00 AM
sec-Butylbenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
4-Isopropyltoluene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,3-Dichlorobenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,4-Dichlorobenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
n-Butylbenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2-Dichlorobenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-003

**Matrix:** Soil

**Client Sample ID:** GP-13-9.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3048

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Hexachlorobutadiene	ND	0.0858		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Naphthalene	ND	0.0257		mg/Kg-dry	1	8/26/2012 8:16:00 AM
1,2,3-Trichlorobenzene	ND	0.0172		mg/Kg-dry	1	8/26/2012 8:16:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	8/26/2012 8:16:00 AM
Surr: Dibromofluoromethane	95.0	67.6-119		%REC	1	8/26/2012 8:16:00 AM
Surr: Toluene-d8	105	78.5-126		%REC	1	8/26/2012 8:16:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5456

Analyst: SG

Percent Moisture	10.5			wt%	1	8/24/2012 11:05:56 AM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-004

**Matrix:** Soil

**Client Sample ID:** GP-13-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	22.5		mg/Kg-dry	1	8/17/2012 11:11:00 PM
Diesel Range Organics (C12-C24)	ND	22.5		mg/Kg-dry	1	8/17/2012 11:11:00 PM
Heavy Oil	ND	56.3		mg/Kg-dry	1	8/17/2012 11:11:00 PM
Surr: 2-Fluorobiphenyl	105	50-150		%REC	1	8/17/2012 11:11:00 PM
Surr: o-Terphenyl	102	50-150		%REC	1	8/17/2012 11:11:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.41		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Gasoline Range Organics C6-C12	ND	6.41		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Surr: 1,2-Dichloroethane-d4	104	65-135		%REC	1	8/21/2012 4:51:00 AM
Surr: Fluorobenzene	98.9	65-135		%REC	1	8/21/2012 4:51:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0769	*	mg/Kg-dry	1	8/21/2012 4:51:00 AM
Chloromethane	ND	0.0769		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Vinyl chloride	ND	0.00256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Bromomethane	ND	0.115		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Chloroethane	ND	0.0769		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1-Dichloroethene	ND	0.0641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Methylene chloride	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
trans-1,2-Dichloroethene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1-Dichloroethane	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
2,2-Dichloropropane	ND	0.0641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
cis-1,2-Dichloroethene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Chloroform	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1-Dichloropropene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Carbon tetrachloride	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2-Dichloroethane (EDC)	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Benzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Trichloroethene (TCE)	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-004

**Matrix:** Soil

**Client Sample ID:** GP-13-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Bromodichloromethane	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Dibromomethane	ND	0.0513		mg/Kg-dry	1	8/21/2012 4:51:00 AM
cis-1,3-Dichloropropene	ND	0.0256	*	mg/Kg-dry	1	8/21/2012 4:51:00 AM
Toluene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
trans-1,3-Dichloropropylene	ND	0.0385	*	mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1,2-Trichloroethane	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,3-Dichloropropane	ND	0.0641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Tetrachloroethene (PCE)	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Dibromochloromethane	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2-Dibromoethane (EDB)	ND	0.00641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Chlorobenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Ethylbenzene	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
m,p-Xylene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
o-Xylene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Styrene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Isopropylbenzene	ND	0.103		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Bromoform	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
n-Propylbenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Bromobenzene	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,3,5-Trimethylbenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
2-Chlorotoluene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
4-Chlorotoluene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
tert-Butylbenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2,3-Trichloropropane	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2,4-Trichlorobenzene	ND	0.0641		mg/Kg-dry	1	8/21/2012 4:51:00 AM
sec-Butylbenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
4-Isopropyltoluene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,3-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,4-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
n-Butylbenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-004

**Matrix:** Soil

**Client Sample ID:** GP-13-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Hexachlorobutadiene	ND	0.128		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Naphthalene	ND	0.0385		mg/Kg-dry	1	8/21/2012 4:51:00 AM
1,2,3-Trichlorobenzene	ND	0.0256		mg/Kg-dry	1	8/21/2012 4:51:00 AM
Surr: 1-Bromo-4-fluorobenzene	100	63.1-141		%REC	1	8/21/2012 4:51:00 AM
Surr: Dibromofluoromethane	99.4	67.6-119		%REC	1	8/21/2012 4:51:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	8/21/2012 4:51:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	13.1			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-007

**Matrix:** Soil

**Client Sample ID:** GP-13-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	22.5		mg/Kg-dry	1	8/17/2012 11:39:00 PM
Diesel Range Organics (C12-C24)	ND	22.5		mg/Kg-dry	1	8/17/2012 11:39:00 PM
Heavy Oil	ND	56.3		mg/Kg-dry	1	8/17/2012 11:39:00 PM
Surr: 2-Fluorobiphenyl	101	50-150		%REC	1	8/17/2012 11:39:00 PM
Surr: o-Terphenyl	96.4	50-150		%REC	1	8/17/2012 11:39:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.66		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Gasoline Range Organics C6-C12	ND	6.66		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Surr: 1,2-Dichloroethane-d4	99.7	65-135		%REC	1	8/21/2012 3:46:00 AM
Surr: Fluorobenzene	97.2	65-135		%REC	1	8/21/2012 3:46:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0799	*	mg/Kg-dry	1	8/21/2012 3:46:00 AM
Chloromethane	ND	0.0799		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Vinyl chloride	ND	0.00266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Bromomethane	ND	0.120		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Chloroethane	ND	0.0799		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1-Dichloroethane	ND	0.0666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Methylene chloride	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
trans-1,2-Dichloroethane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1-Dichloroethane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
2,2-Dichloropropane	ND	0.0666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
cis-1,2-Dichloroethane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Chloroform	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1-Dichloropropene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Carbon tetrachloride	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2-Dichloroethane (EDC)	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Benzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Trichloroethene (TCE)	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-007

**Matrix:** Soil

**Client Sample ID:** GP-13-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Bromodichloromethane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Dibromomethane	ND	0.0533		mg/Kg-dry	1	8/21/2012 3:46:00 AM
cis-1,3-Dichloropropene	ND	0.0266	*	mg/Kg-dry	1	8/21/2012 3:46:00 AM
Toluene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
trans-1,3-Dichloropropylene	ND	0.0399	*	mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1,2-Trichloroethane	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,3-Dichloropropane	ND	0.0666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Tetrachloroethene (PCE)	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Dibromochloromethane	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2-Dibromoethane (EDB)	ND	0.00666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Chlorobenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Ethylbenzene	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
m,p-Xylene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
o-Xylene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Styrene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Isopropylbenzene	ND	0.107		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Bromoform	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
n-Propylbenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Bromobenzene	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,3,5-Trimethylbenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
2-Chlorotoluene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
4-Chlorotoluene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
tert-Butylbenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2,3-Trichloropropane	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2,4-Trichlorobenzene	ND	0.0666		mg/Kg-dry	1	8/21/2012 3:46:00 AM
sec-Butylbenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
4-Isopropyltoluene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,3-Dichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,4-Dichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
n-Butylbenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2-Dichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 8:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-007

**Matrix:** Soil

**Client Sample ID:** GP-13-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Hexachlorobutadiene	ND	0.133		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Naphthalene	ND	0.0399		mg/Kg-dry	1	8/21/2012 3:46:00 AM
1,2,3-Trichlorobenzene	ND	0.0266		mg/Kg-dry	1	8/21/2012 3:46:00 AM
Surr: 1-Bromo-4-fluorobenzene	96.8	63.1-141		%REC	1	8/21/2012 3:46:00 AM
Surr: Dibromofluoromethane	101	67.6-119		%REC	1	8/21/2012 3:46:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/21/2012 3:46:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	17.7			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-009

**Matrix:** Soil

**Client Sample ID:** GP-24-0.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b><u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u></b>				Batch ID: 2989		Analyst: SG
Diesel (Fuel Oil)	ND	20.4		mg/Kg-dry	1	8/18/2012 12:07:00 AM
Diesel Range Organics (C12-C24)	ND	20.4		mg/Kg-dry	1	8/18/2012 12:07:00 AM
Heavy Oil	176	51.0		mg/Kg-dry	1	8/18/2012 12:07:00 AM
Surr: 2-Fluorobiphenyl	105	50-150		%REC	1	8/18/2012 12:07:00 AM
Surr: o-Terphenyl	102	50-150		%REC	1	8/18/2012 12:07:00 AM
<b><u>Gasoline by NWTPH-Gx</u></b>				Batch ID: R5370		Analyst: EM
Gasoline	ND	5.92		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Gasoline Range Organics C6-C12	ND	5.92		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Surr: 1,2-Dichloroethane-d4	101	65-135		%REC	1	8/21/2012 4:19:00 AM
Surr: Fluorobenzene	98.9	65-135		%REC	1	8/21/2012 4:19:00 AM
<b><u>Volatile Organic Compounds by EPA Method 8260</u></b>				Batch ID: 2985		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0710	*	mg/Kg-dry	1	8/21/2012 4:19:00 AM
Chloromethane	ND	0.0710		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Vinyl chloride	ND	0.00237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Bromomethane	ND	0.107		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Chloroethane	ND	0.0710		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1-Dichloroethene	ND	0.0592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Methylene chloride	ND	0.0237		mg/Kg-dry	1	8/22/2012 11:53:00 AM
trans-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1-Dichloroethane	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
2,2-Dichloropropane	ND	0.0592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
cis-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Chloroform	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1-Dichloropropene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Carbon tetrachloride	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2-Dichloroethane (EDC)	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Benzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Trichloroethene (TCE)	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-009

**Matrix:** Soil

**Client Sample ID:** GP-24-0.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Bromodichloromethane	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Dibromomethane	ND	0.0474		mg/Kg-dry	1	8/21/2012 4:19:00 AM
cis-1,3-Dichloropropene	ND	0.0237	*	mg/Kg-dry	1	8/21/2012 4:19:00 AM
Toluene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
trans-1,3-Dichloropropylene	ND	0.0355	*	mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1,2-Trichloroethane	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,3-Dichloropropane	ND	0.0592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Tetrachloroethene (PCE)	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Dibromochloromethane	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2-Dibromoethane (EDB)	ND	0.00592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Chlorobenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Ethylbenzene	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
m,p-Xylene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
o-Xylene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Styrene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Isopropylbenzene	ND	0.0947		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Bromoform	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
n-Propylbenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Bromobenzene	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,3,5-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
2-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
4-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
tert-Butylbenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2,3-Trichloropropane	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2,4-Trichlorobenzene	ND	0.0592		mg/Kg-dry	1	8/21/2012 4:19:00 AM
sec-Butylbenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
4-Isopropyltoluene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,3-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,4-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
n-Butylbenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-009

**Matrix:** Soil

**Client Sample ID:** GP-24-0.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Hexachlorobutadiene	ND	0.118		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Naphthalene	ND	0.0355		mg/Kg-dry	1	8/21/2012 4:19:00 AM
1,2,3-Trichlorobenzene	ND	0.0237		mg/Kg-dry	1	8/21/2012 4:19:00 AM
Surr: 1-Bromo-4-fluorobenzene	103	63.1-141		%REC	1	8/21/2012 4:19:00 AM
Surr: Dibromofluoromethane	97.5	67.6-119		%REC	1	8/21/2012 4:19:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/21/2012 4:19:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	8.53			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-010

**Matrix:** Soil

**Client Sample ID:** GP-24-5.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b><u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u></b>					Batch ID: 3041	Analyst: BR
Diesel (Fuel Oil)	ND	22.8		mg/Kg-dry	1	8/27/2012 10:22:00 AM
Diesel Range Organics (C12-C24)	ND	22.8		mg/Kg-dry	1	8/27/2012 10:22:00 AM
Heavy Oil	ND	56.9		mg/Kg-dry	1	8/27/2012 10:22:00 AM
Surr: 2-Fluorobiphenyl	137	50-150		%REC	1	8/27/2012 10:22:00 AM
Surr: o-Terphenyl	132	50-150		%REC	1	8/27/2012 10:22:00 AM
<b><u>Sample Moisture (Percent Moisture)</u></b>					Batch ID: R5456	Analyst: SG
Percent Moisture	17.1			wt%	1	8/24/2012 11:05:56 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-011

**Matrix:** Soil

**Client Sample ID:** GP-24-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	21.4		mg/Kg-dry	1	8/18/2012 1:58:00 AM
Diesel Range Organics (C12-C24)	ND	21.4		mg/Kg-dry	1	8/18/2012 1:58:00 AM
Heavy Oil	ND	53.5		mg/Kg-dry	1	8/18/2012 1:58:00 AM
Surr: 2-Fluorobiphenyl	103	50-150		%REC	1	8/18/2012 1:58:00 AM
Surr: o-Terphenyl	101	50-150		%REC	1	8/18/2012 1:58:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	7.50		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Gasoline Range Organics C6-C12	ND	7.50		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Surr: 1,2-Dichloroethane-d4	99.8	65-135		%REC	1	8/20/2012 10:29:00 PM
Surr: Fluorobenzene	96.3	65-135		%REC	1	8/20/2012 10:29:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0900	*	mg/Kg-dry	1	8/20/2012 10:29:00 PM
Chloromethane	ND	0.0900		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Vinyl chloride	ND	0.00300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Bromomethane	ND	0.135		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Chloroethane	ND	0.0900		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1-Dichloroethene	ND	0.0750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Methylene chloride	ND	0.0300		mg/Kg-dry	1	8/22/2012 12:25:00 PM
trans-1,2-Dichloroethene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1-Dichloroethane	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
2,2-Dichloropropane	ND	0.0750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
cis-1,2-Dichloroethene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Chloroform	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1-Dichloropropene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Carbon tetrachloride	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2-Dichloroethane (EDC)	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Benzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Trichloroethene (TCE)	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-011

**Matrix:** Soil

**Client Sample ID:** GP-24-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Bromodichloromethane	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Dibromomethane	ND	0.0600		mg/Kg-dry	1	8/20/2012 10:29:00 PM
cis-1,3-Dichloropropene	ND	0.0300	*	mg/Kg-dry	1	8/20/2012 10:29:00 PM
Toluene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
trans-1,3-Dichloropropylene	ND	0.0450	*	mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1,2-Trichloroethane	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,3-Dichloropropane	ND	0.0750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Tetrachloroethene (PCE)	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Dibromochloromethane	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2-Dibromoethane (EDB)	ND	0.00750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Chlorobenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Ethylbenzene	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
m,p-Xylene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
o-Xylene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Styrene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Isopropylbenzene	ND	0.120		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Bromoform	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
n-Propylbenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Bromobenzene	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
4-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
tert-Butylbenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2,4-Trichlorobenzene	ND	0.0750		mg/Kg-dry	1	8/20/2012 10:29:00 PM
sec-Butylbenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
4-Isopropyltoluene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,3-Dichlorobenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,4-Dichlorobenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
n-Butylbenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2-Dichlorobenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-011

**Matrix:** Soil

**Client Sample ID:** GP-24-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Hexachlorobutadiene	ND	0.150		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Naphthalene	ND	0.0450		mg/Kg-dry	1	8/20/2012 10:29:00 PM
1,2,3-Trichlorobenzene	ND	0.0300		mg/Kg-dry	1	8/20/2012 10:29:00 PM
Surr: 1-Bromo-4-fluorobenzene	92.5	63.1-141		%REC	1	8/20/2012 10:29:00 PM
Surr: Dibromofluoromethane	103	67.6-119		%REC	1	8/20/2012 10:29:00 PM
Surr: Toluene-d8	99.7	78.5-126		%REC	1	8/20/2012 10:29:00 PM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	16.6			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 10:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-014

**Matrix:** Soil

**Client Sample ID:** GP-25-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	21.6		mg/Kg-dry	1	8/18/2012 2:26:00 AM
Diesel Range Organics (C12-C24)	ND	21.6		mg/Kg-dry	1	8/18/2012 2:26:00 AM
Heavy Oil	ND	53.9		mg/Kg-dry	1	8/18/2012 2:26:00 AM
Surr: 2-Fluorobiphenyl	101	50-150		%REC	1	8/18/2012 2:26:00 AM
Surr: o-Terphenyl	95.6	50-150		%REC	1	8/18/2012 2:26:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	5.81		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Gasoline Range Organics C6-C12	ND	5.81		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Surr: 1,2-Dichloroethane-d4	107	65-135		%REC	1	8/20/2012 11:00:00 PM
Surr: Fluorobenzene	102	65-135		%REC	1	8/20/2012 11:00:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0698	*	mg/Kg-dry	1	8/20/2012 11:00:00 PM
Chloromethane	ND	0.0698		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Vinyl chloride	ND	0.00233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Bromomethane	ND	0.105		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Chloroethane	ND	0.0698		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1-Dichloroethene	ND	0.0581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Methylene chloride	ND	0.0233		mg/Kg-dry	1	8/22/2012 12:58:00 PM
trans-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1-Dichloroethane	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
2,2-Dichloropropane	ND	0.0581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
cis-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Chloroform	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1-Dichloropropene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Carbon tetrachloride	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2-Dichloroethane (EDC)	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Benzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Trichloroethene (TCE)	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 10:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-014

**Matrix:** Soil

**Client Sample ID:** GP-25-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Bromodichloromethane	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Dibromomethane	ND	0.0465		mg/Kg-dry	1	8/20/2012 11:00:00 PM
cis-1,3-Dichloropropene	ND	0.0233	*	mg/Kg-dry	1	8/20/2012 11:00:00 PM
Toluene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
trans-1,3-Dichloropropylene	ND	0.0349	*	mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1,2-Trichloroethane	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,3-Dichloropropane	ND	0.0581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Tetrachloroethene (PCE)	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Dibromochloromethane	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2-Dibromoethane (EDB)	ND	0.00581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Chlorobenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Ethylbenzene	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
m,p-Xylene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
o-Xylene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Styrene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Isopropylbenzene	ND	0.0930		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Bromoform	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
n-Propylbenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Bromobenzene	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,3,5-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
2-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
4-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
tert-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2,3-Trichloropropane	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2,4-Trichlorobenzene	ND	0.0581		mg/Kg-dry	1	8/20/2012 11:00:00 PM
sec-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
4-Isopropyltoluene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,3-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,4-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
n-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 10:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-014

**Matrix:** Soil

**Client Sample ID:** GP-25-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Hexachlorobutadiene	ND	0.116		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Naphthalene	ND	0.0349		mg/Kg-dry	1	8/20/2012 11:00:00 PM
1,2,3-Trichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/20/2012 11:00:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.0	63.1-141		%REC	1	8/20/2012 11:00:00 PM
Surr: Dibromofluoromethane	102	67.6-119		%REC	1	8/20/2012 11:00:00 PM
Surr: Toluene-d8	101	78.5-126		%REC	1	8/20/2012 11:00:00 PM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	11.4			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 10:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-016

**Matrix:** Soil

**Client Sample ID:** GP-25-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	21.4		mg/Kg-dry	1	8/18/2012 2:53:00 AM
Diesel Range Organics (C12-C24)	ND	21.4		mg/Kg-dry	1	8/18/2012 2:53:00 AM
Heavy Oil	ND	53.4		mg/Kg-dry	1	8/18/2012 2:53:00 AM
Surr: 2-Fluorobiphenyl	98.7	50-150		%REC	1	8/18/2012 2:53:00 AM
Surr: o-Terphenyl	94.3	50-150		%REC	1	8/18/2012 2:53:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	7.47		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Gasoline Range Organics C6-C12	ND	7.47		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Surr: 1,2-Dichloroethane-d4	104	65-135		%REC	1	8/20/2012 11:32:00 PM
Surr: Fluorobenzene	103	65-135		%REC	1	8/20/2012 11:32:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0896	*	mg/Kg-dry	1	8/20/2012 11:32:00 PM
Chloromethane	ND	0.0896		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Vinyl chloride	ND	0.00299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Bromomethane	ND	0.134		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Chloroethane	ND	0.0896		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1-Dichloroethene	ND	0.0747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Methylene chloride	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
trans-1,2-Dichloroethene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1-Dichloroethane	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
2,2-Dichloropropane	ND	0.0747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
cis-1,2-Dichloroethene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Chloroform	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1-Dichloropropene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Carbon tetrachloride	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2-Dichloroethane (EDC)	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Benzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Trichloroethene (TCE)	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 10:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-016

**Matrix:** Soil

**Client Sample ID:** GP-25-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>					Batch ID: 2985	Analyst: EM
1,2-Dichloropropane	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Bromodichloromethane	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Dibromomethane	ND	0.0598		mg/Kg-dry	1	8/20/2012 11:32:00 PM
cis-1,3-Dichloropropene	ND	0.0299	*	mg/Kg-dry	1	8/20/2012 11:32:00 PM
Toluene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
trans-1,3-Dichloropropylene	ND	0.0448	*	mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1,2-Trichloroethane	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,3-Dichloropropane	ND	0.0747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Tetrachloroethene (PCE)	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Dibromochloromethane	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2-Dibromoethane (EDB)	ND	0.00747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Chlorobenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Ethylbenzene	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
m,p-Xylene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
o-Xylene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Styrene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Isopropylbenzene	ND	0.120		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Bromoform	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
n-Propylbenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Bromobenzene	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,3,5-Trimethylbenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
2-Chlorotoluene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
4-Chlorotoluene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
tert-Butylbenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2,3-Trichloropropane	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2,4-Trichlorobenzene	ND	0.0747		mg/Kg-dry	1	8/20/2012 11:32:00 PM
sec-Butylbenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
4-Isopropyltoluene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,3-Dichlorobenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,4-Dichlorobenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
n-Butylbenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2-Dichlorobenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 10:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-016

**Matrix:** Soil

**Client Sample ID:** GP-25-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Hexachlorobutadiene	ND	0.149		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Naphthalene	ND	0.0448		mg/Kg-dry	1	8/20/2012 11:32:00 PM
1,2,3-Trichlorobenzene	ND	0.0299		mg/Kg-dry	1	8/20/2012 11:32:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.4	63.1-141		%REC	1	8/20/2012 11:32:00 PM
Surr: Dibromofluoromethane	98.1	67.6-119		%REC	1	8/20/2012 11:32:00 PM
Surr: Toluene-d8	98.1	78.5-126		%REC	1	8/20/2012 11:32:00 PM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	20.0			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 11:40:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-019

**Matrix:** Soil

**Client Sample ID:** HA-8-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	17.8		mg/Kg-dry	1	8/18/2012 3:21:00 AM
Diesel Range Organics (C12-C24)	ND	17.8		mg/Kg-dry	1	8/18/2012 3:21:00 AM
Heavy Oil	ND	44.6		mg/Kg-dry	1	8/18/2012 3:21:00 AM
Surr: 2-Fluorobiphenyl	94.6	50-150		%REC	1	8/18/2012 3:21:00 AM
Surr: o-Terphenyl	91.5	50-150		%REC	1	8/18/2012 3:21:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.00		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Gasoline Range Organics C6-C12	ND	6.00		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Surr: 1,2-Dichloroethane-d4	102	65-135		%REC	1	8/21/2012 12:04:00 AM
Surr: Fluorobenzene	98.7	65-135		%REC	1	8/21/2012 12:04:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0720	*	mg/Kg-dry	1	8/21/2012 12:04:00 AM
Chloromethane	ND	0.0720		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Vinyl chloride	ND	0.00240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Bromomethane	ND	0.108		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Chloroethane	ND	0.0720		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1-Dichloroethene	ND	0.0600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
2,2-Dichloropropane	ND	0.0600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Chloroform	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Carbon tetrachloride	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2-Dichloroethane (EDC)	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Benzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Trichloroethene (TCE)	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 11:40:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-019

**Matrix:** Soil

**Client Sample ID:** HA-8-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>					Batch ID: 2985	Analyst: EM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Dibromomethane	ND	0.0480		mg/Kg-dry	1	8/21/2012 12:04:00 AM
cis-1,3-Dichloropropene	ND	0.0240	*	mg/Kg-dry	1	8/21/2012 12:04:00 AM
Toluene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
trans-1,3-Dichloropropylene	ND	0.0360	*	mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1,2-Trichloroethane	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,3-Dichloropropane	ND	0.0600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Tetrachloroethene (PCE)	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Dibromochloromethane	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2-Dibromoethane (EDB)	ND	0.00600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Chlorobenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Ethylbenzene	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
m,p-Xylene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
o-Xylene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Styrene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Isopropylbenzene	ND	0.0960		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Bromoform	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
n-Propylbenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Bromobenzene	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,3,5-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
2-Chlorotoluene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
4-Chlorotoluene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
tert-Butylbenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2,3-Trichloropropane	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2,4-Trichlorobenzene	ND	0.0600		mg/Kg-dry	1	8/21/2012 12:04:00 AM
sec-Butylbenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
4-Isopropyltoluene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,3-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,4-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
n-Butylbenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 11:40:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-019

**Matrix:** Soil

**Client Sample ID:** HA-8-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Hexachlorobutadiene	ND	0.120		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Naphthalene	ND	0.0360		mg/Kg-dry	1	8/21/2012 12:04:00 AM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	8/21/2012 12:04:00 AM
Surr: 1-Bromo-4-fluorobenzene	103	63.1-141		%REC	1	8/21/2012 12:04:00 AM
Surr: Dibromofluoromethane	101	67.6-119		%REC	1	8/21/2012 12:04:00 AM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/21/2012 12:04:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	5.51			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-022

**Matrix:** Soil

**Client Sample ID:** HA-7-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	22.0		mg/Kg-dry	1	8/18/2012 3:48:00 AM
Diesel Range Organics (C12-C24)	ND	22.0		mg/Kg-dry	1	8/18/2012 3:48:00 AM
Heavy Oil	ND	55.1		mg/Kg-dry	1	8/18/2012 3:48:00 AM
Surr: 2-Fluorobiphenyl	96.4	50-150		%REC	1	8/18/2012 3:48:00 AM
Surr: o-Terphenyl	93.4	50-150		%REC	1	8/18/2012 3:48:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	4.74		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Gasoline Range Organics C6-C12	ND	4.74		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Surr: 1,2-Dichloroethane-d4	106	65-135		%REC	1	8/21/2012 1:07:00 AM
Surr: Fluorobenzene	101	65-135		%REC	1	8/21/2012 1:07:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0569	*	mg/Kg-dry	1	8/21/2012 1:07:00 AM
Chloromethane	ND	0.0569		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Vinyl chloride	ND	0.00190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Bromomethane	ND	0.0854		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Chloroethane	ND	0.0569		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1-Dichloroethene	ND	0.0474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Methylene chloride	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
trans-1,2-Dichloroethene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1-Dichloroethane	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
2,2-Dichloropropane	ND	0.0474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
cis-1,2-Dichloroethene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Chloroform	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1-Dichloropropene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Carbon tetrachloride	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2-Dichloroethane (EDC)	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Benzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Trichloroethene (TCE)	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-022

**Matrix:** Soil

**Client Sample ID:** HA-7-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Bromodichloromethane	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Dibromomethane	ND	0.0380		mg/Kg-dry	1	8/21/2012 1:07:00 AM
cis-1,3-Dichloropropene	ND	0.0190	*	mg/Kg-dry	1	8/21/2012 1:07:00 AM
Toluene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
trans-1,3-Dichloropropylene	ND	0.0285	*	mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1,2-Trichloroethane	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,3-Dichloropropane	ND	0.0474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Tetrachloroethene (PCE)	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Dibromochloromethane	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2-Dibromoethane (EDB)	ND	0.00474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Chlorobenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Ethylbenzene	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
m,p-Xylene	0.0190	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
o-Xylene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Styrene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Isopropylbenzene	ND	0.0759		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Bromoform	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
n-Propylbenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Bromobenzene	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,3,5-Trimethylbenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
2-Chlorotoluene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
4-Chlorotoluene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
tert-Butylbenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2,3-Trichloropropane	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2,4-Trichlorobenzene	ND	0.0474		mg/Kg-dry	1	8/21/2012 1:07:00 AM
sec-Butylbenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
4-Isopropyltoluene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,3-Dichlorobenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,4-Dichlorobenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
n-Butylbenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2-Dichlorobenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-022

**Matrix:** Soil

**Client Sample ID:** HA-7-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Hexachlorobutadiene	ND	0.0949		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Naphthalene	ND	0.0285		mg/Kg-dry	1	8/21/2012 1:07:00 AM
1,2,3-Trichlorobenzene	ND	0.0190		mg/Kg-dry	1	8/21/2012 1:07:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	8/21/2012 1:07:00 AM
Surr: Dibromofluoromethane	99.8	67.6-119		%REC	1	8/21/2012 1:07:00 AM
Surr: Toluene-d8	100	78.5-126		%REC	1	8/21/2012 1:07:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	14.8			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-023

**Matrix:** Soil

**Client Sample ID:** HA-7-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3048

Analyst: EM

Benzene	ND	0.0188		mg/Kg-dry	1	8/26/2012 8:48:00 AM
Toluene	ND	0.0188		mg/Kg-dry	1	8/26/2012 8:48:00 AM
Ethylbenzene	ND	0.0282		mg/Kg-dry	1	8/26/2012 8:48:00 AM
m,p-Xylene	ND	0.0188		mg/Kg-dry	1	8/26/2012 8:48:00 AM
o-Xylene	ND	0.0188		mg/Kg-dry	1	8/26/2012 8:48:00 AM
Surr: 1-Bromo-4-fluorobenzene	107	63.1-141		%REC	1	8/26/2012 8:48:00 AM
Surr: Dibromofluoromethane	91.0	67.6-119		%REC	1	8/26/2012 8:48:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/26/2012 8:48:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5456

Analyst: SG

Percent Moisture	17.8			wt%	1	8/24/2012 11:05:56 AM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-025

**Matrix:** Soil

**Client Sample ID:** HA-6-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	19.6		mg/Kg-dry	1	8/18/2012 4:16:00 AM
Diesel Range Organics (C12-C24)	ND	19.6		mg/Kg-dry	1	8/18/2012 4:16:00 AM
Heavy Oil	ND	49.0		mg/Kg-dry	1	8/18/2012 4:16:00 AM
Surr: 2-Fluorobiphenyl	98.0	50-150		%REC	1	8/18/2012 4:16:00 AM
Surr: o-Terphenyl	93.5	50-150		%REC	1	8/18/2012 4:16:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.21		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Gasoline Range Organics C6-C12	ND	6.21		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Surr: 1,2-Dichloroethane-d4	104	65-135		%REC	1	8/21/2012 1:39:00 AM
Surr: Fluorobenzene	99.8	65-135		%REC	1	8/21/2012 1:39:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0745	*	mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chloromethane	ND	0.0745		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Vinyl chloride	ND	0.00248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Bromomethane	ND	0.112		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chloroethane	ND	0.0745		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1-Dichloroethane	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Methylene chloride	ND	0.0248	[RA]	mg/Kg-dry	1	8/30/2012 7:42:00 PM
trans-1,2-Dichloroethene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1-Dichloroethane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
2,2-Dichloropropane	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
cis-1,2-Dichloroethene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chloroform	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1-Dichloropropene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Carbon tetrachloride	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2-Dichloroethane (EDC)	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Benzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Trichloroethene (TCE)	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-025

**Matrix:** Soil

**Client Sample ID:** HA-6-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Bromodichloromethane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Dibromomethane	ND	0.0497		mg/Kg-dry	1	8/21/2012 1:39:00 AM
cis-1,3-Dichloropropene	ND	0.0248	*	mg/Kg-dry	1	8/21/2012 1:39:00 AM
Toluene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
trans-1,3-Dichloropropylene	ND	0.0372	*	mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1,2-Trichloroethane	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,3-Dichloropropane	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Tetrachloroethene (PCE)	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Dibromochloromethane	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2-Dibromoethane (EDB)	ND	0.00621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chlorobenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Ethylbenzene	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
m,p-Xylene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
o-Xylene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Styrene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Isopropylbenzene	ND	0.0993		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Bromoform	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
n-Propylbenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Bromobenzene	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,3,5-Trimethylbenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
2-Chlorotoluene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
4-Chlorotoluene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
tert-Butylbenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2,3-Trichloropropane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2,4-Trichlorobenzene	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
sec-Butylbenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
4-Isopropyltoluene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,3-Dichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,4-Dichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
n-Butylbenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2-Dichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-025

**Matrix:** Soil

**Client Sample ID:** HA-6-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Hexachlorobutadiene	ND	0.124		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Naphthalene	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2,3-Trichlorobenzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	8/21/2012 1:39:00 AM
Surr: Dibromofluoromethane	101	67.6-119		%REC	1	8/21/2012 1:39:00 AM
Surr: Toluene-d8	97.3	78.5-126		%REC	1	8/21/2012 1:39:00 AM

**NOTES:**

\* Flagged value is not within established control limits  
Methylene Chloride is a common laboratory solvent.

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	10.3			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-028

**Matrix:** Soil

**Client Sample ID:** HA-5-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	20.5		mg/Kg-dry	1	8/18/2012 4:44:00 AM
Diesel Range Organics (C12-C24)	ND	20.5		mg/Kg-dry	1	8/18/2012 4:44:00 AM
Heavy Oil	ND	51.4		mg/Kg-dry	1	8/18/2012 4:44:00 AM
Surr: 2-Fluorobiphenyl	93.7	50-150		%REC	1	8/18/2012 4:44:00 AM
Surr: o-Terphenyl	90.4	50-150		%REC	1	8/18/2012 4:44:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	4.80		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Gasoline Range Organics C6-C12	ND	4.80		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Surr: 1,2-Dichloroethane-d4	112	65-135		%REC	1	8/21/2012 2:10:00 AM
Surr: Fluorobenzene	106	65-135		%REC	1	8/21/2012 2:10:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0576	*	mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chloromethane	ND	0.0576		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Vinyl chloride	ND	0.00192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Bromomethane	ND	0.0863		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chloroethane	ND	0.0576		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1-Dichloroethane	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Methylene chloride	ND	0.0192	[RA]	mg/Kg-dry	1	9/6/2012 2:58:00 PM
trans-1,2-Dichloroethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1-Dichloroethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
2,2-Dichloropropane	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
cis-1,2-Dichloroethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chloroform	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1-Dichloropropene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Carbon tetrachloride	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2-Dichloroethane (EDC)	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Benzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Trichloroethene (TCE)	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-028

**Matrix:** Soil

**Client Sample ID:** HA-5-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Bromodichloromethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Dibromomethane	ND	0.0384		mg/Kg-dry	1	8/21/2012 2:10:00 AM
cis-1,3-Dichloropropene	ND	0.0192	*	mg/Kg-dry	1	8/21/2012 2:10:00 AM
Toluene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
trans-1,3-Dichloropropylene	ND	0.0288	*	mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1,2-Trichloroethane	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,3-Dichloropropane	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Tetrachloroethene (PCE)	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Dibromochloromethane	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2-Dibromoethane (EDB)	ND	0.00480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chlorobenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Ethylbenzene	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
m,p-Xylene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
o-Xylene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Styrene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Isopropylbenzene	ND	0.0767		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Bromoform	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
n-Propylbenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Bromobenzene	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,3,5-Trimethylbenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
2-Chlorotoluene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
4-Chlorotoluene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
tert-Butylbenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2,3-Trichloropropane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2,4-Trichlorobenzene	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
sec-Butylbenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
4-Isopropyltoluene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,3-Dichlorobenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,4-Dichlorobenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
n-Butylbenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2-Dichlorobenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-028

**Matrix:** Soil

**Client Sample ID:** HA-5-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Hexachlorobutadiene	ND	0.0959		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Naphthalene	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2,3-Trichlorobenzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Surr: 1-Bromo-4-fluorobenzene	108	63.1-141		%REC	1	8/21/2012 2:10:00 AM
Surr: Dibromofluoromethane	100	67.6-119		%REC	1	8/21/2012 2:10:00 AM
Surr: Toluene-d8	98.6	78.5-126		%REC	1	8/21/2012 2:10:00 AM

**NOTES:**

\* Flagged value is not within established control limits  
Methylene Chloride is a common laboratory solvent.

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	6.95			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-031

**Matrix:** Soil

**Client Sample ID:** GP-7-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	19.6		mg/Kg-dry	1	8/18/2012 5:39:00 AM
Diesel Range Organics (C12-C24)	31.3	19.6		mg/Kg-dry	1	8/18/2012 5:39:00 AM
Heavy Oil	ND	49.0		mg/Kg-dry	1	8/18/2012 5:39:00 AM
Surr: 2-Fluorobiphenyl	91.7	50-150		%REC	1	8/18/2012 5:39:00 AM
Surr: o-Terphenyl	95.3	50-150		%REC	1	8/18/2012 5:39:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	5.32		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Gasoline Range Organics C6-C12	ND	5.32		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Surr: 1,2-Dichloroethane-d4	107	65-135		%REC	1	8/21/2012 2:42:00 AM
Surr: Fluorobenzene	103	65-135		%REC	1	8/21/2012 2:42:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0638	*	mg/Kg-dry	1	8/21/2012 2:42:00 AM
Chloromethane	ND	0.0638		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Vinyl chloride	ND	0.00213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Bromomethane	ND	0.0957		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Chloroethane	ND	0.0638		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1-Dichloroethene	ND	0.0532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Methylene chloride	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
trans-1,2-Dichloroethene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1-Dichloroethane	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
2,2-Dichloropropane	ND	0.0532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
cis-1,2-Dichloroethene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Chloroform	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1-Dichloropropene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Carbon tetrachloride	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2-Dichloroethane (EDC)	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Benzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Trichloroethene (TCE)	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-031

**Matrix:** Soil

**Client Sample ID:** GP-7-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Bromodichloromethane	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Dibromomethane	ND	0.0426		mg/Kg-dry	1	8/21/2012 2:42:00 AM
cis-1,3-Dichloropropene	ND	0.0213	*	mg/Kg-dry	1	8/21/2012 2:42:00 AM
Toluene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
trans-1,3-Dichloropropylene	ND	0.0319	*	mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1,2-Trichloroethane	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,3-Dichloropropane	ND	0.0532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Tetrachloroethene (PCE)	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Dibromochloromethane	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2-Dibromoethane (EDB)	ND	0.00532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Chlorobenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Ethylbenzene	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
m,p-Xylene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
o-Xylene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Styrene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Isopropylbenzene	ND	0.0851		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Bromoform	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
n-Propylbenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Bromobenzene	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,3,5-Trimethylbenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
2-Chlorotoluene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
4-Chlorotoluene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
tert-Butylbenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2,3-Trichloropropane	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2,4-Trichlorobenzene	ND	0.0532		mg/Kg-dry	1	8/21/2012 2:42:00 AM
sec-Butylbenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
4-Isopropyltoluene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,3-Dichlorobenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,4-Dichlorobenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
n-Butylbenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2-Dichlorobenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-031

**Matrix:** Soil

**Client Sample ID:** GP-7-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Hexachlorobutadiene	ND	0.106		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Naphthalene	ND	0.0319		mg/Kg-dry	1	8/21/2012 2:42:00 AM
1,2,3-Trichlorobenzene	ND	0.0213		mg/Kg-dry	1	8/21/2012 2:42:00 AM
Surr: 1-Bromo-4-fluorobenzene	98.2	63.1-141		%REC	1	8/21/2012 2:42:00 AM
Surr: Dibromofluoromethane	99.2	67.6-119		%REC	1	8/21/2012 2:42:00 AM
Surr: Toluene-d8	97.9	78.5-126		%REC	1	8/21/2012 2:42:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5343

Analyst: AO

Percent Moisture	7.71			wt%	1	8/16/2012 1:31:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-033

**Matrix:** Soil

**Client Sample ID:** GP-7-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	23.8		mg/Kg-dry	1	8/18/2012 6:06:00 AM
Diesel Range Organics (C12-C24)	ND	23.8		mg/Kg-dry	1	8/18/2012 6:06:00 AM
Heavy Oil	ND	59.6		mg/Kg-dry	1	8/18/2012 6:06:00 AM
Surr: 2-Fluorobiphenyl	94.7	50-150		%REC	1	8/18/2012 6:06:00 AM
Surr: o-Terphenyl	92.0	50-150		%REC	1	8/18/2012 6:06:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	7.26		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Gasoline Range Organics C6-C12	ND	7.26		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Surr: 1,2-Dichloroethane-d4	103	65-135		%REC	1	8/21/2012 3:14:00 AM
Surr: Fluorobenzene	98.0	65-135		%REC	1	8/21/2012 3:14:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0871	*	mg/Kg-dry	1	8/21/2012 3:14:00 AM
Chloromethane	ND	0.0871		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Vinyl chloride	ND	0.00290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Bromomethane	ND	0.131		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Chloroethane	ND	0.0871		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1-Dichloroethene	ND	0.0726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Methylene chloride	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
trans-1,2-Dichloroethene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1-Dichloroethane	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
2,2-Dichloropropane	ND	0.0726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
cis-1,2-Dichloroethene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Chloroform	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1-Dichloropropene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Carbon tetrachloride	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2-Dichloroethane (EDC)	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Benzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Trichloroethene (TCE)	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-033

**Matrix:** Soil

**Client Sample ID:** GP-7-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Bromodichloromethane	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Dibromomethane	ND	0.0580		mg/Kg-dry	1	8/21/2012 3:14:00 AM
cis-1,3-Dichloropropene	ND	0.0290	*	mg/Kg-dry	1	8/21/2012 3:14:00 AM
Toluene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
trans-1,3-Dichloropropylene	ND	0.0435	*	mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1,2-Trichloroethane	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,3-Dichloropropane	ND	0.0726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Tetrachloroethene (PCE)	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Dibromochloromethane	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2-Dibromoethane (EDB)	ND	0.00726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Chlorobenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Ethylbenzene	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
m,p-Xylene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
o-Xylene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Styrene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Isopropylbenzene	ND	0.116		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Bromoform	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
n-Propylbenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Bromobenzene	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,3,5-Trimethylbenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
2-Chlorotoluene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
4-Chlorotoluene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
tert-Butylbenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2,3-Trichloropropane	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2,4-Trichlorobenzene	ND	0.0726		mg/Kg-dry	1	8/21/2012 3:14:00 AM
sec-Butylbenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
4-Isopropyltoluene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,3-Dichlorobenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,4-Dichlorobenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
n-Butylbenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2-Dichlorobenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-033

**Matrix:** Soil

**Client Sample ID:** GP-7-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Hexachlorobutadiene	ND	0.145		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Naphthalene	ND	0.0435		mg/Kg-dry	1	8/21/2012 3:14:00 AM
1,2,3-Trichlorobenzene	ND	0.0290		mg/Kg-dry	1	8/21/2012 3:14:00 AM
Surr: 1-Bromo-4-fluorobenzene	96.7	63.1-141		%REC	1	8/21/2012 3:14:00 AM
Surr: Dibromofluoromethane	98.9	67.6-119		%REC	1	8/21/2012 3:14:00 AM
Surr: Toluene-d8	99.8	78.5-126		%REC	1	8/21/2012 3:14:00 AM

**NOTES:**

\* Flagged value is not within established control limits

**Sample Moisture (Percent Moisture)**

Batch ID: R5343

Analyst: AO

Percent Moisture	19.5			wt%	1	8/16/2012 1:31:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-035

**Matrix:** Soil

**Client Sample ID:** GP-7-22.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	23.9		mg/Kg-dry	1	8/18/2012 6:34:00 AM
Diesel Range Organics (C12-C24)	ND	23.9		mg/Kg-dry	1	8/18/2012 6:34:00 AM
Heavy Oil	ND	59.7		mg/Kg-dry	1	8/18/2012 6:34:00 AM
Surr: 2-Fluorobiphenyl	95.1	50-150		%REC	1	8/18/2012 6:34:00 AM
Surr: o-Terphenyl	93.9	50-150		%REC	1	8/18/2012 6:34:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	7.09		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Gasoline Range Organics C6-C12	ND	7.09		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Surr: 1,2-Dichloroethane-d4	77.0	65-135		%REC	1	8/17/2012 10:16:00 AM
Surr: Fluorobenzene	103	65-135		%REC	1	8/17/2012 10:16:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0850		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Chloromethane	ND	0.0850		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Vinyl chloride	ND	0.00283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Bromomethane	ND	0.128		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Chloroethane	ND	0.0850		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1-Dichloroethene	ND	0.0709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Methylene chloride	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
trans-1,2-Dichloroethene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1-Dichloroethane	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
2,2-Dichloropropane	ND	0.0709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
cis-1,2-Dichloroethene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Chloroform	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1-Dichloropropene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Carbon tetrachloride	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2-Dichloroethane (EDC)	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Benzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Trichloroethene (TCE)	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-035

**Matrix:** Soil

**Client Sample ID:** GP-7-22.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2-Dichloropropane	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Bromodichloromethane	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Dibromomethane	ND	0.0567		mg/Kg-dry	1	8/17/2012 10:16:00 AM
cis-1,3-Dichloropropene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Toluene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
trans-1,3-Dichloropropylene	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1,2-Trichloroethane	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,3-Dichloropropane	ND	0.0709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Tetrachloroethene (PCE)	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Dibromochloromethane	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2-Dibromoethane (EDB)	ND	0.00709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Chlorobenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Ethylbenzene	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
m,p-Xylene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
o-Xylene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Styrene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Isopropylbenzene	ND	0.113		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Bromoform	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
n-Propylbenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Bromobenzene	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,3,5-Trimethylbenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
2-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
4-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
tert-Butylbenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2,3-Trichloropropane	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2,4-Trichlorobenzene	ND	0.0709		mg/Kg-dry	1	8/17/2012 10:16:00 AM
sec-Butylbenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
4-Isopropyltoluene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,3-Dichlorobenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,4-Dichlorobenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
n-Butylbenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2-Dichlorobenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/13/2012 3:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-035

**Matrix:** Soil

**Client Sample ID:** GP-7-22.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Hexachlorobutadiene	ND	0.142		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Naphthalene	ND	0.0425		mg/Kg-dry	1	8/17/2012 10:16:00 AM
1,2,3-Trichlorobenzene	ND	0.0283		mg/Kg-dry	1	8/17/2012 10:16:00 AM
Surr: 1-Bromo-4-fluorobenzene	97.0	63.1-141		%REC	1	8/17/2012 10:16:00 AM
Surr: Dibromofluoromethane	92.8	67.6-119		%REC	1	8/17/2012 10:16:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/17/2012 10:16:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5343

Analyst: AO

Percent Moisture	21.2			wt%	1	8/16/2012 1:31:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>1208084-028BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5387</b>							
Client ID: <b>HA-5-2</b>	Batch ID: <b>2989</b>		Analysis Date: <b>8/18/2012</b>	SeqNo: <b>105452</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	19.8						0	0	30	
Diesel Range Organics (C12-C24)	ND	19.8						0	0	30	
Heavy Oil	ND	49.4						0	0	30	
Surr: 2-Fluorobiphenyl	18.6		19.76		94.4	50	150		0		
Surr: o-Terphenyl	17.9		19.76		90.9	50	150		0		

Sample ID: <b>1208084-009BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5387</b>							
Client ID: <b>GP-24-0.5</b>	Batch ID: <b>2989</b>		Analysis Date: <b>8/18/2012</b>	SeqNo: <b>105459</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	21.6						0	0	30	
Diesel Range Organics (C12-C24)	ND	21.6						0	0	30	
Heavy Oil	213	54.1						176.2	18.9	30	
Surr: 2-Fluorobiphenyl	25.5		21.65		118	50	150		0		
Surr: o-Terphenyl	24.0		21.65		111	50	150		0		

Sample ID: <b>LCS-2989</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5387</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2989</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105461</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	551	20.0	500.0	0	110	65	135				
Surr: 2-Fluorobiphenyl	22.8		20.00		114	50	150				
Surr: o-Terphenyl	22.1		20.00		111	50	150				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>MB-2989</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5387</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2989</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105462</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	19.6		20.00		98.1	50	150				
Surr: o-Terphenyl	18.7		20.00		93.6	50	150				

Sample ID: <b>CCV-2989B</b>	SampType: <b>CCV</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5387</b>							
Client ID: <b>CCV</b>	Batch ID: <b>2989</b>		Analysis Date: <b>8/20/2012</b>	SeqNo: <b>105464</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	423	20.0	500.0	0	84.6	80	120				
Surr: 2-Fluorobiphenyl	21.1		20.00		106	50	150				
Surr: o-Terphenyl	20.9		20.00		105	50	150				

Sample ID: <b>LCS-3041</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>107253</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	493	20.0	500.0	0	98.6	65	135				
Surr: 2-Fluorobiphenyl	25.9		20.00		129	50	150				
Surr: o-Terphenyl	25.4		20.00		127	50	150				

Sample ID: <b>MB-3041</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>107254</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>MB-3041</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>107254</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	25.7		20.00		128	50	150				
Surr: o-Terphenyl	25.0		20.00		125	50	150				

Sample ID: <b>1208084-003BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5469</b>							
Client ID: <b>GP-13-9.5</b>	Batch ID: <b>3041</b>		Analysis Date: <b>8/27/2012</b>	SeqNo: <b>108414</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	21.0						0	0	30	
Diesel Range Organics (C12-C24)	ND	21.0						0	0	30	
Heavy Oil	ND	52.6						0	0	30	
Surr: 2-Fluorobiphenyl	29.0		21.04		138	50	150		0		
Surr: o-Terphenyl	28.2		21.04		134	50	150		0		

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>LCS-R5370</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105248</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	25.7	5.00	25.00	0	103	65	135				
Surr: 1,2-Dichloroethane-d4	0.440		0.5000		88.0	65	135				
Surr: Fluorobenzene	0.532		0.5000		106	65	135				

Sample ID: <b>MB-R5370</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105249</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.397		0.5000		79.4	65	135				
Surr: Fluorobenzene	0.520		0.5000		104	65	135				

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>HA-8-2</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105759</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	6.00						0	0	30	
Gasoline Range Organics C6-C12	ND	6.00						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.609		0.6000		102	65	135		0		
Surr: Fluorobenzene	0.593		0.6000		98.8	65	135		0		

Sample ID: <b>CCV-R5370B</b>	SampType: <b>CCV</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>CCV</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/20/2012</b>	SeqNo: <b>105766</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	526	5.00	500.0	0	105	80	120				
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**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>CCV-R5370B</b>	SampType: <b>CCV</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5370</b>							
Client ID: <b>CCV</b>	Batch ID: <b>R5370</b>		Analysis Date: <b>8/20/2012</b>	SeqNo: <b>105766</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 1,2-Dichloroethane-d4	10.3		10.00		103	65	135				
Surr: Fluorobenzene	9.61		10.00		96.1	65	135				

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5512</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>R5512</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108348</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.32						0	0	30	
Gasoline Range Organics C6-C12	8.71	5.32						7.815	10.8	30	
Surr: 1,2-Dichloroethane-d4	0.465		0.5316		87.4	65	135		0		
Surr: Fluorobenzene	0.423		0.5316		79.6	65	135		0		

Sample ID: <b>LCS-R5512</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5512</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5512</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108350</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	29.6	5.00	25.00	0	118	65	135				
Surr: 1,2-Dichloroethane-d4	0.434		0.5000		86.7	65	135				
Surr: Fluorobenzene	0.398		0.5000		79.6	65	135				

Sample ID: <b>MB-R5512</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5512</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5512</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108351</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.438		0.5000		87.6	65	135				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>MB-R5512</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5512</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5512</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108351</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Fluorobenzene	0.400		0.5000		80.0	65	135				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-035AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>GP-7-22.5</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105234</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.16	0.0850	1.417	0	82.1	43.5	121				
Chloromethane	1.16	0.0850	1.417	0	82.2	45	130				
Vinyl chloride	1.28	0.00283	1.417	0	90.2	51.2	146				
Bromomethane	0.779	0.128	1.417	0	55.0	70	130				S
Trichlorofluoromethane (CFC-11)	0.368	0.0709	1.417	0	26.0	52.2	132				S
Chloroethane	0.442	0.0850	1.417	0	31.2	43.8	117				S
1,1-Dichloroethene	0.624	0.0709	1.417	0	44.1	61.9	141				S
Methylene chloride	0.762	0.0283	1.417	0	53.8	54.7	142				S
trans-1,2-Dichloroethene	1.07	0.0283	1.417	0	75.4	52	136				
Methyl tert-butyl ether (MTBE)	0.964	0.0709	1.417	0	68.0	54.4	132				
1,1-Dichloroethane	1.05	0.0283	1.417	0	74.4	51.8	141				
2,2-Dichloropropane	1.48	0.0709	1.417	0	105	36	123				
cis-1,2-Dichloroethene	1.29	0.0283	1.417	0	91.3	58.6	136				
Chloroform	1.24	0.0283	1.417	0	87.8	53.2	129				
1,1,1-Trichloroethane (TCA)	1.28	0.0283	1.417	0	90.1	58.3	145				
1,1-Dichloropropene	1.28	0.0283	1.417	0	90.7	55.1	138				
Carbon tetrachloride	1.31	0.0283	1.417	0	92.6	53.3	144				
1,2-Dichloroethane (EDC)	1.09	0.0425	1.417	0	76.7	51.3	139				
Benzene	1.23	0.0283	1.417	0	86.8	63.5	133				
Trichloroethene (TCE)	1.29	0.0425	1.417	0	91.1	68.6	132				
1,2-Dichloropropane	1.28	0.0283	1.417	0	90.4	59	136				
Bromodichloromethane	1.21	0.0283	1.417	0	85.1	50.7	141				
Dibromomethane	1.20	0.0567	1.417	0	84.8	50.6	137				
cis-1,3-Dichloropropene	0.825	0.0283	1.417	0	58.3	52.3	129				
Toluene	1.32	0.0283	1.417	0	93.5	67.8	129				
trans-1,3-Dichloropropylene	0.825	0.0425	1.417	0	58.3	52.2	138				
1,1,2-Trichloroethane	1.28	0.0425	1.417	0	90.6	51.6	137				
1,3-Dichloropropane	1.24	0.0709	1.417	0	87.6	53.1	134				
Tetrachloroethene (PCE)	1.25	0.0283	1.417	0	88.5	44.1	141				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-035AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>GP-7-22.5</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105234</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	1.19	0.0425	1.417	0	84.2	55.3	140				
1,2-Dibromoethane (EDB)	1.28	0.00709	1.417	0	90.6	50.4	136				
Chlorobenzene	1.38	0.0283	1.417	0	97.6	60	133				
1,1,1,2-Tetrachloroethane	1.38	0.0425	1.417	0	97.3	53.1	142				
Ethylbenzene	1.37	0.0425	1.417	0	96.8	54.5	134				
m,p-Xylene	2.58	0.0283	2.834	0	91.1	53.1	132				
o-Xylene	1.34	0.0283	1.417	0	94.5	53.3	139				
Styrene	1.32	0.0283	1.417	0	92.9	51.1	132				
Isopropylbenzene	1.41	0.113	1.417	0	99.3	58.9	138				
Bromoform	1.20	0.0283	1.417	0	84.6	57.9	130				
1,1,2,2-Tetrachloroethane	1.24	0.0283	1.417	0	87.8	51.9	131				
n-Propylbenzene	1.27	0.0283	1.417	0	89.5	53.6	140				
Bromobenzene	1.41	0.0425	1.417	0	99.2	54.2	140				
1,3,5-Trimethylbenzene	1.31	0.0283	1.417	0	92.2	51.8	136				
2-Chlorotoluene	1.23	0.0283	1.417	0	86.9	51.6	136				
4-Chlorotoluene	1.30	0.0283	1.417	0	91.6	50.1	139				
tert-Butylbenzene	1.60	0.0283	1.417	0	113	50.5	135				
1,2,3-Trichloropropane	1.22	0.0283	1.417	0	86.3	50.5	131				
1,2,4-Trichlorobenzene	1.19	0.0709	1.417	0	84.1	50.8	130				
sec-Butylbenzene	1.39	0.0283	1.417	0	98.1	52.6	141				
4-Isopropyltoluene	1.43	0.0283	1.417	0	101	52.9	134				
1,3-Dichlorobenzene	1.22	0.0283	1.417	0	86.4	52.6	131				
1,4-Dichlorobenzene	1.22	0.0283	1.417	0	86.4	52.9	129				
n-Butylbenzene	1.20	0.0283	1.417	0	84.6	52.6	130				
1,2-Dichlorobenzene	1.14	0.0283	1.417	0	80.4	55.8	129				
1,2-Dibromo-3-chloropropane	0.859	0.0425	1.417	0	60.7	53	129				
1,2,4-Trimethylbenzene	1.35	0.0283	1.417	0	95.6	50.6	137				
Hexachlorobutadiene	1.21	0.142	1.417	0	85.3	51.5	130				
Naphthalene	1.06	0.0425	1.417	0	75.0	52.3	124				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-035AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>GP-7-22.5</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105234</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	1.16	0.0283	1.417	0	81.7	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.708		0.7086		99.9	63.1	141				
Surr: Dibromofluoromethane	0.658		0.7086		92.8	67.6	119				
Surr: Toluene-d8	0.718		0.7086		101	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Sample ID: <b>LCS-2985</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105235</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.944	0.0600	1.000	0	94.4	41.5	132				
Chloromethane	0.940	0.0600	1.000	0	94.0	52.3	129				
Vinyl chloride	1.04	0.00200	1.000	0	104	51.1	134				
Bromomethane	1.06	0.0900	1.000	0	106	54.6	148				
Trichlorofluoromethane (CFC-11)	1.12	0.0500	1.000	0	112	59.7	131				
Chloroethane	1.14	0.0600	1.000	0	114	53.9	135				
1,1-Dichloroethene	1.13	0.0500	1.000	0	113	58	139				
Methylene chloride	1.11	0.0200	1.000	0	111	58.7	141				
trans-1,2-Dichloroethene	1.14	0.0200	1.000	0	114	70	130				
Methyl tert-butyl ether (MTBE)	1.11	0.0500	1.000	0	111	70	130				
1,1-Dichloroethane	1.13	0.0200	1.000	0	113	67.6	127				
2,2-Dichloropropane	0.911	0.0500	1.000	0	91.1	40.1	133				
cis-1,2-Dichloroethene	1.18	0.0200	1.000	0	118	70	130				
Chloroform	1.14	0.0200	1.000	0	114	64	127				
1,1,1-Trichloroethane (TCA)	1.11	0.0200	1.000	0	111	68.9	132				
1,1-Dichloropropene	1.12	0.0200	1.000	0	112	70	130				
Carbon tetrachloride	1.21	0.0200	1.000	0	121	56.3	141				
1,2-Dichloroethane (EDC)	1.06	0.0300	1.000	0	106	69.4	131				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2985</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>
Client ID: <b>LCSS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105235</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.03	0.0200	1.000	0	103	72.3	125				
Trichloroethene (TCE)	1.22	0.0300	1.000	0	122	73.5	130				
1,2-Dichloropropane	1.12	0.0200	1.000	0	112	70	130				
Bromodichloromethane	1.12	0.0200	1.000	0	112	70	130				
Dibromomethane	1.12	0.0400	1.000	0	112	70	130				
cis-1,3-Dichloropropene	0.840	0.0200	1.000	0	84.0	58.7	141				
Toluene	1.10	0.0200	1.000	0	110	73.6	126				
trans-1,3-Dichloropropylene	0.840	0.0300	1.000	0	84.0	55.3	142				
1,1,2-Trichloroethane	1.10	0.0300	1.000	0	110	70	130				
1,3-Dichloropropane	1.08	0.0500	1.000	0	108	70	130				
Tetrachloroethene (PCE)	1.31	0.0200	1.000	0	131	55.2	151				
Dibromochloromethane	1.18	0.0300	1.000	0	118	71.5	142				
1,2-Dibromoethane (EDB)	1.12	0.00500	1.000	0	112	70	130				
Chlorobenzene	1.13	0.0200	1.000	0	113	74.2	122				
1,1,1,2-Tetrachloroethane	1.22	0.0300	1.000	0	122	70	130				
Ethylbenzene	1.21	0.0300	1.000	0	121	70	130				
m,p-Xylene	2.17	0.0200	2.000	0	108	70	130				
o-Xylene	1.17	0.0200	1.000	0	117	70	130				
Styrene	1.21	0.0200	1.000	0	121	70	130				
Isopropylbenzene	1.17	0.0800	1.000	0	117	70	130				
Bromoform	1.18	0.0200	1.000	0	118	70.9	147				
1,1,2,2-Tetrachloroethane	1.03	0.0200	1.000	0	103	61.9	136				
n-Propylbenzene	1.06	0.0200	1.000	0	106	70	130				
Bromobenzene	1.23	0.0300	1.000	0	123	52.7	146				
1,3,5-Trimethylbenzene	1.07	0.0200	1.000	0	107	70	130				
2-Chlorotoluene	1.07	0.0200	1.000	0	107	70	130				
4-Chlorotoluene	1.08	0.0200	1.000	0	108	70	130				
tert-Butylbenzene	1.10	0.0200	1.000	0	110	70	130				
1,2,3-Trichloropropane	1.14	0.0200	1.000	0	114	61.7	138				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-2985</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105235</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,4-Trichlorobenzene	1.11	0.0500	1.000	0	111	57.5	138				
sec-Butylbenzene	1.17	0.0200	1.000	0	117	70	130				
4-Isopropyltoluene	1.18	0.0200	1.000	0	118	52	149				
1,3-Dichlorobenzene	1.10	0.0200	1.000	0	110	70	130				
1,4-Dichlorobenzene	1.10	0.0200	1.000	0	110	70	130				
n-Butylbenzene	1.05	0.0200	1.000	0	105	59.2	136				
1,2-Dichlorobenzene	1.08	0.0200	1.000	0	108	70	130				
1,2-Dibromo-3-chloropropane	0.970	0.0300	1.000	0	97.0	60.6	137				
1,2,4-Trimethylbenzene	1.21	0.0200	1.000	0	121	70	130				
Hexachlorobutadiene	1.07	0.100	1.000	0	107	54.7	137				
Naphthalene	1.09	0.0300	1.000	0	109	53.2	136				
1,2,3-Trichlorobenzene	1.17	0.0200	1.000	0	117	51	140				
Surr: 1-Bromo-4-fluorobenzene	0.492		0.5000		98.3	63.1	141				
Surr: Dibromofluoromethane	0.480		0.5000		96.0	67.6	119				
Surr: Toluene-d8	0.511		0.5000		102	78.5	126				

Sample ID: <b>MB-2985</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105236</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2985</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105236</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									

**Qualifiers:** 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      J Analyte detected below quantitation limits      ND Not detected at the Reporting Limit  
R RPD outside accepted recovery limits      RL Reporting Limit      S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-2985</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>
Client ID: <b>MBLKS</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/17/2012</b>	SeqNo: <b>105236</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.479		0.5000		95.7	63.1	141				
Surr: Dibromofluoromethane	0.465		0.5000		93.0	67.6	119				
Surr: Toluene-d8	0.518		0.5000		104	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits





Date: 9/11/2012

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>HA-8-2</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105776</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0720						0	0	30	
Chloromethane	ND	0.0720						0	0	30	
Vinyl chloride	ND	0.00240						0	0	30	
Bromomethane	ND	0.108						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0600						0	0	30	
Chloroethane	ND	0.0720						0	0	30	
1,1-Dichloroethene	ND	0.0600						0	0	30	
Methylene chloride	ND	0.0240						0	0	30	
trans-1,2-Dichloroethene	ND	0.0240						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0600						0	0	30	
1,1-Dichloroethane	ND	0.0240						0	0	30	
2,2-Dichloropropane	ND	0.0600						0	0	30	
cis-1,2-Dichloroethene	ND	0.0240						0	0	30	
Chloroform	ND	0.0240						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0240						0	0	30	
1,1-Dichloropropene	ND	0.0240						0	0	30	
Carbon tetrachloride	ND	0.0240						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0360						0	0	30	
Benzene	ND	0.0240						0	0	30	
Trichloroethene (TCE)	ND	0.0360						0	0	30	
1,2-Dichloropropane	ND	0.0240						0	0	30	
Bromodichloromethane	ND	0.0240						0	0	30	*
Dibromomethane	ND	0.0480						0	0	30	
cis-1,3-Dichloropropene	ND	0.0240						0	0	30	
Toluene	ND	0.0240						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0360						0	0	30	
1,1,2-Trichloroethane	ND	0.0360						0	0	30	
1,3-Dichloropropane	ND	0.0600						0	0	30	
Tetrachloroethene (PCE)	ND	0.0240						0	0	30	

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>HA-8-2</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105776</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.0360						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00600						0	0	30	
Chlorobenzene	ND	0.0240						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0360						0	0	30	
Ethylbenzene	ND	0.0360						0	0	30	
m,p-Xylene	ND	0.0240						0	0	30	
o-Xylene	ND	0.0240						0	0	30	
Styrene	ND	0.0240						0	0	30	
Isopropylbenzene	ND	0.0960						0	0	30	
Bromoform	ND	0.0240						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0240						0	0	30	
n-Propylbenzene	ND	0.0240						0	0	30	
Bromobenzene	ND	0.0360						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0240						0	0	30	
2-Chlorotoluene	ND	0.0240						0	0	30	
4-Chlorotoluene	ND	0.0240						0	0	30	
tert-Butylbenzene	ND	0.0240						0	0	30	
1,2,3-Trichloropropane	ND	0.0240						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0600						0	0	30	
sec-Butylbenzene	ND	0.0240						0	0	30	
4-Isopropyltoluene	ND	0.0240						0	0	30	
1,3-Dichlorobenzene	ND	0.0240						0	0	30	
1,4-Dichlorobenzene	ND	0.0240						0	0	30	
n-Butylbenzene	ND	0.0240						0	0	30	
1,2-Dichlorobenzene	ND	0.0240						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0360						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0240						0	0	30	
Hexachlorobutadiene	ND	0.120						0	0	30	
Naphthalene	ND	0.0360						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208084-019ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>HA-8-2</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105776</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0240						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.609		0.6000		102	63.1	141		0		
Surr: Dibromofluoromethane	0.596		0.6000		99.4	67.6	119		0		
Surr: Toluene-d8	0.595		0.6000		99.2	78.5	126		0		

**NOTES:**

\* Flagged value is not within established control limits

Sample ID: <b>MB-R5418</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5418</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5418</b>		Analysis Date: <b>8/22/2012</b>	SeqNo: <b>106089</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methylene chloride	ND	0.0200									
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Sample ID: <b>CCV-R5418</b>	SampType: <b>CCV</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/16/2012</b>	RunNo: <b>5418</b>							
Client ID: <b>CCV</b>	Batch ID: <b>R5418</b>		Analysis Date: <b>8/22/2012</b>	SeqNo: <b>106090</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methylene chloride	19.6	0.0200	20.00	0	98.2	80	120				
Surr: 1-Bromo-4-fluorobenzene	10.3		10.00		103	63.1	141				
Surr: Dibromofluoromethane	9.63		10.00		96.3	67.6	119				
Surr: Toluene-d8	10.1		10.00		101	78.5	126				

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0638						0	0	30	
Chloromethane	ND	0.0638						0	0	30	

**Qualifiers:**
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
J Analyte detected below quantitation limits
ND Not detected at the Reporting Limit

R RPD outside accepted recovery limits
RL Reporting Limit
S Spike recovery outside accepted recovery limits



**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Vinyl chloride	ND	0.00213						0	0	30	
Bromomethane	ND	0.0957						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0532						0	0	30	
Chloroethane	ND	0.0638						0	0	30	
1,1-Dichloroethene	ND	0.0532						0	0	30	
Methylene chloride	ND	0.0213						0	0	30	
trans-1,2-Dichloroethene	ND	0.0213						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0532						0	0	30	
1,1-Dichloroethane	ND	0.0213						0	0	30	
2,2-Dichloropropane	ND	0.0532						0	0	30	
cis-1,2-Dichloroethene	ND	0.0213						0	0	30	
Chloroform	ND	0.0213						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0213						0	0	30	
1,1-Dichloropropene	ND	0.0213						0	0	30	
Carbon tetrachloride	ND	0.0213						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0319						0	0	30	
Benzene	ND	0.0213						0	0	30	
Trichloroethene (TCE)	ND	0.0319						0	0	30	
1,2-Dichloropropane	ND	0.0213						0	0	30	
Bromodichloromethane	ND	0.0213						0	0	30	
Dibromomethane	ND	0.0425						0	0	30	
cis-1,3-Dichloropropene	ND	0.0213						0	0	30	
Toluene	0.0314	0.0213						0.03083	1.71	30	
trans-1,3-Dichloropropylene	ND	0.0319						0	0	30	
1,1,2-Trichloroethane	ND	0.0319						0	0	30	
1,3-Dichloropropane	ND	0.0532						0	0	30	
Tetrachloroethene (PCE)	ND	0.0213						0	0	30	
Dibromochloromethane	ND	0.0319						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00532						0	0	30	

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.0213						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0319						0	0	30	
Ethylbenzene	ND	0.0319						0	0	30	
m,p-Xylene	ND	0.0213						0	0	30	
o-Xylene	ND	0.0213						0	0	30	
Styrene	ND	0.0213						0	0	30	
Isopropylbenzene	ND	0.0851						0	0	30	
Bromoform	ND	0.0213						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0213						0	0	30	
n-Propylbenzene	0.0250	0.0213						0.02339	6.59	30	
Bromobenzene	ND	0.0319						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0213						0	0	30	
2-Chlorotoluene	ND	0.0213						0	0	30	
4-Chlorotoluene	ND	0.0213						0	0	30	
tert-Butylbenzene	ND	0.0213						0	0	30	
1,2,3-Trichloropropane	ND	0.0213						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0532						0	0	30	
sec-Butylbenzene	ND	0.0213						0	0	30	
4-Isopropyltoluene	ND	0.0213						0	0	30	
1,3-Dichlorobenzene	ND	0.0213						0	0	30	
1,4-Dichlorobenzene	ND	0.0213						0	0	30	
n-Butylbenzene	0.0356	0.0213						0.03455	3.03	30	
1,2-Dichlorobenzene	ND	0.0213						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0319						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0213						0	0	30	
Hexachlorobutadiene	ND	0.106						0	0	30	
Naphthalene	ND	0.0319						0	0	30	
1,2,3-Trichlorobenzene	ND	0.0213						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.579		0.5316		109	63.1	141		0		

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208127-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108337</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Dibromofluoromethane	0.455		0.5316		85.6	67.6	119		0		
Surr: Toluene-d8	0.554		0.5316		104	78.5	126		0		

Sample ID: <b>1208134-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108339</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.698	0.0655	1.092	0	64.0	43.5	121				
Chloromethane	0.738	0.0655	1.092	0	67.6	45	130				
Vinyl chloride	0.492	0.00218	1.092	0	45.1	51.2	146				S
Bromomethane	0.241	0.0983	1.092	0	22.1	70	130				S
Trichlorofluoromethane (CFC-11)	0.693	0.0546	1.092	0	63.5	52.2	132				
Chloroethane	0.608	0.0655	1.092	0	55.7	43.8	117				
1,1-Dichloroethene	0.826	0.0546	1.092	0	75.6	61.9	141				
Methylene chloride	0.765	0.0218	1.092	0	70.0	54.7	142				
trans-1,2-Dichloroethene	0.875	0.0218	1.092	0	80.1	52	136				
Methyl tert-butyl ether (MTBE)	0.822	0.0546	1.092	0	75.3	54.4	132				
1,1-Dichloroethane	0.962	0.0218	1.092	0	88.1	51.8	141				
2,2-Dichloropropane	0.690	0.0546	1.092	0	63.2	36	123				
cis-1,2-Dichloroethene	0.817	0.0218	1.092	0	74.8	58.6	136				
Chloroform	0.767	0.0218	1.092	0	70.3	53.2	129				
1,1,1-Trichloroethane (TCA)	0.882	0.0218	1.092	0	80.8	58.3	145				
1,1-Dichloropropene	0.875	0.0218	1.092	0	80.1	55.1	138				
Carbon tetrachloride	0.880	0.0218	1.092	0	80.6	53.3	144				
1,2-Dichloroethane (EDC)	0.835	0.0328	1.092	0	76.5	51.3	139				
Benzene	0.854	0.0218	1.092	0	78.2	63.5	133				
Trichloroethene (TCE)	0.926	0.0328	1.092	0	84.8	68.6	132				
1,2-Dichloropropane	0.855	0.0218	1.092	0	78.3	59	136				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208134-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108339</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	0.840	0.0218	1.092	0	76.9	50.7	141				
Dibromomethane	0.804	0.0437	1.092	0	73.7	50.6	137				
cis-1,3-Dichloropropene	0.783	0.0218	1.092	0	71.7	52.3	129				
Toluene	0.839	0.0218	1.092	0	76.9	67.8	129				
trans-1,3-Dichloropropylene	0.761	0.0328	1.092	0	69.7	52.2	138				
1,1,2-Trichloroethane	0.817	0.0328	1.092	0	74.9	51.6	137				
1,3-Dichloropropane	0.793	0.0546	1.092	0	72.6	53.1	134				
Tetrachloroethene (PCE)	0.892	0.0218	1.092	0	81.7	44.1	141				
Dibromochloromethane	0.790	0.0328	1.092	0	72.4	55.3	140				
1,2-Dibromoethane (EDB)	0.805	0.00546	1.092	0	73.7	50.4	136				
Chlorobenzene	0.795	0.0218	1.092	0	72.8	60	133				
1,1,1,2-Tetrachloroethane	0.763	0.0328	1.092	0	69.9	53.1	142				
Ethylbenzene	0.775	0.0328	1.092	0	71.0	54.5	134				
m,p-Xylene	1.54	0.0218	2.184	0	70.7	53.1	132				
o-Xylene	0.777	0.0218	1.092	0	71.1	53.3	139				
Styrene	0.781	0.0218	1.092	0	71.6	51.1	132				
Isopropylbenzene	0.815	0.0874	1.092	0	74.6	58.9	138				
Bromoform	0.710	0.0218	1.092	0	65.1	57.9	130				
1,1,2,2-Tetrachloroethane	0.657	0.0218	1.092	0	60.2	51.9	131				
n-Propylbenzene	0.779	0.0218	1.092	0	71.3	53.6	140				
Bromobenzene	0.765	0.0328	1.092	0	70.1	54.2	140				
1,3,5-Trimethylbenzene	0.810	0.0218	1.092	0	74.2	51.8	136				
2-Chlorotoluene	0.793	0.0218	1.092	0	72.6	51.6	136				
4-Chlorotoluene	0.770	0.0218	1.092	0	70.5	50.1	139				
tert-Butylbenzene	0.801	0.0218	1.092	0	73.3	50.5	135				
1,2,3-Trichloropropane	0.744	0.0218	1.092	0	68.2	50.5	131				
1,2,4-Trichlorobenzene	0.722	0.0546	1.092	0	66.2	50.8	130				
sec-Butylbenzene	0.840	0.0218	1.092	0	76.9	52.6	141				
4-Isopropyltoluene	0.816	0.0218	1.092	0	74.7	52.9	134				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208134-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108339</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,3-Dichlorobenzene	0.710	0.0218	1.092	0	65.0	52.6	131				
1,4-Dichlorobenzene	0.706	0.0218	1.092	0	64.7	52.9	129				
n-Butylbenzene	0.703	0.0218	1.092	0	64.4	52.6	130				
1,2-Dichlorobenzene	0.718	0.0218	1.092	0	65.8	55.8	129				
1,2-Dibromo-3-chloropropane	0.626	0.0328	1.092	0	57.3	53	129				
1,2,4-Trimethylbenzene	0.803	0.0218	1.092	0	73.6	50.6	137				
Hexachlorobutadiene	0.813	0.109	1.092	0	74.5	51.5	130				
Naphthalene	0.693	0.0328	1.092	0	63.5	52.3	124				
1,2,3-Trichlorobenzene	0.727	0.0218	1.092	0	66.6	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.587		0.5461		108	63.1	141				
Surr: Dibromofluoromethane	0.491		0.5461		89.9	67.6	119				
Surr: Toluene-d8	0.569		0.5461		104	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Sample ID: <b>LCS-3048</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	1.04	0.0600	1.000	0	104	37.7	136				
Chloromethane	1.08	0.0600	1.000	0	108	38.8	132				
Vinyl chloride	1.07	0.00200	1.000	0	107	56.1	130				
Bromomethane	0.876	0.0900	1.000	0	87.6	44.3	149				
Trichlorofluoromethane (CFC-11)	1.27	0.0500	1.000	0	127	61.8	130				
Chloroethane	1.20	0.0600	1.000	0	120	52.2	131				
1,1-Dichloroethene	1.17	0.0500	1.000	0	117	64.6	134				
Methylene chloride	1.18	0.0200	1.000	0	118	60.6	140				
trans-1,2-Dichloroethene	1.10	0.0200	1.000	0	110	68.7	127				
Methyl tert-butyl ether (MTBE)	1.09	0.0500	1.000	0	109	73.4	128				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3048</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	1.23	0.0200	1.000	0	123	65.5	132				
2,2-Dichloropropane	0.986	0.0500	1.000	0	98.6	28.1	149				
cis-1,2-Dichloroethene	1.14	0.0200	1.000	0	114	71.6	123				
Chloroform	1.15	0.0200	1.000	0	115	67.5	129				
1,1,1-Trichloroethane (TCA)	1.11	0.0200	1.000	0	111	74.4	130				
1,1-Dichloropropene	1.11	0.0200	1.000	0	111	72.7	131				
Carbon tetrachloride	1.05	0.0200	1.000	0	105	73	136				
1,2-Dichloroethane (EDC)	1.10	0.0300	1.000	0	110	68.7	133				
Benzene	1.12	0.0200	1.000	0	112	74.6	124				
Trichloroethene (TCE)	1.15	0.0300	1.000	0	115	71.5	134				
1,2-Dichloropropane	1.14	0.0200	1.000	0	114	72.7	133				
Bromodichloromethane	1.11	0.0200	1.000	0	111	76.1	136				
Dibromomethane	1.12	0.0400	1.000	0	112	70	130				
cis-1,3-Dichloropropene	1.10	0.0200	1.000	0	110	59.1	143				
Toluene	1.11	0.0200	1.000	0	111	81.1	123				
trans-1,3-Dichloropropylene	1.06	0.0300	1.000	0	106	49.2	149				
1,1,2-Trichloroethane	1.10	0.0300	1.000	0	110	74.5	129				
1,3-Dichloropropane	1.09	0.0500	1.000	0	109	70	130				
Tetrachloroethene (PCE)	1.16	0.0200	1.000	0	116	64.4	150				
Dibromochloromethane	1.10	0.0300	1.000	0	110	70.6	144				
1,2-Dibromoethane (EDB)	1.10	0.00500	1.000	0	110	70	130				
Chlorobenzene	1.05	0.0200	1.000	0	105	76.1	123				
1,1,1,2-Tetrachloroethane	1.04	0.0300	1.000	0	104	74.8	131				
Ethylbenzene	1.05	0.0300	1.000	0	105	74	129				
m,p-Xylene	2.09	0.0200	2.000	0	105	79.8	128				
o-Xylene	1.06	0.0200	1.000	0	106	77.3	128				
Styrene	1.05	0.0200	1.000	0	105	76.8	130				
Isopropylbenzene	1.04	0.0800	1.000	0	104	70	130				
Bromoform	1.02	0.0200	1.000	0	102	67	154				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3048</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108355</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	1.00	0.0200	1.000	0	100	61.9	139				
n-Propylbenzene	1.04	0.0200	1.000	0	104	78	130				
Bromobenzene	1.04	0.0300	1.000	0	104	49.2	144				
1,3,5-Trimethylbenzene	1.07	0.0200	1.000	0	107	79.7	128				
2-Chlorotoluene	1.08	0.0200	1.000	0	108	76.7	129				
4-Chlorotoluene	1.06	0.0200	1.000	0	106	77.5	125				
tert-Butylbenzene	1.02	0.0200	1.000	0	102	74.2	128				
1,2,3-Trichloropropane	1.05	0.0200	1.000	0	105	67.9	136				
1,2,4-Trichlorobenzene	1.01	0.0500	1.000	0	101	65.6	137				
sec-Butylbenzene	1.08	0.0200	1.000	0	108	75.6	133				
4-Isopropyltoluene	1.07	0.0200	1.000	0	107	76.8	131				
1,3-Dichlorobenzene	1.01	0.0200	1.000	0	101	72.8	128				
1,4-Dichlorobenzene	1.03	0.0200	1.000	0	103	72.6	126				
n-Butylbenzene	0.972	0.0200	1.000	0	97.2	65.3	136				
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	72.8	126				
1,2-Dibromo-3-chloropropane	1.01	0.0300	1.000	0	101	64.3	135				
1,2,4-Trimethylbenzene	1.07	0.0200	1.000	0	107	77.5	129				
Hexachlorobutadiene	0.961	0.100	1.000	0	96.1	42	151				
Naphthalene	1.01	0.0300	1.000	0	101	64	130				
1,2,3-Trichlorobenzene	1.00	0.0200	1.000	0	100	62.1	140				
Surr: 1-Bromo-4-fluorobenzene	0.532		0.5000		106	63.1	141				
Surr: Dibromofluoromethane	0.506		0.5000		101	67.6	119				
Surr: Toluene-d8	0.525		0.5000		105	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3048</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108356</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3048</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108356</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208084  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3048</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/24/2012</b>	RunNo: <b>5511</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3048</b>		Analysis Date: <b>8/26/2012</b>	SeqNo: <b>108356</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.510		0.5000		102	63.1	141				
Surr: Dibromofluoromethane	0.466		0.5000		93.1	67.6	119				
Surr: Toluene-d8	0.518		0.5000		104	78.5	126				

Sample ID: <b>ICV-2985B</b>	SampType: <b>ICV</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/30/2012</b>	RunNo: <b>5369</b>							
Client ID: <b>ICV</b>	Batch ID: <b>2985</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109946</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methylene chloride	19.3	0.0200	20.00	0	96.5	70	130				
Surr: 1-Bromo-4-fluorobenzene	10.3		10.00		103	63.1	141				
Surr: Dibromofluoromethane	9.92		10.00		99.2	67.6	119				
Surr: Toluene-d8	10.6		10.00		106	78.5	126				

Sample ID: <b>ICV-R5611</b>	SampType: <b>ICV</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/6/2012</b>	RunNo: <b>5611</b>							
Client ID: <b>ICV</b>	Batch ID: <b>R5611</b>		Analysis Date: <b>9/6/2012</b>	SeqNo: <b>110322</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methylene chloride	19.6	0.0200	20.00	0	97.9	70	130				
Surr: 1-Bromo-4-fluorobenzene	10.0		10.00		100	63.1	141				
Surr: Dibromofluoromethane	10.2		10.00		102	67.6	119				
Surr: Toluene-d8	10.3		10.00		103	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **PES**

 Work Order Number: **1208084**

 Logged by: **Troy Zehr**

 Date Received: **8/14/2012 3:15:00 PM**

### Chain of Custody

1. Were custodial seals present? Yes  No  Not Required
2. Is Chain of Custody complete? Yes  No  Not Present
3. How was the sample delivered? Courier

### Log In

4. Coolers are present? Yes  No  NA
5. Was an attempt made to cool the samples? Yes  No  NA
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes  No  NA
7. Sample(s) in proper container(s)? Yes  No
8. Sufficient sample volume for indicated test(s)? Yes  No
9. Are samples properly preserved? Yes  No
10. Was preservative added to bottles? Yes  No  NA
11. Is there headspace present in VOA vials? Yes  No  NA
12. Did all sample containers arrive in good condition?(unbroken) Yes  No
13. Does paperwork match bottle labels? Yes  No
14. Are matrices correctly identified on Chain of Custody? Yes  No
15. Is it clear what analyses were requested? Yes  No
16. Were all holding times able to be met? Yes  No

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

### Item Information

Item #	Temp °C	Condition
Cooler 1	2.4	Good
Cooler 2	2.1	Good



1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

DES

Client:  
Address:  
City, State, Zip

Report To (Pw): KELLY RANKICH

Report To (Pw): Project No: 1006-008-02

Date: 8/14/12

Laboratory Project No (Internal): 1208084

### Chain of Custody Record

Page: 1 of 3  
Project Name: FORMER PACE, KIRKLAND  
Location: KIRKLAND WA  
Collected by: CDOODY / K SPRINGSTED

Tel:

Fax:

Email:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	HPC (EPA 8210)	GC/MS (EPA 8210)	GC/MS by EPA 8210	Gasoline Range Organics	Hydrocarbon Indication (HCl)	PAT (EPA 8210 - SM)	PCB (EPA 800)	Metals (EPA 8210)	Chlorides (EPA 8001)	Mercury (EPA 8171)	Ammonia (EPA 8171)	Comments/Length
GP-13-3	8/14	755	Soil	X	X	X	X	X	X	X	X	X	X	X	HOLD
GP-13-6		805		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-13-9.5		810		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-13-12		820		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-13-15		830		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-13-18		835		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-13-23		845		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-24-0.5		850		X	X	X	X	X	X	X	X	X	X	(AR)	
GP-24-5.5		920		X	X	X	X	X	X	X	X	X	X	(AR)	
		930		X	X	X	X	X	X	X	X	X	X	(AR)	

\*Metals Analysis (Circle): MICRA-5, METRA-8, Priority Pollutants, TAC, Individual: Ag, Al, As, B, Bi, Cd, Ca, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sr, Sn, Ti, U, V, Zn

\*\*Anions (Circle): Nitrate, Nitrite, Chloride, Sulfate, Bromide, Chlorophosphate, Fluoride, Nitrate+Nitrite

Sample Disposal:  Return to Client  Disposal by Lab (if fee may be assessed, samples are returned under to tag)

Retrieved: 8/14/12 15:15  
Date/Time: 8/14/12 15:15  
Date/Time: 8/14/12 15:15

Special Remarks: SEE PM KEIN  
RANKICH FOR TRANSIS  
X = Silage cleanup

Tel: Next Day 2 Day 3 Day 5 Day









**Fremont**  
Analytical

1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client: PES Environmental  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_

Project Name: Former Race  
Kirkland w/ L  
Doody/K Springstead  
Location: \_\_\_\_\_  
Collected by: \_\_\_\_\_

Laboratory Project No (Internal): \_\_\_\_\_  
Page: \_\_\_\_\_ of \_\_\_\_\_

Reports To (PM): Kelly Rankich

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Project No: 1006.008.01.002

**Chain of Custody Record**

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	ATC	Geo/Range Organics	Hydrocarbon Organics	Semi Vol (EPA 8270)	PAH (EPA 8270)	PCB (EPA 8280)	Chlorinated (EPA 8280)	Metal* (EPA 8210)	Metals* (EPA 8210)	Asbestos (EPA 8210)	Other (EPA 8210)	Comments/Depth
GP-7-3	8/13	1500 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
GP-7-7		1510 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
GP-7-12.5		1515 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
GP-7-17.5		1520 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
GP-7-22.5		1530 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
GP-7-27.5		1550 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
GP-7-34	↓	1600 S	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold

\*Metals Analysis (Circle): MTCA-5 RCRA-B Priority Pollutants TAL Individually Ag Al As B Ba Be Bi C Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sm Ti Tl U V Zn

\*\* Anions (Circle): Nitrate Nitrite Nitrate+Nitrite

Special Disposal:  Return to Client  Disposal by Lab (A fee may be assessed if samples are retained after 30 days)

Received: [Signature] Date/Time: 8/14/12 15:15

Received: [Signature] Date/Time: 8/14/12 15:15

TAT -> Next Day 2 Day 3 Day STD

Special Remarks: Silicagel Cleanup

Distribution: White - Lab, Yellow - File, Pink - Originator

# Chain of Custody Record



111 N. 35th Street  
Seattle, WA 98103  
Tel: 206-352-3790  
Fax: 206-352-7128

Client: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_

Date: 8/14/12  
Project Name: FORMER PACE, KIRKLAND  
Location: KIRKLAND WA  
Collected by: CLODDY / K SPRINGSTED

Laboratory Project No (Internal): 1208084  
Page: 3 of 3

Reports To (Email): KELLY RANKICH  
Tel: \_\_\_\_\_  
Email: \_\_\_\_\_  
Project No: 1006-0080Z

Sample Name	Service Label	Sample Time	Sample Type	Matrix	As Pb	As B	As Ba	As Ca	As Co	As Cr	As Cu	As Fe	As Hg	As Mn	As Mo	As Ni	As Pb	As Se	As Sn	As Th	As U	As V	As Zn
1. GP-13-3	914	755	Soil		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. GP-13-6		805			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. GP-13-9.5		810			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4. GP-13-12		820			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5. GP-13-15		830			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6. GP-13-18		835			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7. GP-13-23		845			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8. GP-24-16-13-27.5		850			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9. GP-24-0.5		900			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10. GP-24-5.5		930			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

HOLD!

Add Analysis w/ Silica Gel Cleanup  
Per Kelly E FB 8/25/12

W Silica Gel Cleanup

Special Remarks:  
SEE PM KEM  
RANKICH FOR ANALYSIS  
\* Silica Gel Cleanup

Received By: \_\_\_\_\_ Date/Time: 8/14/12 15:15  
Received By: Kelly Rankich Date/Time: 8/14/12 15:15



**Fremont**  
 1321 N 35th Street  
 Seattle, WA 98103  
 Tel: 206-457-3290  
 Fax: 206-352-1116

**Chain of Custody Record**

Lab Entry/Client No (Internal) 1208084

Page: 3

Date: 8/14/12

Client: PES

Project Name: \_\_\_\_\_

Address: \_\_\_\_\_

Location: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Reports to (Print): Kelly Panmich

Project No.: 100602.02

Product No.: \_\_\_\_\_

Sample Name	Sample Date	Sample Time (Approx)	Sample Type	ES-QA (Print)	ES-QA (Sign)	ES-QA (Date)	ES-QA (Time)	ES-QA (Signature)	ES-QA (Date/Time)
HA-8-9	8/14	1150	Soil	X	X	X	X	X	X
HA-7-2		1310		X	X	X	X	X	X
HA-7-6		1315		X	X	X	X	X	X
HA-7-9		1320		X	X	X	X	X	X
HA-6-2		1330		X	X	X	X	X	X
HA-6-6		1335		X	X	X	X	X	X
HA-6-9		1340		X	X	X	X	X	X
HA-5-2		1400		X	X	X	X	X	X
HA-5-6		1405		X	X	X	X	X	X
HA-5-9		410		X	X	X	X	X	X

Special Remarks: SEE PM KELLY PANMICH FOR ANALYSIS. S. Stigebel

Signature: \_\_\_\_\_ Date/Time: 8/14/12 15:15

Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

## MEMORANDUM

**TO:** Project File **DATE:** September 10, 2012  
**FROM:** Jerry Harris  
**SUBJECT:** Laboratory Data Validation Review  
**PROJECT:** Former Pace Facility Kirkland, WA  
**PROJECT #:** 1006.008.01.003  
**TASK:** August 13-14, 2012 Soil Samples  
**LAB:** Fremont Analytical Service Request No. 1208084

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Soil sampling was conducted at the former Pace facility in Kirkland, Washington on August 13 and 14, 2012. Thirty-seven (37) soil samples were collected from the site.

Selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as diesel (fuel oil), diesel-range organics (DRO), and heavy oil (HO) by the Northwest TPH Dx (NWTPH-Dx) method, TPH as gasoline by the NWTPH-Gx method, and volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260. The TPH-Dx analyses were performed in two analysis groups (IDs 2989 and 3041); the TPH-Gx analyses were performed in two analysis groups (IDs 5370 and 5512); and the VOC analyses were performed in two primary analysis groups (IDs 2985 and 3048). Re-analyses of methylene chloride in two samples were performed in secondary analysis groups 5418 and 5611. Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1208084.

The quality assurance review of the groundwater samples data is summarized below.

### DATA QUALIFICATIONS

Guidelines established by USEPA for 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 Organic Data Review (USEPA, 1999).

### DATA VALIDATION

#### Completeness

All samples were collected and analyzed as requested.

## **Sample Collection and Preservation**

The samples were collected in appropriately preserved containers supplied by the analytical laboratory. The laboratory reported that the samples were received in good condition. The laboratory received the samples in two coolers at temperatures of 2.4 and 2.1 degrees centigrade (°C). The cooler temperatures were within the USEPA recommended temperature range of  $4^{\circ} \pm 2^{\circ}\text{C}$ . No data qualifications were warranted based upon the laboratory receipt temperatures.

## **Holding Times**

### *NWTPH-Dx*

The extractions and analyses for the NWTPH-Dx method were performed within the recommended 14 day holding time limit for soil samples.

### *NWTPH-Gx*

The analyses for the NWTPH Gx method were performed within the recommended 14 day holding time limit for soil samples.

### *USEPA Method 8260*

The analyses for VOCS were performed within the recommended 14 day holding time limit for soil samples except for re-analysis for methylene chloride only for samples HA-6-2 and HA-5-2. The methylene chloride re-analysis for sample HA-6-2 was conducted 16 days after sample collection. This exceeded the holding time by two days. Based upon this exceedance, the methylene chloride result for sample HA-6-2 is qualified as estimated and assigned a J flag. The two-day exceedance was not considered sufficient cause to warrant rejection of the data due to proper preservation while at the laboratory and the relatively low volatility of methylene chloride. The HA-5-2 methylene chloride re-analysis was performed 22 days after collection. The methylene chloride result is qualified as rejected and assigned an R flag due to the 8-day holding time exceedance. Laboratory report pages showing the qualifications are attached. No other data were qualified based upon holding times.

## **Initial Calibration**

Hard copies of the initial calibration verification (ICV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in initial calibration results associated with the project analyses if they occur. No discrepancies were reported; therefore no data qualifications were warranted.

The laboratory reported ICV results for re-analysis group 5418 for the USEPA 8260 re-analysis of methylene chloride. The ICV results were within the laboratory control limits. No qualifications were warranted.

## **Continuing Calibration**

Hard copies of the continuing calibration verification (CCV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in continuing

calibration results associated with the project analyses. No discrepancies were reported; therefore no data qualifications were warranted.

The laboratory reported CCV results for analysis group 2989 for the NWTPH-Dx analysis. The CCV results were within the laboratory control limits. No qualifications were warranted.

The laboratory reported CCV results for analysis group 5370 for the NWTPH-Gx analysis. The CCV results were within the laboratory control limits. No qualifications were warranted.

The laboratory reported CCV results for re-analysis analysis group 5611 for the USEPA 8260 methylene chloride re-analysis. The CCV results were within the laboratory control limits. No qualifications were warranted.

### **Method Blank Results**

#### *NWTPH-Dx*

Two method blanks were analyzed with the two analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the Method Reporting Limits (MRLs). No data qualifications were warranted.

#### *NWTPH-Gx*

Two method blanks were analyzed with the two analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

#### *USEPA Method 8260*

Two method blanks were analyzed with the two primary analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. In addition, the laboratory reported the method blank results for the analysis groups/sample lots that included the two samples for methylene chloride re-analysis (HA-6-2 and HA-5-2). The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

### **Trip Blank Results**

No trip blanks were required or collected during this field event.

### **Field Duplicate Analyses**

No field duplicates were required or collected during this field event.

### **Laboratory Duplicate Analyses**

#### *NWTPH-Dx*

The laboratory prepared two duplicate soil samples for analysis group 2989 from project samples HA-5-2 and GP-24-0.5 and one duplicate from analysis group 3041 (from sample GP-13-9.5).

The primary and laboratory duplicate pairs were analyzed by the NWTPH Dx method. The relative percent differences (RPD) for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

#### *NWTPH-Gx*

The laboratory prepared two duplicate soil samples for the two analysis groups. For analysis group 5370, one duplicate was prepared from primary sample HA-8-2. The duplicate for analysis group 5512 was prepared from a batch (non-project) sample. The primary and laboratory duplicate pairs were analyzed by the NWTPH Gx method. The RPD for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

#### *USEPA Method 8260*

The laboratory prepared a duplicate soil sample for batch 2985; the duplicate was prepared from project sample HA-8-2. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. For batch 3048, one duplicate was prepared from a batch (non-project) sample. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. For the re-analysis batches for methylene chloride, duplicate results from the primary analysis batches apply. No data qualifications were warranted.

### **Surrogate Recoveries**

#### *NWTPH-Dx*

The surrogate percent recovery (%R) results for all NWTPH Dx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 50 to 150%R.

#### *NWTPH-Gx*

The surrogate %R results for all NWTPH Gx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 65 to 135%. No data qualifications were warranted.

#### *USEPA Method 8260*

The surrogate %R results for all USEPA Method 8260 soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

### **Laboratory Control Samples**

#### *NWTPH-Dx*

Two laboratory control samples (LCS) were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *NWTPH-Gx*

Two laboratory control samples (LCS) were prepared and analyzed; one for each analytical



batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *USEPA Method 8260*

Two LCSs were prepared and analyzed; one for primary analysis batch 2985, one for primary analysis batch 3048. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted. For the re-analysis batches (5418 and 5611), the primary LCS results apply. The laboratory reported CCV results for batch 5418 and ICV results for batch 5611. These results are discussed in the CCV and ICV sections above.

### **Matrix Spike/Matrix Spike Duplicates**

#### *NWTPH-Dx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Dx method.

#### *NWTPH-Gx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Gx method.

#### *USEPA Method 8260*

Two soil MSs were prepared and analyzed with the project samples; one for each of the primary analysis batches. Sample duplicates were analyzed in lieu of MSDs for the samples. This is acceptable. The MS %Rs for all target analytes in analysis batch 2985 were within the laboratory control limits except for bromomethane, trichlorofluoromethane, chloroethane, 1,1-dichloroethene, and methylene chloride. The %Rs for these compounds were below the lower control limit, indicating a potential matrix-induced variability in sample results for these compounds. However, these compounds were not detected in the project sample and the remaining quality control data did not indicate any issues with detecting these compounds. Based upon this information, the MS exceedances are not considered to affect non-detect results. These compounds were not detected in any of the project samples; therefore, no data were qualified. For analysis batch 3048, the MS %Rs for all target analytes were within the laboratory control limits except for vinyl chloride and bromomethane. Because the MS for this analysis group was prepared from a batch (non-project) sample and because there were no other QC issues associated with these compounds in the remaining quality control data, the MS exceedances are not considered sufficient cause to warrant qualification of the data. No other qualifications were warranted.

### **Other Quality Control Issues**

The laboratory reported that the cis-1,3-dichloropropene and trans-1,3-dichloropropylene results for the USEPA 8260 analyses in analysis group 2985 exceeded quality control limits. However, review of the quality control data from these two compounds indicated that there were no exceedances. No qualifications were warranted.

No other laboratory quality control issues were identified in the laboratory report.

### **Quantitation Limits**

The MRLs were acceptable for the project; therefore, no data qualifiers were assigned.

### **Data Assessment**

The USEPA 8260 result for methylene chloride in sample HA-6-2 is qualified as estimated and assigned a J flag. The USEPA 8260 result for methylene chloride in sample HA-5-2 is qualified as rejected and assigned an R flag. The laboratory report pages with the indicated qualifiers are attached. All unqualified data and J qualified data are judged to be acceptable for their intended use. The rejected data is not considered usable.



# Analytical Report

WO#: 1208084

Date Reported: 9/6/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 1:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-025

**Matrix:** Soil

**Client Sample ID:** HA-6-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	19.6		mg/Kg-dry	1	8/18/2012 4:16:00 AM
Heavy Oil	ND	49.0		mg/Kg-dry	1	8/18/2012 4:16:00 AM
Surr: 2-Fluorobiphenyl	98.0	50-150		%REC	1	8/18/2012 4:16:00 AM
Surr: o-Terphenyl	93.5	50-150		%REC	1	8/18/2012 4:16:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	6.21		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Surr: 1,2-Dichloroethane-d4	104	65-135		%REC	1	8/21/2012 1:39:00 AM
Surr: Fluorobenzene	99.8	65-135		%REC	1	8/21/2012 1:39:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0745	*	mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chloromethane	ND	0.0745		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Vinyl chloride	ND	0.00248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Bromomethane	ND	0.112		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chloroethane	ND	0.0745		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1-Dichloroethene	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Methylene chloride	ND J	0.0248	[RA]	mg/Kg-dry	1	8/30/2012 7:42:00 PM
trans-1,2-Dichloroethene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1-Dichloroethane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
2,2-Dichloropropane	ND	0.0621		mg/Kg-dry	1	8/21/2012 1:39:00 AM
cis-1,2-Dichloroethene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Chloroform	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,1-Dichloropropene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Carbon tetrachloride	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2-Dichloroethane (EDC)	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Benzene	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Trichloroethene (TCE)	ND	0.0372		mg/Kg-dry	1	8/21/2012 1:39:00 AM
1,2-Dichloropropane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM
Bromodichloromethane	ND	0.0248		mg/Kg-dry	1	8/21/2012 1:39:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208084

Date Reported: 9/6/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208084-028

**Matrix:** Soil

**Client Sample ID:** HA-5-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2989

Analyst: SG

Diesel (Fuel Oil)	ND	20.5		mg/Kg-dry	1	8/18/2012 4:44:00 AM
Heavy Oil	ND	51.4		mg/Kg-dry	1	8/18/2012 4:44:00 AM
Surr: 2-Fluorobiphenyl	93.7	50-150		%REC	1	8/18/2012 4:44:00 AM
Surr: o-Terphenyl	90.4	50-150		%REC	1	8/18/2012 4:44:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5370

Analyst: EM

Gasoline	ND	4.80		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Surr: 1,2-Dichloroethane-d4	112	65-135		%REC	1	8/21/2012 2:10:00 AM
Surr: Fluorobenzene	106	65-135		%REC	1	8/21/2012 2:10:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 2985

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0576	*	mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chloromethane	ND	0.0576		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Vinyl chloride	ND	0.00192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Bromomethane	ND	0.0863		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chloroethane	ND	0.0576		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1-Dichloroethene	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Methylene chloride	ND <b>R</b>	0.0192	[RA]	mg/Kg-dry	1	9/6/2012 2:58:00 PM
trans-1,2-Dichloroethene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1-Dichloroethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
2,2-Dichloropropane	ND	0.0480		mg/Kg-dry	1	8/21/2012 2:10:00 AM
cis-1,2-Dichloroethene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Chloroform	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,1-Dichloropropene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Carbon tetrachloride	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2-Dichloroethane (EDC)	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Benzene	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Trichloroethene (TCE)	ND	0.0288		mg/Kg-dry	1	8/21/2012 2:10:00 AM
1,2-Dichloropropane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM
Bromodichloromethane	ND	0.0192		mg/Kg-dry	1	8/21/2012 2:10:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



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**PES Environmental, Inc.**  
Kelly Rankich  
1215 Fourth Avenue, Suite 1350  
Seattle, Washington 98161

**RE: Former Pace Kirkland**  
**Lab ID: 1208094**

September 11, 2012

**Attention Kelly Rankich:**

Fremont Analytical, Inc. received 32 sample(s) on 8/15/2012 for the analyses presented in the following report.

***Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***  
***Gasoline by NWTPH-Gx***  
***Organochlorine Pesticides by EPA Method 8081***  
***Sample Moisture (Percent Moisture)***  
***Volatile Organic Compounds by EPA Method 8260***

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,

A handwritten signature in black ink, appearing to read "M. Dee", is written over a light blue horizontal line.

Michael Dee  
Sr. Chemist / Principal



Date: 09/11/2012

**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland  
**Lab Order:** 1208094

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1208094-001	GP-23-3	08/15/2012 8:00 AM	08/15/2012 1:54 PM
1208094-002	GP-23-7.5	08/15/2012 8:10 AM	08/15/2012 1:54 PM
1208094-003	GP-23-11	08/15/2012 8:15 AM	08/15/2012 3:54 PM
1208094-004	GP-23-16	08/15/2012 8:25 AM	08/15/2012 3:54 PM
1208094-005	GP-23-23	08/15/2012 8:40 AM	08/15/2012 3:54 PM
1208094-006	GP-23-28	08/15/2012 9:00 AM	08/15/2012 3:54 PM
1208094-007	GP-19-1.5	08/15/2012 9:30 AM	08/15/2012 3:54 PM
1208094-008	GP-19-9	08/15/2012 9:35 AM	08/15/2012 3:54 PM
1208094-009	GP-19-12.5	08/15/2012 9:45 AM	08/15/2012 3:54 PM
1208094-010	GP-19-20.5	08/15/2012 11:15 AM	08/15/2012 3:54 PM
1208094-011	GP-19-24	08/15/2012 11:20 AM	08/15/2012 3:54 PM
1208094-012	GP-4-3	08/14/2012 2:40 PM	08/15/2012 3:54 PM
1208094-013	GP-4-8	08/14/2012 2:50 PM	08/15/2012 3:54 PM
1208094-014	GP-4-13	08/14/2012 2:55 PM	08/15/2012 3:54 PM
1208094-015	GP-4-18	08/14/2012 3:00 PM	08/15/2012 3:54 PM
1208094-016	GP-4-23	08/14/2012 3:05 PM	08/15/2012 3:54 PM
1208094-017	GP-4-27	08/14/2012 3:30 PM	08/15/2012 3:54 PM
1208094-018	GP-12-3	08/15/2012 12:30 PM	08/15/2012 3:54 PM
1208094-019	GP-12-7	08/15/2012 12:40 PM	08/15/2012 3:54 PM
1208094-020	GP-12-11.5	08/15/2012 12:45 PM	08/15/2012 3:54 PM
1208094-021	GP-12-14	08/15/2012 1:00 PM	08/15/2012 3:54 PM
1208094-022	GP-12-20	08/15/2012 1:10 PM	08/15/2012 3:54 PM
1208094-023	GP-12-27	08/15/2012 3:30 PM	08/15/2012 3:54 PM
1208094-024	GP-20-3	08/15/2012 2:15 PM	08/15/2012 3:54 PM
1208094-025	GP-20-7	08/15/2012 2:20 PM	08/15/2012 3:54 PM
1208094-026	GP-20-11.5	08/15/2012 2:30 PM	08/15/2012 3:54 PM
1208094-027	GP-20-17	08/15/2012 2:45 PM	08/15/2012 3:54 PM
1208094-028	GP-20-23	08/15/2012 3:00 PM	08/15/2012 3:54 PM
1208094-029	GP-20-27	08/15/2012 3:10 PM	08/15/2012 3:54 PM
1208094-030	GP-12-24	08/15/2012 3:20 PM	08/15/2012 3:54 PM
1208094-031	MEOH Trip Blank #1		08/15/2012 1:54 PM
1208094-032	MEOH Trip Blank #2		08/15/2012 1:54 PM

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

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**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are 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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-002B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-004B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-007B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-008B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-010B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-013B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-015B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-018B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-022B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-020B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-026B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-028B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-029B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208094-030B) required Silica Gel Cleanup Procedure.

**CLIENT:** PES Environmental, Inc.

**Project:** Former Pace Kirkland

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DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).





# Analytical Report

WO#: 1208094

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 8:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-002

**Matrix:** Soil

**Client Sample ID:** GP-23-7.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	21.9		mg/Kg-dry	1	8/18/2012 9:46:00 AM
Diesel Range Organics (C12-C24)	ND	21.9		mg/Kg-dry	1	8/18/2012 9:46:00 AM
Heavy Oil	ND	54.7		mg/Kg-dry	1	8/18/2012 9:46:00 AM
Surr: 2-Fluorobiphenyl	97.9	50-150		%REC	1	8/18/2012 9:46:00 AM
Surr: o-Terphenyl	97.6	50-150		%REC	1	8/18/2012 9:46:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.82		mg/Kg-dry	1	8/21/2012 12:17:00 PM
Gasoline Range Organics C6-C12	ND	5.82		mg/Kg-dry	1	8/21/2012 12:17:00 PM
Surr: 1,2-Dichloroethane-d4	108	65-135		%REC	1	8/21/2012 12:17:00 PM
Surr: Fluorobenzene	111	65-135		%REC	1	8/21/2012 12:17:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208094

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 8:25:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-004

**Matrix:** Soil

**Client Sample ID:** GP-23-16

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	23.2		mg/Kg-dry	1	8/18/2012 10:13:00 AM
Diesel Range Organics (C12-C24)	ND	23.2		mg/Kg-dry	1	8/18/2012 10:13:00 AM
Heavy Oil	ND	58.0		mg/Kg-dry	1	8/18/2012 10:13:00 AM
Surr: 2-Fluorobiphenyl	103	50-150		%REC	1	8/18/2012 10:13:00 AM
Surr: o-Terphenyl	101	50-150		%REC	1	8/18/2012 10:13:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.38		mg/Kg-dry	1	8/21/2012 1:23:00 PM
Gasoline Range Organics C6-C12	ND	5.38		mg/Kg-dry	1	8/21/2012 1:23:00 PM
Surr: 1,2-Dichloroethane-d4	111	65-135		%REC	1	8/21/2012 1:23:00 PM
Surr: Fluorobenzene	113	65-135		%REC	1	8/21/2012 1:23:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208094

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 9:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-007

**Matrix:** Soil

**Client Sample ID:** GP-19-1.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	17.1		mg/Kg-dry	1	8/18/2012 10:41:00 AM
Diesel Range Organics (C12-C24)	17.8	17.1		mg/Kg-dry	1	8/18/2012 10:41:00 AM
Heavy Oil	ND	42.8		mg/Kg-dry	1	8/18/2012 10:41:00 AM
Surr: 2-Fluorobiphenyl	124	50-150		%REC	1	8/18/2012 10:41:00 AM
Surr: o-Terphenyl	118	50-150		%REC	1	8/18/2012 10:41:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	7.44		mg/Kg-dry	1	8/21/2012 3:02:00 PM
Gasoline Range Organics C6-C12	ND	7.44		mg/Kg-dry	1	8/21/2012 3:02:00 PM
Surr: 1,2-Dichloroethane-d4	114	65-135		%REC	1	8/21/2012 3:02:00 PM
Surr: Fluorobenzene	113	65-135		%REC	1	8/21/2012 3:02:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208094

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 9:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-008

**Matrix:** Soil

**Client Sample ID:** GP-19-9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	17.9		mg/Kg-dry	1	8/18/2012 12:03:00 PM
Diesel Range Organics (C12-C24)	ND	17.9		mg/Kg-dry	1	8/18/2012 12:03:00 PM
Heavy Oil	ND	44.7		mg/Kg-dry	1	8/18/2012 12:03:00 PM
Surr: 2-Fluorobiphenyl	101	50-150		%REC	1	8/18/2012 12:03:00 PM
Surr: o-Terphenyl	96.4	50-150		%REC	1	8/18/2012 12:03:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	4.58		mg/Kg-dry	1	8/21/2012 3:35:00 PM
Gasoline Range Organics C6-C12	ND	4.58		mg/Kg-dry	1	8/21/2012 3:35:00 PM
Surr: 1,2-Dichloroethane-d4	112	65-135		%REC	1	8/21/2012 3:35:00 PM
Surr: Fluorobenzene	111	65-135		%REC	1	8/21/2012 3:35:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 11:15:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-010

**Matrix:** Soil

**Client Sample ID:** GP-19-20.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	24.5		mg/Kg-dry	1	8/18/2012 12:31:00 PM
Diesel Range Organics (C12-C24)	ND	24.5		mg/Kg-dry	1	8/18/2012 12:31:00 PM
Heavy Oil	ND	61.3		mg/Kg-dry	1	8/18/2012 12:31:00 PM
Surr: 2-Fluorobiphenyl	106	50-150		%REC	1	8/18/2012 12:31:00 PM
Surr: o-Terphenyl	102	50-150		%REC	1	8/18/2012 12:31:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.53		mg/Kg-dry	1	8/21/2012 4:09:00 PM
Gasoline Range Organics C6-C12	ND	5.53		mg/Kg-dry	1	8/21/2012 4:09:00 PM
Surr: 1,2-Dichloroethane-d4	110	65-135		%REC	1	8/21/2012 4:09:00 PM
Surr: Fluorobenzene	112	65-135		%REC	1	8/21/2012 4:09:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 2:50:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-013

**Matrix:** Soil

**Client Sample ID:** GP-4-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	21.5		mg/Kg-dry	1	8/18/2012 12:59:00 PM
Diesel Range Organics (C12-C24)	ND	21.5		mg/Kg-dry	1	8/18/2012 12:59:00 PM
Heavy Oil	ND	53.8		mg/Kg-dry	1	8/18/2012 12:59:00 PM
Surr: 2-Fluorobiphenyl	97.4	50-150		%REC	1	8/18/2012 12:59:00 PM
Surr: o-Terphenyl	95.3	50-150		%REC	1	8/18/2012 12:59:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.06		mg/Kg-dry	1	8/21/2012 4:43:00 PM
Gasoline Range Organics C6-C12	ND	5.06		mg/Kg-dry	1	8/21/2012 4:43:00 PM
Surr: 1,2-Dichloroethane-d4	110	65-135		%REC	1	8/21/2012 4:43:00 PM
Surr: Fluorobenzene	110	65-135		%REC	1	8/21/2012 4:43:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/14/2012 3:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-015

**Matrix:** Soil

**Client Sample ID:** GP-4-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	18.9		mg/Kg-dry	1	8/18/2012 1:26:00 PM
Diesel Range Organics (C12-C24)	ND	18.9		mg/Kg-dry	1	8/18/2012 1:26:00 PM
Heavy Oil	ND	47.2		mg/Kg-dry	1	8/18/2012 1:26:00 PM
Surr: 2-Fluorobiphenyl	95.8	50-150		%REC	1	8/18/2012 1:26:00 PM
Surr: o-Terphenyl	92.7	50-150		%REC	1	8/18/2012 1:26:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	6.58		mg/Kg-dry	1	8/21/2012 8:25:00 PM
Gasoline Range Organics C6-C12	ND	6.58		mg/Kg-dry	1	8/21/2012 8:25:00 PM
Surr: 1,2-Dichloroethane-d4	120	65-135		%REC	1	8/21/2012 8:25:00 PM
Surr: Fluorobenzene	110	65-135		%REC	1	8/21/2012 8:25:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 12:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-018

**Matrix:** Soil

**Client Sample ID:** GP-12-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	17.3		mg/Kg-dry	1	8/18/2012 1:54:00 PM
Diesel Range Organics (C12-C24)	ND	17.3		mg/Kg-dry	1	8/18/2012 1:54:00 PM
Heavy Oil	ND	43.2		mg/Kg-dry	1	8/18/2012 1:54:00 PM
Surr: 2-Fluorobiphenyl	94.6	50-150		%REC	1	8/18/2012 1:54:00 PM
Surr: o-Terphenyl	93.6	50-150		%REC	1	8/18/2012 1:54:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	6.33		mg/Kg-dry	1	8/21/2012 8:57:00 PM
Gasoline Range Organics C6-C12	ND	6.33		mg/Kg-dry	1	8/21/2012 8:57:00 PM
Surr: 1,2-Dichloroethane-d4	118	65-135		%REC	1	8/21/2012 8:57:00 PM
Surr: Fluorobenzene	111	65-135		%REC	1	8/21/2012 8:57:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208094

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-020

**Matrix:** Soil

**Client Sample ID:** GP-12-11.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	20.2		mg/Kg-dry	1	8/18/2012 2:21:00 PM
Diesel Range Organics (C12-C24)	ND	20.2		mg/Kg-dry	1	8/18/2012 2:21:00 PM
Heavy Oil	ND	50.5		mg/Kg-dry	1	8/18/2012 2:21:00 PM
Surr: 2-Fluorobiphenyl	97.3	50-150		%REC	1	8/18/2012 2:21:00 PM
Surr: o-Terphenyl	95.4	50-150		%REC	1	8/18/2012 2:21:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	4.74		mg/Kg-dry	1	8/21/2012 9:30:00 PM
Gasoline Range Organics C6-C12	ND	4.74		mg/Kg-dry	1	8/21/2012 9:30:00 PM
Surr: 1,2-Dichloroethane-d4	119	65-135		%REC	1	8/21/2012 9:30:00 PM
Surr: Fluorobenzene	110	65-135		%REC	1	8/21/2012 9:30:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-022

**Matrix:** Soil

**Client Sample ID:** GP-12-20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	23.5		mg/Kg-dry	1	8/18/2012 2:49:00 PM
Diesel Range Organics (C12-C24)	ND	23.5		mg/Kg-dry	1	8/18/2012 2:49:00 PM
Heavy Oil	ND	58.7		mg/Kg-dry	1	8/18/2012 2:49:00 PM
Surr: 2-Fluorobiphenyl	97.4	50-150		%REC	1	8/18/2012 2:49:00 PM
Surr: o-Terphenyl	93.6	50-150		%REC	1	8/18/2012 2:49:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	4.83		mg/Kg-dry	1	8/21/2012 10:02:00 PM
Gasoline Range Organics C6-C12	ND	4.83		mg/Kg-dry	1	8/21/2012 10:02:00 PM
Surr: 1,2-Dichloroethane-d4	120	65-135		%REC	1	8/21/2012 10:02:00 PM
Surr: Fluorobenzene	111	65-135		%REC	1	8/21/2012 10:02:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208094

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 2:30:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-026

**Matrix:** Soil

**Client Sample ID:** GP-20-11.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	23.9		mg/Kg-dry	1	8/18/2012 3:17:00 PM
Diesel Range Organics (C12-C24)	ND	23.9		mg/Kg-dry	1	8/18/2012 3:17:00 PM
Heavy Oil	ND	59.8		mg/Kg-dry	1	8/18/2012 3:17:00 PM
Surr: 2-Fluorobiphenyl	99.7	50-150		%REC	1	8/18/2012 3:17:00 PM
Surr: o-Terphenyl	96.1	50-150		%REC	1	8/18/2012 3:17:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.77		mg/Kg-dry	1	8/21/2012 10:35:00 PM
Gasoline Range Organics C6-C12	ND	5.77		mg/Kg-dry	1	8/21/2012 10:35:00 PM
Surr: 1,2-Dichloroethane-d4	121	65-135		%REC	1	8/21/2012 10:35:00 PM
Surr: Fluorobenzene	112	65-135		%REC	1	8/21/2012 10:35:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 3:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208094-028

**Matrix:** Soil

**Client Sample ID:** GP-20-23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2990

Analyst: SG

Diesel (Fuel Oil)	ND	24.3		mg/Kg-dry	1	8/18/2012 4:12:00 PM
Diesel Range Organics (C12-C24)	ND	24.3		mg/Kg-dry	1	8/18/2012 4:12:00 PM
Heavy Oil	ND	60.7		mg/Kg-dry	1	8/18/2012 4:12:00 PM
Surr: 2-Fluorobiphenyl	95.3	50-150		%REC	1	8/18/2012 4:12:00 PM
Surr: o-Terphenyl	94.4	50-150		%REC	1	8/18/2012 4:12:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	6.05		mg/Kg-dry	1	8/21/2012 11:07:00 PM
Gasoline Range Organics C6-C12	ND	6.05		mg/Kg-dry	1	8/21/2012 11:07:00 PM
Surr: 1,2-Dichloroethane-d4	119	65-135		%REC	1	8/21/2012 11:07:00 PM
Surr: Fluorobenzene	111	65-135		%REC	1	8/21/2012 11:07:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

**Work Order:** 1208094  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>1208094-007BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5391</b>							
Client ID: <b>GP-19-1.5</b>	Batch ID: <b>2990</b>		Analysis Date: <b>8/18/2012</b>	SeqNo: <b>105497</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	17.7						0	0	30	
Diesel Range Organics (C12-C24)	20.5	17.7						17.83	13.7	30	
Heavy Oil	ND	44.4						0	0	30	
Surr: 2-Fluorobiphenyl	18.2		17.75		102	50	150		0		
Surr: o-Terphenyl	17.7		17.75		99.9	50	150		0		

Sample ID: <b>LCS-2990</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5391</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2990</b>		Analysis Date: <b>8/18/2012</b>	SeqNo: <b>105500</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	537	20.0	500.0	0	107	65	135				
Surr: 2-Fluorobiphenyl	22.2		20.00		111	50	150				
Surr: o-Terphenyl	22.1		20.00		110	50	150				

Sample ID: <b>MB-2990</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/17/2012</b>	RunNo: <b>5391</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2990</b>		Analysis Date: <b>8/18/2012</b>	SeqNo: <b>105501</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	20.3		20.00		101	50	150				
Surr: o-Terphenyl	19.9		20.00		99.4	50	150				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208094  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208094-002ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5419</b>							
Client ID: <b>GP-23-7.5</b>	Batch ID: <b>R5419</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106131</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.82						0	0	30	
Gasoline Range Organics C6-C12	ND	5.82						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.646		0.5822		111	65	135		0		
Surr: Fluorobenzene	0.643		0.5822		110	65	135		0		

Sample ID: <b>LCS-R5419</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5419</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5419</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106150</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	26.8	5.00	25.00	0	107	65	135				
Surr: 1,2-Dichloroethane-d4	0.546		0.5000		109	65	135				
Surr: Fluorobenzene	0.553		0.5000		111	65	135				

Sample ID: <b>MB-R5419</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5419</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5419</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106151</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.552		0.5000		110	65	135				
Surr: Fluorobenzene	0.545		0.5000		109	65	135				

**Qualifiers:**
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
J Analyte detected below quantitation limits
ND Not detected at the Reporting Limit

R RPD outside accepted recovery limits
RL Reporting Limit
S Spike recovery outside accepted recovery limits

Client Name: **PES**

 Work Order Number: **1208094**

 Logged by: **Troy Zehr**

 Date Received: **8/15/2012 1:54:00 PM**

### Chain of Custody

1. Were custodial seals present? Yes  No  Not Required
2. Is Chain of Custody complete? Yes  No  Not Present
3. How was the sample delivered? Courier

### Log In

4. Coolers are present? Yes  No  NA
5. Was an attempt made to cool the samples? Yes  No  NA
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes  No  NA
7. Sample(s) in proper container(s)? Yes  No
8. Sufficient sample volume for indicated test(s)? Yes  No
9. Are samples properly preserved? Yes  No
10. Was preservative added to bottles? Yes  No  NA
11. Is there headspace present in VOA vials? Yes  No  NA
12. Did all sample containers arrive in good condition?(unbroken) Yes  No
13. Does paperwork match bottle labels? Yes  No
14. Are matrices correctly identified on Chain of Custody? Yes  No
15. Is it clear what analyses were requested? Yes  No
16. Were all holding times able to be met? Yes  No

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text" value="Leora"/>	Date:	<input type="text" value="8/16/2012"/>
By Whom:	<input type="text" value="Troy Zehr"/>	Via:	<input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text" value="Regarding GP-12-24 (not on COC) and GP-23-12.5"/>		
Client Instructions:	<input type="text" value="GP-12-24 is on hold and GP-23-12.5 should be GP-19-12.5"/>		

18. Additional remarks/Discrepancies

### Item Information

Item #	Temp °C	Condition
Cooler 1	2.8	Good
Cooler 2	2.9	Good







**Fremont**  
Analytical

1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7128

Client:

Address:

City, State, Zip

Reports To (PM): Kelly Bankich Fax:

Tel:

Email:

Laboratory Project No (Internal):

Page: 2 of 3

Date: 8/15/12

Project Name:

Location:

Collected by:

Project No: 1006.008.01.002

Emr Pace  
Kirkland

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 826)	SMA (EPA 821)	PAH (EPA 827)	PCB (EPA 829)	Chlorides (EPA 821)	Metals (EPA 821)	Total (T) / Dissolved (D)	Ames (GC)	Comments/Depth
<del>GR-4-19-24</del>	8/15	1120	S	X	X	X	X	X	X	X	X	Hold
GR-4-3	8/14	1440		X	X	X	X	X	X	X	X	Hold
GR-4-5	8/14	1450		X	X	X	X	X	X	X	X	Hold
GR-4-13	8/14	1455		X	X	X	X	X	X	X	X	Hold
GR-4-18	8/14	1500		X	X	X	X	X	X	X	X	Hold
GR-4-23	8/14	1505		X	X	X	X	X	X	X	X	Hold
GR-4-27	8/14	1530		X	X	X	X	X	X	X	X	Hold
GR-2-3	8/15	1030		X	X	X	X	X	X	X	X	Hold
GR-12-7	8/15	1240		X	X	X	X	X	X	X	X	Hold
GR-12-11.5	8/15	1245		X	X	X	X	X	X	X	X	Hold

\*\*Metals Analysis (Circle):  MICA-5  ICP-AES  ICP-MS  ICP-OES  ICP-MS/MS  ICP-MS/MS-MS  ICP-MS/MS-MS-MS  
 \*\*Anions (Circle):  Nitrate  Nitrite  Chloride  Sulfate  Bromide  Fluoride  Nitrate-Nitrite  
 Sample Disposal:  Return to Client  Disposal by Lab (if the sample analysis techniques are standard after 30 days.)  
 Requisitioned: [Signature] Date/Time: 8/15 1554  
 Receiving: [Signature] Date/Time: 8/15 1554  
 Special Remarks: Kstiga gel  
Hold All cleanup  
SAMPLES  
 TAT -> Next Day 2 Day 3 Day 5 Day



1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client: PES

Address: Former Pace  
Kirkland, WA

City, State, Zip: Kirkland, WA

Reports To (P/M): Kelly Rankich

Tel: Project No: 1006.008.01.002

# Chain of Custody Record

Laboratory Project No (Internal): 3  
Page: 3 of 3

Project Name: Former Pace  
Location: Kirkland, WA

Collect: d by

Sample Name	Sample Date	Sample Time	Sample Type (M or S)	Lab (M or S)	Comments/Depth
GR-12-14	8/15	1300	S		Hold
GR-12-20	8/15	1310			Hold
GR-12-27	8/15	1320			Hold
GR-20-3	8/15	1415			Hold
GR-20-7		1420			Hold
GR-20-11.5		1430			Hold
GR-20-17		1445			Hold
GR-20-23		1500			Hold
GR-20-27		1610			Hold

Sample Disposal	Returns to Client	Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)	Special Remarks
Received	8/13 1554	8/15/12 15:54	Silica gel Hold Samples
Received			

From: [Kelly Rankich](#)  
To: [Mike Ridgeway \(mridgeway@fremontanalytical.com\)](mailto:mridgeway@fremontanalytical.com);  
Subject: RE: Your new Fremont Analytical, Inc. report for WO# 1208094, Former Pace Kirkland.  
Date: Friday, August 24, 2012 4:02:03 PM

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Could you please run GP-19-1.5 for pesticides as well?

-----Original Message-----

From: service@fremontanalytical.com [<mailto:service@fremontanalytical.com>]  
Sent: Thursday, August 23, 2012 2:26 PM  
To: Kelly Rankich  
Subject: Your new Fremont Analytical, Inc. report for WO# 1208094, Former Pace Kirkland.

A new report has been posted for PES Environmental, Inc., work order# 1208094, Former Pace Kirkland . Please find the report attached to this email.

You can also download the report at <http://Client.fremontanalytical.com/Flashpoint/Secure/FileDownload.aspx?fid=14248>.

This alert was sent according to your preferences. To update your settings, go to <http://Client.fremontanalytical.com/Flashpoint/Secure/EmailAlerts.aspx>

Thank You for using Fremont Analytical, Inc.

## MEMORANDUM

**TO:** Project File **DATE:** September 11, 2012  
**FROM:** Jerry Harris  
**SUBJECT:** Laboratory Data Validation Review  
**PROJECT:** Former Pace Facility Kirkland, WA  
**PROJECT #:** 1006.008.01.003  
**TASK:** August 14-15, 2012 Soil Samples  
**LAB:** Fremont Analytical Service Request No. 1208094

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Soil sampling was conducted at the former Pace facility in Kirkland, Washington on August 14 and 15, 2012. Thirty-two (32) soil samples were collected from the site. In addition, two trip blanks were prepared and shipped with the samples.

Selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as diesel (fuel oil), diesel-range organics (DRO), and heavy oil (HO) by the Northwest TPH Dx (NWTPH-Dx) method, TPH as gasoline by the NWTPH-Gx method, volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260 and organochlorine pesticides by USEPA Method 8081. The TPH-Dx analyses were performed in one analysis group (ID 2990); the TPH-Gx analyses were performed in one analysis group (IDs 5419); the VOC analyses were performed in one analysis group (ID 3013); and the pesticides analyses were performed in two analytical groups (IDs 3027 and 3104). Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1208094.

The quality assurance review of the groundwater samples data is summarized below.

### DATA QUALIFICATIONS

Guidelines established by USEPA for 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 Organic Data Review (USEPA, 1999).

### DATA VALIDATION

#### Completeness

All samples were collected and analyzed as requested.

## **Sample Collection and Preservation**

The samples were collected in appropriately preserved containers supplied by the analytical laboratory. The laboratory reported that the samples were received in good condition. The laboratory received the samples in two coolers at temperatures of 2.8 and 2.9 degrees centigrade (°C). The cooler temperatures were within the USEPA recommended temperature range of  $4^{\circ} \pm 2^{\circ}\text{C}$ . The samples in both coolers were appropriately preserved with ice and no shipping anomalies were identified by the laboratory. No data qualifications were warranted based upon the laboratory receipt temperatures.

## **Holding Times**

### *NWTPH-Dx*

The extractions and analyses for the NWTPH-Dx method were performed within the recommended 14 day holding time limit for soil samples.

### *NWTPH-Gx*

The analyses for the NWTPH Gx method were performed within the recommended 14 day holding time limit for soil samples.

### *USEPA Method 8260*

The analyses for VOCS were performed within the recommended 14 day holding time limit for soil samples. No data were qualified based upon holding times.

### *USEPA Method 8081*

The extractions and analyses for pesticides method were performed within the recommended 14 day extraction and 40 day analysis holding time limit for soil samples.

## **Initial Calibration**

Hard copies of the initial calibration verification (ICV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in initial calibration results associated with the project analyses if they occur. No discrepancies were reported; therefore no data qualifications were warranted.

## **Continuing Calibration**

Hard copies of the continuing calibration verification (CCV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in continuing calibration results associated with the project analyses. No discrepancies were reported; therefore no data qualifications were warranted.

## **Method Blank Results**

### *NWTPH-Dx*

One method blank was analyzed with the single analysis group. This meets the required method blank frequency for the analytical method. The method blank results did not report any

compounds at concentrations at or above the Method Reporting Limits (MRLs). No data qualifications were warranted.

#### *NWTPH-Gx*

One method blank was analyzed with the single analysis group. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

#### *USEPA Method 8260*

One method blank was analyzed with the single analysis group. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

#### *USEPA Method 8081*

Two method blanks were analyzed; one with each of the two analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

### **Trip Blank Results**

Two trip blanks were prepared and shipped with the samples but was not analyzed. Trip blank analyses were no required for this sampling event.

### **Field Duplicate Analyses**

No field duplicates were required or collected during this field event.

### **Laboratory Duplicate Analyses**

#### *NWTPH-Dx*

The laboratory prepared one duplicate soil sample for analysis group 2990 from project sample GP-19-1.5. The primary and laboratory duplicate pair was analyzed by the NWTPH Dx method. The relative percent differences (RPD) for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

#### *NWTPH-Gx*

The laboratory prepared one duplicate soil samples for the single analysis group. For analysis group 5419, a duplicate was prepared from primary sample GP-23-7.5. The primary and laboratory duplicate pair was analyzed by the NWTPH Gx method. The RPD for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

#### *USEPA Method 8260*

The laboratory prepared a duplicate soil sample for batch 3013; the duplicate was prepared from project sample GP-23-7.5. The RPDs for all target analyte pairs in the primary and duplicate

sample were within the laboratory control criteria of 30 RPD. No data qualifications were warranted.

#### *USEPA Method 8081*

The laboratory prepared two duplicate soil samples; one for each analysis group. For batch 3027; the duplicate was prepared from project sample GP-19-9. For batch 3104; the duplicate was prepared from project sample GP-19-1.5. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data qualifications were warranted.

### **Surrogate Recoveries**

#### *NWTPH-Dx*

The surrogate percent recovery (%R) results for all NWTPH Dx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 50 to 150%R.

#### *NWTPH-Gx*

The surrogate %R results for all NWTPH Gx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 65 to 135%. No data qualifications were warranted.

#### *USEPA Method 8260*

The surrogate %R results for all USEPA Method 8260 soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

#### *USEPA Method 8081*

The surrogate %R results for all USEPA Method 8081 soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

### **Laboratory Control Samples**

#### *NWTPH-Dx*

One laboratory control sample (LCS) was prepared and analyzed with the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *NWTPH-Gx*

One LCS was prepared and analyzed with the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *USEPA Method 8260*

One LCS was prepared and analyzed with the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

### *USEPA Method 8081*

Two LCSs were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

### **Matrix Spike/Matrix Spike Duplicates**

#### *NWTPH-Dx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Dx method.

#### *NWTPH-Gx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Gx method.

### *USEPA Method 8260*

One soil MS was prepared and analyzed with the project samples for the single analytical batch. A sample duplicate was analyzed in lieu of an MSD for the samples. This is acceptable. The MS for analytical batch 3013 was prepared from project sample GP-23-16. The MS %Rs for all target analytes in analytical batch 3013 were within the laboratory control limits except for bromomethane. The %R for this compound was below the lower control limit, indicating a potential matrix-induced variability in sample results for this compound. This compound was not detected in any project samples and there were no other quality control issues associated with this compound in the remaining quality control data. Because the instrumentation was in control and bromomethane was not present in the samples, the addition of bromomethane to the sample and the subsequent MS exceedance is not considered sufficient cause to warrant qualification of the data. No data in analytical group 3013 were qualified.

### *USEPA Method 8081*

Two soil MSs were prepared and analyzed with the project samples; one for each of the analytical batches. Sample duplicates were analyzed in lieu of MSDs for the samples. This is acceptable. The MS for analytical batch 3027 was prepared from project sample GP-19-9. The MS %Rs for all target analytes in analytical batch 3027 were within the laboratory control limits. No data in analytical group 3027 were qualified. The MS for analytical batch 3104 was prepared from project sample GP-19-1.5. For analytical batch 3104, the MS %Rs for all target analytes were within the laboratory control limits. No data in analytical group 3104 were qualified. No other qualifications were warranted.

### **Other Quality Control Issues**

The laboratory reported two discrepancies between samples bottles received and information on the chain of custody (COC). The laboratory contacted the PES project manager to request clarification. One set of sample bottles labeled GP-12-24 was not listed on the COC. PES confirmed that this sample was on hold. Another sample bottle set (GP-23-12.5) was not on the COC. PES informed the laboratory that the sample bottles were mislabeled and that the correct bottle identification was GP-19-12.5). Because these two labeling/COC issues were resolved successfully, no qualifications of the data were warranted. No other laboratory quality control issues were identified in the laboratory report.



### **Quantitation Limits**

The MRLs were acceptable for the project; therefore, no data qualifiers were assigned.

### **Data Assessment**

No data were qualified. All data are judged to be acceptable for their intended use.



1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**PES Environmental, Inc.**  
Kelly Rankich  
1215 Fourth Avenue, Suite 1350  
Seattle, Washington 98161

**RE: Former Pace Kirkland**  
**Lab ID: 1208101**

September 11, 2012

**Attention Kelly Rankich:**

Fremont Analytical, Inc. received 5 sample(s) on 8/16/2012 for the analyses presented in the following report.

***Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***  
***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Volatile Organic Compounds by EPA Method 8260***

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,

A handwritten signature in black ink, appearing to read "M. Dee".

Michael Dee  
Sr. Chemist / Principal



Date: 09/11/2012

---

**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland  
**Lab Order:** 1208101

## Work Order Sample Summary

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Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1208101-001	GP-9-4.5	08/15/2012 4:15 PM	08/16/2012 2:22 PM
1208101-002	GP-9-9	08/15/2012 4:20 PM	08/16/2012 2:22 PM
1208101-003	GP-9-13	08/15/2012 4:25 PM	08/16/2012 2:22 PM
1208101-004	GP-9-17	08/15/2012 4:30 PM	08/16/2012 2:22 PM
1208101-005	GP-9-24	08/15/2012 4:45 PM	08/16/2012 2:22 PM

---

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

**CLIENT:** PES Environmental, Inc.**Project:** Former Pace Kirkland

---

**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are 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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208101-005B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208101-003B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208101-001B) required Silica Gel Cleanup Procedure.

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-001

**Matrix:** Soil

**Client Sample ID:** GP-9-4.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2998

Analyst: SG

Diesel (Fuel Oil)	ND	21.2		mg/Kg-dry	1	8/20/2012 4:21:00 PM
Diesel Range Organics (C12-C24)	ND	21.2		mg/Kg-dry	1	8/20/2012 4:21:00 PM
Heavy Oil	ND	52.9		mg/Kg-dry	1	8/20/2012 4:21:00 PM
Surr: 2-Fluorobiphenyl	101	50-150		%REC	1	8/20/2012 4:21:00 PM
Surr: o-Terphenyl	96.5	50-150		%REC	1	8/20/2012 4:21:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	6.29		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Gasoline Range Organics C6-C12	ND	6.29		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Surr: 1,2-Dichloroethane-d4	118	65-135		%REC	1	8/21/2012 11:40:00 PM
Surr: Fluorobenzene	110	65-135		%REC	1	8/21/2012 11:40:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0755		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Chloromethane	ND	0.0755		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Vinyl chloride	ND	0.00252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Bromomethane	ND	0.113		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Chloroethane	ND	0.0755		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1-Dichloroethene	ND	0.0629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Methylene chloride	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
trans-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1-Dichloroethane	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
2,2-Dichloropropane	ND	0.0629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
cis-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Chloroform	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1-Dichloropropene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Carbon tetrachloride	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2-Dichloroethane (EDC)	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Benzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Trichloroethene (TCE)	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-001

**Matrix:** Soil

**Client Sample ID:** GP-9-4.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

1,2-Dichloropropane	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Bromodichloromethane	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Dibromomethane	ND	0.0503		mg/Kg-dry	1	8/21/2012 11:40:00 PM
cis-1,3-Dichloropropene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Toluene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
trans-1,3-Dichloropropylene	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1,2-Trichloroethane	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,3-Dichloropropane	ND	0.0629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Tetrachloroethene (PCE)	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Dibromochloromethane	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2-Dibromoethane (EDB)	ND	0.00629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Chlorobenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Ethylbenzene	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
m,p-Xylene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
o-Xylene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Styrene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Isopropylbenzene	ND	0.101		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Bromoform	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
n-Propylbenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Bromobenzene	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,3,5-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
2-Chlorotoluene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
4-Chlorotoluene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
tert-Butylbenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2,3-Trichloropropane	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2,4-Trichlorobenzene	ND	0.0629		mg/Kg-dry	1	8/21/2012 11:40:00 PM
sec-Butylbenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
4-Isopropyltoluene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,3-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,4-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
n-Butylbenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:15:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-001

**Matrix:** Soil

**Client Sample ID:** GP-9-4.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Hexachlorobutadiene	ND	0.126		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Naphthalene	ND	0.0378		mg/Kg-dry	1	8/21/2012 11:40:00 PM
1,2,3-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	8/21/2012 11:40:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	8/21/2012 11:40:00 PM
Surr: Dibromofluoromethane	91.0	67.6-119		%REC	1	8/21/2012 11:40:00 PM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/21/2012 11:40:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	17.4			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-003

**Matrix:** Soil

**Client Sample ID:** GP-9-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2998

Analyst: SG

Diesel (Fuel Oil)	ND	19.6		mg/Kg-dry	1	8/20/2012 5:17:00 PM
Diesel Range Organics (C12-C24)	ND	19.6		mg/Kg-dry	1	8/20/2012 5:17:00 PM
Heavy Oil	ND	49.0		mg/Kg-dry	1	8/20/2012 5:17:00 PM
Surr: 2-Fluorobiphenyl	103	50-150		%REC	1	8/20/2012 5:17:00 PM
Surr: o-Terphenyl	98.4	50-150		%REC	1	8/20/2012 5:17:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.30		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Gasoline Range Organics C6-C12	ND	5.30		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Surr: 1,2-Dichloroethane-d4	122	65-135		%REC	1	8/22/2012 12:45:00 AM
Surr: Fluorobenzene	110	65-135		%REC	1	8/22/2012 12:45:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0636		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Chloromethane	ND	0.0636		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Vinyl chloride	ND	0.00212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Bromomethane	ND	0.0954		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Chloroethane	ND	0.0636		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1-Dichloroethene	ND	0.0530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Methylene chloride	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
trans-1,2-Dichloroethene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1-Dichloroethane	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
2,2-Dichloropropane	ND	0.0530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
cis-1,2-Dichloroethene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Chloroform	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1-Dichloropropene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Carbon tetrachloride	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2-Dichloroethane (EDC)	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Benzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Trichloroethene (TCE)	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-003

**Matrix:** Soil

**Client Sample ID:** GP-9-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

1,2-Dichloropropane	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Bromodichloromethane	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Dibromomethane	ND	0.0424		mg/Kg-dry	1	8/22/2012 12:45:00 AM
cis-1,3-Dichloropropene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Toluene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
trans-1,3-Dichloropropylene	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1,2-Trichloroethane	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,3-Dichloropropane	ND	0.0530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Tetrachloroethene (PCE)	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Dibromochloromethane	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2-Dibromoethane (EDB)	ND	0.00530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Chlorobenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Ethylbenzene	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
m,p-Xylene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
o-Xylene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Styrene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Isopropylbenzene	ND	0.0848		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Bromoform	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
n-Propylbenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Bromobenzene	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,3,5-Trimethylbenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
2-Chlorotoluene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
4-Chlorotoluene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
tert-Butylbenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2,3-Trichloropropane	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2,4-Trichlorobenzene	ND	0.0530		mg/Kg-dry	1	8/22/2012 12:45:00 AM
sec-Butylbenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
4-Isopropyltoluene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,3-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,4-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
n-Butylbenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-003

**Matrix:** Soil

**Client Sample ID:** GP-9-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Hexachlorobutadiene	ND	0.106		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Naphthalene	ND	0.0318		mg/Kg-dry	1	8/22/2012 12:45:00 AM
1,2,3-Trichlorobenzene	ND	0.0212		mg/Kg-dry	1	8/22/2012 12:45:00 AM
Surr: 1-Bromo-4-fluorobenzene	103	63.1-141		%REC	1	8/22/2012 12:45:00 AM
Surr: Dibromofluoromethane	89.7	67.6-119		%REC	1	8/22/2012 12:45:00 AM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/22/2012 12:45:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	9.83			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-005

**Matrix:** Soil

**Client Sample ID:** GP-9-24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 2998

Analyst: SG

Diesel (Fuel Oil)	ND	24.4		mg/Kg-dry	1	8/20/2012 5:46:00 PM
Diesel Range Organics (C12-C24)	ND	24.4		mg/Kg-dry	1	8/20/2012 5:46:00 PM
Heavy Oil	ND	60.9		mg/Kg-dry	1	8/20/2012 5:46:00 PM
Surr: 2-Fluorobiphenyl	100	50-150		%REC	1	8/20/2012 5:46:00 PM
Surr: o-Terphenyl	95.8	50-150		%REC	1	8/20/2012 5:46:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5419

Analyst: EM

Gasoline	ND	5.65		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Gasoline Range Organics C6-C12	ND	5.65		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Surr: 1,2-Dichloroethane-d4	117	65-135		%REC	1	8/22/2012 1:18:00 AM
Surr: Fluorobenzene	110	65-135		%REC	1	8/22/2012 1:18:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0678		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Chloromethane	ND	0.0678		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Vinyl chloride	ND	0.00226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Bromomethane	ND	0.102		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Chloroethane	ND	0.0678		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1-Dichloroethene	ND	0.0565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Methylene chloride	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
trans-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1-Dichloroethane	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
2,2-Dichloropropane	ND	0.0565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
cis-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Chloroform	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1-Dichloropropene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Carbon tetrachloride	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2-Dichloroethane (EDC)	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Benzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Trichloroethene (TCE)	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-005

**Matrix:** Soil

**Client Sample ID:** GP-9-24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

1,2-Dichloropropane	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Bromodichloromethane	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Dibromomethane	ND	0.0452		mg/Kg-dry	1	8/22/2012 1:18:00 AM
cis-1,3-Dichloropropene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Toluene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
trans-1,3-Dichloropropylene	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1,2-Trichloroethane	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,3-Dichloropropane	ND	0.0565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Tetrachloroethene (PCE)	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Dibromochloromethane	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2-Dibromoethane (EDB)	ND	0.00565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Chlorobenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Ethylbenzene	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
m,p-Xylene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
o-Xylene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Styrene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Isopropylbenzene	ND	0.0904		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Bromoform	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
n-Propylbenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Bromobenzene	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,3,5-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
2-Chlorotoluene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
4-Chlorotoluene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
tert-Butylbenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2,3-Trichloropropane	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2,4-Trichlorobenzene	ND	0.0565		mg/Kg-dry	1	8/22/2012 1:18:00 AM
sec-Butylbenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
4-Isopropyltoluene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,3-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,4-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
n-Butylbenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208101

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/15/2012 4:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208101-005

**Matrix:** Soil

**Client Sample ID:** GP-9-24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3013

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Hexachlorobutadiene	ND	0.113		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Naphthalene	ND	0.0339		mg/Kg-dry	1	8/22/2012 1:18:00 AM
1,2,3-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	8/22/2012 1:18:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	8/22/2012 1:18:00 AM
Surr: Dibromofluoromethane	90.0	67.6-119		%REC	1	8/22/2012 1:18:00 AM
Surr: Toluene-d8	99.6	78.5-126		%REC	1	8/22/2012 1:18:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5371

Analyst: SC

Percent Moisture	23.0			wt%	1	8/17/2012 1:20:00 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>LCS-2998</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5395</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2998</b>		Analysis Date: <b>8/20/2012</b>	SeqNo: <b>105553</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	437	20.0	500.0	0	87.3	65	135				
Surr: 2-Fluorobiphenyl	21.9		20.00		109	50	150				
Surr: o-Terphenyl	20.6		20.00		103	50	150				

Sample ID: <b>MB-2998</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5395</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>2998</b>		Analysis Date: <b>8/20/2012</b>	SeqNo: <b>105554</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	18.3		20.00		91.5	50	150				
Surr: o-Terphenyl	17.5		20.00		87.3	50	150				

Sample ID: <b>1208101-001BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5395</b>							
Client ID: <b>GP-9-4.5</b>	Batch ID: <b>2998</b>		Analysis Date: <b>8/20/2012</b>	SeqNo: <b>105702</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	21.6						0	0	30	
Diesel Range Organics (C12-C24)	ND	21.6						0	0	30	
Heavy Oil	ND	53.9						0	0	30	
Surr: 2-Fluorobiphenyl	20.7		21.57		96.1	50	150		0		
Surr: o-Terphenyl	20.1		21.57		93.2	50	150		0		

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208101-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5419</b>							
Client ID: <b>GP-9-4.5</b>	Batch ID: <b>R5419</b>		Analysis Date: <b>8/22/2012</b>	SeqNo: <b>106144</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	6.29						0	0	30	
Gasoline Range Organics C6-C12	ND	6.29						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.745		0.6292		118	65	135		0		
Surr: Fluorobenzene	0.690		0.6292		110	65	135		0		

Sample ID: <b>LCS-R5419</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5419</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5419</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106150</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	26.8	5.00	25.00	0	107	65	135				
Surr: 1,2-Dichloroethane-d4	0.546		0.5000		109	65	135				
Surr: Fluorobenzene	0.553		0.5000		111	65	135				

Sample ID: <b>MB-R5419</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5419</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5419</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106151</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.552		0.5000		110	65	135				
Surr: Fluorobenzene	0.545		0.5000		109	65	135				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208094-004AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105834</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.06	0.0646	1.076	0	98.8	43.5	121				
Chloromethane	0.996	0.0646	1.076	0	92.5	45	130				
Vinyl chloride	0.570	0.00215	1.076	0	52.9	51.2	146				
Bromomethane	0.432	0.0968	1.076	0	40.1	70	130				S
Trichlorofluoromethane (CFC-11)	1.02	0.0538	1.076	0	94.8	52.2	132				
Chloroethane	0.534	0.0646	1.076	0	49.6	43.8	117				
1,1-Dichloroethene	0.927	0.0538	1.076	0	86.2	61.9	141				
Methylene chloride	0.870	0.0215	1.076	0	80.8	54.7	142				
trans-1,2-Dichloroethene	1.10	0.0215	1.076	0	102	52	136				
Methyl tert-butyl ether (MTBE)	1.05	0.0538	1.076	0	97.9	54.4	132				
1,1-Dichloroethane	0.941	0.0215	1.076	0	87.5	51.8	141				
2,2-Dichloropropane	0.955	0.0538	1.076	0	88.7	36	123				
cis-1,2-Dichloroethene	1.04	0.0215	1.076	0	96.5	58.6	136				
Chloroform	1.01	0.0215	1.076	0	94.0	53.2	129				
1,1,1-Trichloroethane (TCA)	1.11	0.0215	1.076	0	103	58.3	145				
1,1-Dichloropropene	1.10	0.0215	1.076	0	102	55.1	138				
Carbon tetrachloride	1.13	0.0215	1.076	0	105	53.3	144				
1,2-Dichloroethane (EDC)	1.10	0.0323	1.076	0	102	51.3	139				
Benzene	1.09	0.0215	1.076	0	101	63.5	133				
Trichloroethene (TCE)	1.10	0.0323	1.076	0	103	68.6	132				
1,2-Dichloropropane	1.10	0.0215	1.076	0	102	59	136				
Bromodichloromethane	1.05	0.0215	1.076	0	97.3	50.7	141				
Dibromomethane	1.08	0.0430	1.076	0	101	50.6	137				
cis-1,3-Dichloropropene	1.03	0.0215	1.076	0	95.7	52.3	129				
Toluene	1.12	0.0215	1.076	0	104	67.8	129				
trans-1,3-Dichloropropylene	1.03	0.0323	1.076	0	95.4	52.2	138				
1,1,2-Trichloroethane	1.04	0.0323	1.076	0	97.0	51.6	137				
1,3-Dichloropropane	1.09	0.0538	1.076	0	101	53.1	134				
Tetrachloroethene (PCE)	1.13	0.0215	1.076	0	105	44.1	141				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits



**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208094-004AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105834</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	1.08	0.0323	1.076	0	100	55.3	140				
1,2-Dibromoethane (EDB)	1.06	0.00538	1.076	0	98.5	50.4	136				
Chlorobenzene	1.08	0.0215	1.076	0	100	60	133				
1,1,1,2-Tetrachloroethane	1.06	0.0323	1.076	0	98.9	53.1	142				
Ethylbenzene	1.11	0.0323	1.076	0	103	54.5	134				
m,p-Xylene	2.23	0.0215	2.152	0	104	53.1	132				
o-Xylene	1.10	0.0215	1.076	0	103	53.3	139				
Styrene	1.11	0.0215	1.076	0	103	51.1	132				
Isopropylbenzene	1.15	0.0861	1.076	0	107	58.9	138				
Bromoform	1.04	0.0215	1.076	0	96.2	57.9	130				
1,1,2,2-Tetrachloroethane	1.00	0.0215	1.076	0	93.0	51.9	131				
n-Propylbenzene	1.13	0.0215	1.076	0	105	53.6	140				
Bromobenzene	1.07	0.0323	1.076	0	99.4	54.2	140				
1,3,5-Trimethylbenzene	1.14	0.0215	1.076	0	106	51.8	136				
2-Chlorotoluene	1.17	0.0215	1.076	0	109	51.6	136				
4-Chlorotoluene	1.11	0.0215	1.076	0	103	50.1	139				
tert-Butylbenzene	1.14	0.0215	1.076	0	106	50.5	135				
1,2,3-Trichloropropane	0.897	0.0215	1.076	0	83.3	50.5	131				
1,2,4-Trichlorobenzene	1.10	0.0538	1.076	0	102	50.8	130				
sec-Butylbenzene	1.12	0.0215	1.076	0	104	52.6	141				
4-Isopropyltoluene	1.15	0.0215	1.076	0	107	52.9	134				
1,3-Dichlorobenzene	1.14	0.0215	1.076	0	106	52.6	131				
1,4-Dichlorobenzene	1.11	0.0215	1.076	0	103	52.9	129				
n-Butylbenzene	1.17	0.0215	1.076	0	109	52.6	130				
1,2-Dichlorobenzene	1.11	0.0215	1.076	0	103	55.8	129				
1,2-Dibromo-3-chloropropane	0.939	0.0323	1.076	0	87.2	53	129				
1,2,4-Trimethylbenzene	1.13	0.0215	1.076	0	105	50.6	137				
Hexachlorobutadiene	1.13	0.108	1.076	0	105	51.5	130				
Naphthalene	1.02	0.0323	1.076	0	94.8	52.3	124				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208094-004AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105834</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	1.10	0.0215	1.076	0	102	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.522		0.5380		97.0	63.1	141				
Surr: Dibromofluoromethane	0.484		0.5380		89.9	67.6	119				
Surr: Toluene-d8	0.538		0.5380		100	78.5	126				

**NOTES:**

S - Outlying spike recovery observed for Bromomethane. The method is in control as indicated by the LCS.

Sample ID: <b>LCS-3013</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105836</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	1.00	0.0600	1.000	0	100	41.5	132				
Chloromethane	0.932	0.0600	1.000	0	93.2	52.3	129				
Vinyl chloride	0.934	0.00200	1.000	0	93.4	51.1	134				
Bromomethane	1.01	0.0900	1.000	0	101	54.6	148				
Trichlorofluoromethane (CFC-11)	0.880	0.0500	1.000	0	88.0	59.7	131				
Chloroethane	0.814	0.0600	1.000	0	81.4	53.9	135				
1,1-Dichloroethene	0.980	0.0500	1.000	0	98.0	58	139				
Methylene chloride	1.04	0.0200	1.000	0	104	58.7	141				
trans-1,2-Dichloroethene	0.971	0.0200	1.000	0	97.1	70	130				
Methyl tert-butyl ether (MTBE)	1.04	0.0500	1.000	0	104	70	130				
1,1-Dichloroethane	0.991	0.0200	1.000	0	99.0	67.6	127				
2,2-Dichloropropane	0.844	0.0500	1.000	0	84.4	40.1	133				
cis-1,2-Dichloroethene	0.959	0.0200	1.000	0	95.9	70	130				
Chloroform	1.01	0.0200	1.000	0	101	64	127				
1,1,1-Trichloroethane (TCA)	0.987	0.0200	1.000	0	98.7	68.9	132				
1,1-Dichloropropene	0.995	0.0200	1.000	0	99.5	70	130				
Carbon tetrachloride	1.00	0.0200	1.000	0	100	56.3	141				
1,2-Dichloroethane (EDC)	1.01	0.0300	1.000	0	101	69.4	131				

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3013</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105836</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.990	0.0200	1.000	0	99.0	72.3	125				
Trichloroethene (TCE)	1.02	0.0300	1.000	0	102	73.5	130				
1,2-Dichloropropane	1.03	0.0200	1.000	0	103	70	130				
Bromodichloromethane	0.976	0.0200	1.000	0	97.6	70	130				
Dibromomethane	1.03	0.0400	1.000	0	103	70	130				
cis-1,3-Dichloropropene	1.00	0.0200	1.000	0	100	58.7	141				
Toluene	1.00	0.0200	1.000	0	100	73.6	126				
trans-1,3-Dichloropropylene	0.984	0.0300	1.000	0	98.4	55.3	142				
1,1,2-Trichloroethane	0.978	0.0300	1.000	0	97.8	70	130				
1,3-Dichloropropane	1.02	0.0500	1.000	0	102	70	130				
Tetrachloroethene (PCE)	1.00	0.0200	1.000	0	100	55.2	151				
Dibromochloromethane	1.00	0.0300	1.000	0	100	71.5	142				
1,2-Dibromoethane (EDB)	1.01	0.00500	1.000	0	101	70	130				
Chlorobenzene	0.978	0.0200	1.000	0	97.8	74.2	122				
1,1,1,2-Tetrachloroethane	0.994	0.0300	1.000	0	99.4	70	130				
Ethylbenzene	1.01	0.0300	1.000	0	101	70	130				
m,p-Xylene	2.05	0.0200	2.000	0	103	70	130				
o-Xylene	1.01	0.0200	1.000	0	101	70	130				
Styrene	1.02	0.0200	1.000	0	102	70	130				
Isopropylbenzene	1.04	0.0800	1.000	0	104	70	130				
Bromoform	1.05	0.0200	1.000	0	105	70.9	147				
1,1,2,2-Tetrachloroethane	0.978	0.0200	1.000	0	97.9	61.9	136				
n-Propylbenzene	1.01	0.0200	1.000	0	101	70	130				
Bromobenzene	1.02	0.0300	1.000	0	102	52.7	146				
1,3,5-Trimethylbenzene	1.02	0.0200	1.000	0	102	70	130				
2-Chlorotoluene	1.04	0.0200	1.000	0	104	70	130				
4-Chlorotoluene	1.01	0.0200	1.000	0	101	70	130				
tert-Butylbenzene	1.02	0.0200	1.000	0	102	70	130				
1,2,3-Trichloropropane	0.878	0.0200	1.000	0	87.8	61.7	138				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3013</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105836</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	0.962	0.0500	1.000	0	96.2	57.5	138				
sec-Butylbenzene	0.993	0.0200	1.000	0	99.3	70	130				
4-Isopropyltoluene	1.00	0.0200	1.000	0	100	52	149				
1,3-Dichlorobenzene	1.04	0.0200	1.000	0	104	70	130				
1,4-Dichlorobenzene	1.02	0.0200	1.000	0	102	70	130				
n-Butylbenzene	0.992	0.0200	1.000	0	99.2	59.2	136				
1,2-Dichlorobenzene	1.05	0.0200	1.000	0	105	70	130				
1,2-Dibromo-3-chloropropane	1.01	0.0300	1.000	0	101	60.6	137				
1,2,4-Trimethylbenzene	1.03	0.0200	1.000	0	103	70	130				
Hexachlorobutadiene	0.870	0.100	1.000	0	87.0	54.7	137				
Naphthalene	0.978	0.0300	1.000	0	97.9	53.2	136				
1,2,3-Trichlorobenzene	0.967	0.0200	1.000	0	96.7	51	140				
Surr: 1-Bromo-4-fluorobenzene	0.496		0.5000		99.3	63.1	141				
Surr: Dibromofluoromethane	0.496		0.5000		99.3	67.6	119				
Surr: Toluene-d8	0.500		0.5000		100	78.5	126				

Sample ID: <b>MB-3013</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>
Client ID: <b>MBLKS</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105837</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3013</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105837</b>							
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	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3013</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>
Client ID: <b>MBLKS</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>105837</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.491		0.5000		98.1	63.1	141				
Surr: Dibromofluoromethane	0.478		0.5000		95.5	67.6	119				
Surr: Toluene-d8	0.495		0.5000		99.0	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208101-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>GP-9-4.5</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/22/2012</b>	SeqNo: <b>106102</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0755						0	0	30	
Chloromethane	ND	0.0755						0	0	30	
Vinyl chloride	ND	0.00252						0	0	30	
Bromomethane	ND	0.113						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0629						0	0	30	
Chloroethane	ND	0.0755						0	0	30	
1,1-Dichloroethene	ND	0.0629						0	0	30	
Methylene chloride	ND	0.0252						0	0	30	
trans-1,2-Dichloroethene	ND	0.0252						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0629						0	0	30	
1,1-Dichloroethane	ND	0.0252						0	0	30	
2,2-Dichloropropane	ND	0.0629						0	0	30	
cis-1,2-Dichloroethene	ND	0.0252						0	0	30	
Chloroform	ND	0.0252						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0252						0	0	30	
1,1-Dichloropropene	ND	0.0252						0	0	30	
Carbon tetrachloride	ND	0.0252						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0378						0	0	30	
Benzene	ND	0.0252						0	0	30	
Trichloroethene (TCE)	ND	0.0378						0	0	30	
1,2-Dichloropropane	ND	0.0252						0	0	30	
Bromodichloromethane	ND	0.0252						0	0	30	
Dibromomethane	ND	0.0503						0	0	30	
cis-1,3-Dichloropropene	ND	0.0252						0	0	30	
Toluene	ND	0.0252						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0378						0	0	30	
1,1,2-Trichloroethane	ND	0.0378						0	0	30	
1,3-Dichloropropane	ND	0.0629						0	0	30	
Tetrachloroethene (PCE)	ND	0.0252						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208101-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>GP-9-4.5</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/22/2012</b>	SeqNo: <b>106102</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.0378						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00629						0	0	30	
Chlorobenzene	ND	0.0252						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0378						0	0	30	
Ethylbenzene	ND	0.0378						0	0	30	
m,p-Xylene	ND	0.0252						0	0	30	
o-Xylene	ND	0.0252						0	0	30	
Styrene	ND	0.0252						0	0	30	
Isopropylbenzene	ND	0.101						0	0	30	
Bromoform	ND	0.0252						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0252						0	0	30	
n-Propylbenzene	ND	0.0252						0	0	30	
Bromobenzene	ND	0.0378						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0252						0	0	30	
2-Chlorotoluene	ND	0.0252						0	0	30	
4-Chlorotoluene	ND	0.0252						0	0	30	
tert-Butylbenzene	ND	0.0252						0	0	30	
1,2,3-Trichloropropane	ND	0.0252						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0629						0	0	30	
sec-Butylbenzene	ND	0.0252						0	0	30	
4-Isopropyltoluene	ND	0.0252						0	0	30	
1,3-Dichlorobenzene	ND	0.0252						0	0	30	
1,4-Dichlorobenzene	ND	0.0252						0	0	30	
n-Butylbenzene	ND	0.0252						0	0	30	
1,2-Dichlorobenzene	ND	0.0252						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0378						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0252						0	0	30	
Hexachlorobutadiene	ND	0.126						0	0	30	
Naphthalene	ND	0.0378						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208101  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208101-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/20/2012</b>	RunNo: <b>5404</b>							
Client ID: <b>GP-9-4.5</b>	Batch ID: <b>3013</b>		Analysis Date: <b>8/22/2012</b>	SeqNo: <b>106102</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0252						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.644		0.6292		102	63.1	141		0		
Surr: Dibromofluoromethane	0.549		0.6292		87.2	67.6	119		0		
Surr: Toluene-d8	0.653		0.6292		104	78.5	126		0		

**Qualifiers:**
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
J Analyte detected below quantitation limits
ND Not detected at the Reporting Limit  
R RPD outside accepted recovery limits
RL Reporting Limit
S Spike recovery outside accepted recovery limits

Client Name: **PES**

 Work Order Number: **1208101**

 Logged by: **Troy Zehr**

 Date Received: **8/16/2012 2:22:00 PM**

### Chain of Custody

1. Were custodial seals present?      Yes       No       Not Required
2. Is Chain of Custody complete?      Yes       No       Not Present
3. How was the sample delivered?      Client

### Log In

4. Coolers are present?      Yes       No       NA
5. Was an attempt made to cool the samples?      Yes       No       NA
6. Were all coolers received at a temperature of >0° C to 10.0°C      Yes       No       NA
7. Sample(s) in proper container(s)?      Yes       No
8. Sufficient sample volume for indicated test(s)?      Yes       No
9. Are samples properly preserved?      Yes       No
10. Was preservative added to bottles?      Yes       No       NA
11. Is there headspace present in VOA vials?      Yes       No       NA
12. Did all sample containers arrive in good condition?(unbroken)      Yes       No
13. Does paperwork match bottle labels?      Yes       No
14. Are matrices correctly identified on Chain of Custody?      Yes       No
15. Is it clear what analyses were requested?      Yes       No
16. Were all holding times able to be met?      Yes       No

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order?      Yes       No       NA

Person Notified:	<input style="width: 95%;" type="text"/>	Date:	<input style="width: 95%;" type="text"/>
By Whom:	<input style="width: 95%;" type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input style="width: 95%;" type="text"/>		
Client Instructions:	<input style="width: 95%;" type="text"/>		

18. Additional remarks/Discrepancies

### Item Information

Item #	Temp °C	Condition
Cooler	2.8	Good



# Fremont

ANALYTICAL

1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client:

PES

Address:

City, State, Zip

Tel:

Project Name:

FORMER

Location:

G DORR

Collected by:

Project No: 1006 008.01.002

Reports To (PM): Kelly Rankin

Email:

## Chain of Custody Record

Laboratory Project No (Intern al):

1208101

Date:

8/16/12

Page:

of: PACE

Project Name:

G DORR

Location:

Collected by:

Project No: 1006 008.01.002

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	LOC (EPA 820)	EXTRACT BY EPA 820	GRAV BY EPA 820	GRAV RANGE OIGANS	PROPORTION REPLICATION (PCR)	PAH (EPA 821)	PAH (EPA 820 - SIM)	CI METALS (EPA 821)	CI METALS (EPA 821)	Metals - (EPA 821)	Toxic (P) (Reserved)	Residual (P)	Comment/Depth
1. GP-9-4.5	8/15	16:50	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
2. GP-9-9	8/15	16:00	S	X	X	X	X	X	X	X	X	X	X	X	X	Hold
3. GP-9-13	8/15	16:25	S	X	X	X	X	X	X	X	X	X	X	X	X	
4. GP-9-17	8/15	16:20	S	X	X	X	X	X	X	X	X	X	X	X	X	
5. GP-9-24	8/15	16:15	S	X	X	X	X	X	X	X	X	X	X	X	X	
6.																
7.																
8.																
9.																
10.																

Special Remarks:  
 HOLD !!  
 TS: ka bel

TAT -> Next Day 2 Day 3 Day 5TD

Received: 8/16/12 14:22  
 Received by: Jay Zeddy

Return to Client:  Disposal by Lab (A fee may be assessed if samples are retained after 10 days.)

## MEMORANDUM

**TO:** Project File **DATE:** September 10, 2012  
**FROM:** Jerry Harris  
**SUBJECT:** Laboratory Data Validation Review  
**PROJECT:** Former Pace Facility Kirkland, WA  
**PROJECT #:** 1006.008.01.003  
**TASK:** August 15, 2012 Soil Samples  
**LAB:** Fremont Analytical Service Request No. 1208101

---

Soil sampling was conducted at the former Pace facility in Kirkland, Washington on August 15, 2012. Five (5) soil samples were collected from the site.

Three selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as diesel (fuel oil), diesel range organics (DRO), and heavy oil (HO) by the Northwest TPH Dx (NWTPH-Dx) method, TPH as gasoline by the NWTPH-Gx method, and volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260. The TPH-Dx analyses were performed in one analysis group (ID 2998); the TPH-Gx analyses were performed in one analysis group (ID 5419); and the VOC analyses were performed in one primary analysis group (ID 3013). Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1208101.

The quality assurance review of the groundwater samples data is summarized below.

### DATA QUALIFICATIONS

Guidelines established by USEPA for 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 Organic Data Review (USEPA, 1999).

### DATA VALIDATION

#### Completeness

All samples were collected and analyzed as requested.

#### Sample Collection and Preservation

The samples were collected in appropriately preserved containers supplied by the analytical laboratory. The laboratory reported that the samples were received in good condition. The

laboratory received the samples in one cooler at a temperature of 2.8 degrees centigrade (°C). The cooler temperature was within the USEPA recommended temperature range of  $4^{\circ} \pm 2^{\circ}\text{C}$ . No data qualifications were warranted based upon the laboratory receipt temperatures.

### **Holding Times**

#### *NWTPH-Dx*

The extractions and analyses for the NWTPH-Dx method were performed within the recommended 14 day holding time limit for soil samples.

#### *NWTPH-Gx*

The analyses for the NWTPH Gx method were performed within the recommended 14 day holding time limit for soil samples.

#### *USEPA Method 8260*

The analyses for VOCS were performed within the recommended 14 day holding time limit for soil samples. No data were qualified based upon holding times.

### **Initial Calibration**

Hard copies of the initial calibration verification (ICV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in initial calibration results associated with the project analyses if they occur. No discrepancies were reported; therefore no data qualifications were warranted.

### **Continuing Calibration**

Hard copies of the continuing calibration verification (CCV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in continuing calibration results associated with the project analyses. No discrepancies were reported; therefore no data qualifications were warranted.

### **Method Blank Results**

#### *NWTPH-Dx*

One method blank was analyzed with the single analysis group. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the Method Reporting Limits (MRLs). No data qualifications were warranted.

#### *NWTPH-Gx*

One method blank was analyzed with the single analysis group. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

#### *USEPA Method 8260*

One method blank was analyzed with the single analysis group. This meets the required method

blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

### **Trip Blank Results**

No trip blanks were required or collected during this field event.

### **Field Duplicate Analyses**

No field duplicates were required or collected during this field event.

### **Laboratory Duplicate Analyses**

#### *NWTPH-Dx*

The laboratory prepared one duplicate soil sample for analysis group 2988 from project sample GP-9-4.5. The primary and laboratory duplicate pair was analyzed by the NWTPH Dx method. The relative percent differences (RPDs) for all target analytes in the primary and duplicate sample were within the laboratory control criteria of 30 RPD. No data were qualified.

#### *NWTPH-Gx*

The laboratory prepared one duplicate soil sample for analysis group 5419 from project sample GP-9-4.5. The primary and laboratory duplicate pair was analyzed by the NWTPH Gx method. The RPDs for all target analytes in the primary and duplicate sample were within the laboratory control criteria of 30 RPD. No data were qualified.

#### *USEPA Method 8260*

The laboratory prepared one duplicate soil sample for analysis group 3013 from project sample GP-9-4.5. The primary and laboratory duplicate pair was analyzed by USEPA Method 8260. The RPDs for all target analytes in the primary and duplicate sample were within the laboratory control criteria of 30 RPD. No data were qualified.

### **Surrogate Recoveries**

#### *NWTPH-Dx*

The surrogate percent recovery (%R) results for all NWTPH Dx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 50 to 150%R.

#### *NWTPH-Gx*

The surrogate %R results for all NWTPH Gx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 65 to 135%. No data qualifications were warranted.

#### *USEPA Method 8260*

The surrogate %R results for all USEPA Method 8260 soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

## **Laboratory Control Samples**

### *NWTPH-Dx*

One laboratory control sample (LCS) was prepared and analyzed for the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

### *NWTPH-Gx*

One laboratory control sample (LCS) was prepared and analyzed for the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

### *USEPA Method 8260*

One laboratory control sample (LCS) was prepared and analyzed for the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

## **Matrix Spike/Matrix Spike Duplicates**

### *NWTPH-Dx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Dx method.

### *NWTPH-Gx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Gx method.

### *USEPA Method 8260*

One batch (non-project) soil MS was prepared and analyzed with the project samples for the single analysis batch. A sample duplicate was analyzed in lieu of a MSD for the project. This is acceptable. The MS %Rs for all target analytes in analysis batch 3013 were within the laboratory control limits except for bromomethane. The %R for this compound was below the lower control limit. Because the MS was prepared from a batch (non-project) sample, matrix-caused variability in the MS does not indicate that there is a potential for matrix effects in the project samples. In addition, this compound was not detected in the project samples and the remaining quality control data did not indicate any issues with detecting these compounds. Based upon the information cited above, the MS exceedance is not considered to affect non-detect results. No qualifications were warranted.

## **Other Quality Control Issues**

No other laboratory quality control issues were identified in the laboratory report.

## **Quantitation Limits**

The MRLs were acceptable for the project; therefore, no data qualifiers were assigned.

## **Data Assessment**

No data were qualified. All data are judged to be acceptable for their intended use.





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T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**PES Environmental, Inc.**  
Kelly Rankich  
1215 Fourth Avenue, Suite 1350  
Seattle, Washington 98161

**RE: Former Pace Kirkland**  
**Lab ID: 1208108**

September 11, 2012

**Attention Kelly Rankich:**

Fremont Analytical, Inc. received 35 sample(s) on 8/17/2012 for the analyses presented in the following report.

***Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***  
***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Volatile Organic Compounds by EPA Method 8260***

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,

A handwritten signature in black ink, appearing to read "M. Dee".

Michael Dee  
Sr. Chemist / Principal



Date: 09/11/2012

**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland  
**Lab Order:** 1208108

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1208108-001	GP-1-1	08/17/2012 6:35 AM	08/17/2012 3:03 PM
1208108-002	GP-1-7.5	08/17/2012 6:45 AM	08/17/2012 3:03 PM
1208108-003	GP-1-12.5	08/17/2012 6:50 AM	08/17/2012 3:03 PM
1208108-004	GP-1-17.5	08/17/2012 6:55 AM	08/17/2012 3:03 PM
1208108-005	GP-1-24	08/17/2012 7:05 AM	08/17/2012 3:03 PM
1208108-006	GP-2-2	08/17/2012 7:15 AM	08/17/2012 3:03 PM
1208108-007	GP-2-6.5	08/17/2012 7:30 AM	08/17/2012 3:03 PM
1208108-008	GP-2-11	08/17/2012 7:45 AM	08/17/2012 3:03 PM
1208108-009	GP-2-14	08/17/2012 7:50 AM	08/17/2012 3:03 PM
1208108-010	GP-3-2	08/17/2012 8:10 AM	08/17/2012 3:03 PM
1208108-011	GP-3-6.5	08/17/2012 8:20 AM	08/17/2012 3:03 PM
1208108-012	GP-3-13	08/17/2012 8:30 AM	08/17/2012 3:03 PM
1208108-013	GP-3-19	08/17/2012 8:35 AM	08/17/2012 3:03 PM
1208108-014	GP-3-22.5	08/17/2012 8:45 AM	08/17/2012 3:03 PM
1208108-015	GP-3-29	08/17/2012 8:55 AM	08/17/2012 3:03 PM
1208108-016	GP-14-3	08/17/2012 9:45 AM	08/17/2012 3:03 PM
1208108-017	GP-14-8	08/17/2012 9:50 AM	08/17/2012 3:03 PM
1208108-018	GP-14-12.5	08/17/2012 9:55 AM	08/17/2012 3:03 PM
1208108-019	GP-14-19	08/17/2012 10:05 AM	08/17/2012 3:03 PM
1208108-020	GP-8-2	08/17/2012 11:00 AM	08/17/2012 3:03 PM
1208108-021	GP-8-7	08/17/2012 11:05 AM	08/17/2012 3:03 PM
1208108-022	GP-8-10	08/17/2012 11:10 AM	08/17/2012 3:03 PM
1208108-023	GP-8-15	08/17/2012 11:15 AM	08/17/2012 3:03 PM
1208108-024	GP-8-24	08/17/2012 11:30 AM	08/17/2012 3:03 PM
1208108-025	GP-5-3.5	08/17/2012 12:15 PM	08/17/2012 3:03 PM
1208108-026	GP-5-7	08/17/2012 12:25 PM	08/17/2012 3:03 PM
1208108-027	GP-5-13	08/17/2012 12:30 PM	08/17/2012 3:03 PM
1208108-028	GP-5-18	08/17/2012 12:45 PM	08/17/2012 3:03 PM
1208108-029	GP-10-2.5	08/17/2012 1:10 PM	08/17/2012 3:03 PM
1208108-030	GP-10-14.5	08/17/2012 1:25 PM	08/17/2012 3:03 PM
1208108-031	GP-10-18	08/17/2012 1:50 PM	08/17/2012 3:03 PM
1208108-032	GP-10-22	08/17/2012 2:00 PM	08/17/2012 3:03 PM
1208108-033	GP-10-25	08/17/2012 2:10 PM	08/17/2012 3:03 PM
1208108-034	GP-10-29	08/17/2012 2:15 PM	08/17/2012 3:03 PM
1208108-035	Trip Blank MEOH	08/17/2012 12:00 AM	08/17/2012 3:03 PM

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

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**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are 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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-001B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-004B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-007B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-009B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-011B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-013B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-016B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-018B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-022B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-024B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-026B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-030B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-032B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-028B) required Silica Gel Cleanup Procedure.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1208108-029B) required Silica Gel Cleanup Procedure.

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**CLIENT:** PES Environmental, Inc.

**Project:** Former Pace Kirkland

---

Procedure.

DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-001

**Matrix:** Soil

**Client Sample ID:** GP-1-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	23.2		mg/Kg-dry	1	8/21/2012 8:57:00 PM
Diesel Range Organics (C12-C24)	ND	23.2		mg/Kg-dry	1	8/21/2012 8:57:00 PM
Heavy Oil	ND	57.9		mg/Kg-dry	1	8/21/2012 8:57:00 PM
Surr: 2-Fluorobiphenyl	84.7	50-150		%REC	1	8/21/2012 8:57:00 PM
Surr: o-Terphenyl	82.2	50-150		%REC	1	8/21/2012 8:57:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	5.49		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Gasoline Range Organics C6-C12	ND	5.49		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Surr: 1,2-Dichloroethane-d4	72.7	65-135		%REC	1	8/23/2012 8:00:00 AM
Surr: Fluorobenzene	98.5	65-135		%REC	1	8/23/2012 8:00:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0659		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Chloromethane	ND	0.0659		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Vinyl chloride	ND	0.00220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Bromomethane	ND	0.0988		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Chloroethane	ND	0.0659		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1-Dichloroethene	ND	0.0549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Methylene chloride	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
trans-1,2-Dichloroethene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1-Dichloroethane	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
2,2-Dichloropropane	ND	0.0549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
cis-1,2-Dichloroethene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Chloroform	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1-Dichloropropene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Carbon tetrachloride	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2-Dichloroethane (EDC)	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Benzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Trichloroethene (TCE)	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-001

**Matrix:** Soil

**Client Sample ID:** GP-1-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Bromodichloromethane	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Dibromomethane	ND	0.0439		mg/Kg-dry	1	8/23/2012 8:00:00 AM
cis-1,3-Dichloropropene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Toluene	0.157	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
trans-1,3-Dichloropropylene	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1,2-Trichloroethane	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,3-Dichloropropane	ND	0.0549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Tetrachloroethene (PCE)	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Dibromochloromethane	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2-Dibromoethane (EDB)	ND	0.00549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Chlorobenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Ethylbenzene	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
m,p-Xylene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
o-Xylene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Styrene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Isopropylbenzene	ND	0.0878		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Bromoform	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
n-Propylbenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Bromobenzene	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,3,5-Trimethylbenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
2-Chlorotoluene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
4-Chlorotoluene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
tert-Butylbenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2,3-Trichloropropane	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2,4-Trichlorobenzene	ND	0.0549		mg/Kg-dry	1	8/23/2012 8:00:00 AM
sec-Butylbenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
4-Isopropyltoluene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,3-Dichlorobenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,4-Dichlorobenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
n-Butylbenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2-Dichlorobenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-001

**Matrix:** Soil

**Client Sample ID:** GP-1-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Hexachlorobutadiene	ND	0.110		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Naphthalene	ND	0.0329		mg/Kg-dry	1	8/23/2012 8:00:00 AM
1,2,3-Trichlorobenzene	ND	0.0220		mg/Kg-dry	1	8/23/2012 8:00:00 AM
Surr: 1-Bromo-4-fluorobenzene	91.0	63.1-141		%REC	1	8/23/2012 8:00:00 AM
Surr: Dibromofluoromethane	95.8	67.6-119		%REC	1	8/23/2012 8:00:00 AM
Surr: Toluene-d8	100	78.5-126		%REC	1	8/23/2012 8:00:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	21.7			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-002

**Matrix:** Soil

**Client Sample ID:** GP-1-7.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

Benzene	ND	0.0275		mg/Kg-dry	1	8/30/2012 2:17:00 PM
Toluene	ND	0.0275		mg/Kg-dry	1	8/30/2012 2:17:00 PM
Ethylbenzene	ND	0.0413		mg/Kg-dry	1	8/30/2012 2:17:00 PM
m,p-Xylene	ND	0.0275		mg/Kg-dry	1	8/30/2012 2:17:00 PM
o-Xylene	ND	0.0275		mg/Kg-dry	1	8/30/2012 2:17:00 PM
Surr: 1-Bromo-4-fluorobenzene	107	63.1-141		%REC	1	8/30/2012 2:17:00 PM
Surr: Dibromofluoromethane	93.5	67.6-119		%REC	1	8/30/2012 2:17:00 PM
Surr: Toluene-d8	101	78.5-126		%REC	1	8/30/2012 2:17:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5536

Analyst: MC

Percent Moisture	19.3			wt%	1	8/30/2012 12:25:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:55:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-004

**Matrix:** Soil

**Client Sample ID:** GP-1-17.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	23.6		mg/Kg-dry	1	8/21/2012 9:53:00 PM
Diesel Range Organics (C12-C24)	ND	23.6		mg/Kg-dry	1	8/21/2012 9:53:00 PM
Heavy Oil	ND	58.9		mg/Kg-dry	1	8/21/2012 9:53:00 PM
Surr: 2-Fluorobiphenyl	86.1	50-150		%REC	1	8/21/2012 9:53:00 PM
Surr: o-Terphenyl	83.0	50-150		%REC	1	8/21/2012 9:53:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	4.99		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Gasoline Range Organics C6-C12	ND	4.99		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Surr: 1,2-Dichloroethane-d4	75.4	65-135		%REC	1	8/23/2012 8:31:00 AM
Surr: Fluorobenzene	100	65-135		%REC	1	8/23/2012 8:31:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0599		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Chloromethane	ND	0.0599		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Vinyl chloride	ND	0.00200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Bromomethane	ND	0.0899		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Chloroethane	ND	0.0599		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1-Dichloroethene	ND	0.0499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Methylene chloride	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1-Dichloroethane	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
2,2-Dichloropropane	ND	0.0499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Chloroform	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1-Dichloropropene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Carbon tetrachloride	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2-Dichloroethane (EDC)	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Benzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Trichloroethene (TCE)	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:55:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-004

**Matrix:** Soil

**Client Sample ID:** GP-1-17.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Bromodichloromethane	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Dibromomethane	ND	0.0399		mg/Kg-dry	1	8/23/2012 8:31:00 AM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Toluene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
trans-1,3-Dichloropropylene	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1,2-Trichloroethane	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,3-Dichloropropane	ND	0.0499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Tetrachloroethene (PCE)	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Dibromochloromethane	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2-Dibromoethane (EDB)	ND	0.00499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Chlorobenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
m,p-Xylene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
o-Xylene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Styrene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Isopropylbenzene	ND	0.0799		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Bromoform	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
n-Propylbenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Bromobenzene	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,3,5-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
2-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
4-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
tert-Butylbenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2,3-Trichloropropane	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2,4-Trichlorobenzene	ND	0.0499		mg/Kg-dry	1	8/23/2012 8:31:00 AM
sec-Butylbenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
4-Isopropyltoluene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
n-Butylbenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 6:55:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-004

**Matrix:** Soil

**Client Sample ID:** GP-1-17.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Hexachlorobutadiene	ND	0.0999		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Naphthalene	ND	0.0300		mg/Kg-dry	1	8/23/2012 8:31:00 AM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/23/2012 8:31:00 AM
Surr: 1-Bromo-4-fluorobenzene	90.5	63.1-141		%REC	1	8/23/2012 8:31:00 AM
Surr: Dibromofluoromethane	95.3	67.6-119		%REC	1	8/23/2012 8:31:00 AM
Surr: Toluene-d8	98.2	78.5-126		%REC	1	8/23/2012 8:31:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	20.7			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 7:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-007

**Matrix:** Soil

**Client Sample ID:** GP-2-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	21.6		mg/Kg-dry	1	8/21/2012 10:21:00 PM
Diesel Range Organics (C12-C24)	ND	21.6		mg/Kg-dry	1	8/21/2012 10:21:00 PM
Heavy Oil	ND	53.9		mg/Kg-dry	1	8/21/2012 10:21:00 PM
Surr: 2-Fluorobiphenyl	86.1	50-150		%REC	1	8/21/2012 10:21:00 PM
Surr: o-Terphenyl	82.5	50-150		%REC	1	8/21/2012 10:21:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	5.79		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Gasoline Range Organics C6-C12	ND	5.79		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Surr: 1,2-Dichloroethane-d4	71.7	65-135		%REC	1	8/23/2012 9:03:00 AM
Surr: Fluorobenzene	98.0	65-135		%REC	1	8/23/2012 9:03:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0695		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Chloromethane	ND	0.0695		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Vinyl chloride	ND	0.00232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Bromomethane	ND	0.104		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Chloroethane	ND	0.0695		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1-Dichloroethene	ND	0.0579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Methylene chloride	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
trans-1,2-Dichloroethene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1-Dichloroethane	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
2,2-Dichloropropane	ND	0.0579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
cis-1,2-Dichloroethene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Chloroform	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1-Dichloropropene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Carbon tetrachloride	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2-Dichloroethane (EDC)	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Benzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Trichloroethene (TCE)	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 7:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-007

**Matrix:** Soil

**Client Sample ID:** GP-2-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Bromodichloromethane	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Dibromomethane	ND	0.0463		mg/Kg-dry	1	8/23/2012 9:03:00 AM
cis-1,3-Dichloropropene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Toluene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
trans-1,3-Dichloropropylene	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1,2-Trichloroethane	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,3-Dichloropropane	ND	0.0579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Tetrachloroethene (PCE)	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Dibromochloromethane	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2-Dibromoethane (EDB)	ND	0.00579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Chlorobenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Ethylbenzene	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
m,p-Xylene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
o-Xylene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Styrene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Isopropylbenzene	ND	0.0926		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Bromoform	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
n-Propylbenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Bromobenzene	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,3,5-Trimethylbenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
2-Chlorotoluene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
4-Chlorotoluene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
tert-Butylbenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2,3-Trichloropropane	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2,4-Trichlorobenzene	ND	0.0579		mg/Kg-dry	1	8/23/2012 9:03:00 AM
sec-Butylbenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
4-Isopropyltoluene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,3-Dichlorobenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,4-Dichlorobenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
n-Butylbenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2-Dichlorobenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 7:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-007

**Matrix:** Soil

**Client Sample ID:** GP-2-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Hexachlorobutadiene	ND	0.116		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Naphthalene	ND	0.0347		mg/Kg-dry	1	8/23/2012 9:03:00 AM
1,2,3-Trichlorobenzene	ND	0.0232		mg/Kg-dry	1	8/23/2012 9:03:00 AM
Surr: 1-Bromo-4-fluorobenzene	96.8	63.1-141		%REC	1	8/23/2012 9:03:00 AM
Surr: Dibromofluoromethane	94.3	67.6-119		%REC	1	8/23/2012 9:03:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/23/2012 9:03:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	13.9			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 7:50:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-009

**Matrix:** Soil

**Client Sample ID:** GP-2-14

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b><u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u></b>					Batch ID: 3009	Analyst: BR
Diesel (Fuel Oil)	ND	23.8		mg/Kg-dry	1	8/21/2012 10:48:00 PM
Diesel Range Organics (C12-C24)	ND	23.8		mg/Kg-dry	1	8/21/2012 10:48:00 PM
Heavy Oil	ND	59.6		mg/Kg-dry	1	8/21/2012 10:48:00 PM
Surr: 2-Fluorobiphenyl	85.0	50-150		%REC	1	8/21/2012 10:48:00 PM
Surr: o-Terphenyl	82.1	50-150		%REC	1	8/21/2012 10:48:00 PM

<b><u>Gasoline by NWTPH-Gx</u></b>					Batch ID: R5477	Analyst: EM
Gasoline	ND	5.81		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Gasoline Range Organics C6-C12	ND	5.81		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Surr: 1,2-Dichloroethane-d4	71.2	65-135		%REC	1	8/23/2012 9:34:00 AM
Surr: Fluorobenzene	96.9	65-135		%REC	1	8/23/2012 9:34:00 AM

<b><u>Volatile Organic Compounds by EPA Method 8260</u></b>					Batch ID: 3029	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0698		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Chloromethane	ND	0.0698		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Vinyl chloride	ND	0.00233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Bromomethane	ND	0.105		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Chloroethane	ND	0.0698		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1-Dichloroethene	ND	0.0581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Methylene chloride	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
trans-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1-Dichloroethane	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
2,2-Dichloropropane	ND	0.0581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
cis-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Chloroform	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1-Dichloropropene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Carbon tetrachloride	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2-Dichloroethane (EDC)	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Benzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Trichloroethene (TCE)	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM

<b>Qualifiers:</b>	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
	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 7:50:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-009

**Matrix:** Soil

**Client Sample ID:** GP-2-14

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Bromodichloromethane	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Dibromomethane	ND	0.0465		mg/Kg-dry	1	8/23/2012 9:34:00 AM
cis-1,3-Dichloropropene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Toluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
trans-1,3-Dichloropropylene	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1,2-Trichloroethane	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,3-Dichloropropane	ND	0.0581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Tetrachloroethene (PCE)	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Dibromochloromethane	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2-Dibromoethane (EDB)	ND	0.00581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Chlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Ethylbenzene	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
m,p-Xylene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
o-Xylene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Styrene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Isopropylbenzene	ND	0.0930		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Bromoform	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
n-Propylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Bromobenzene	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,3,5-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
2-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
4-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
tert-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2,3-Trichloropropane	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2,4-Trichlorobenzene	ND	0.0581		mg/Kg-dry	1	8/23/2012 9:34:00 AM
sec-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
4-Isopropyltoluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,3-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,4-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
n-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 7:50:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-009

**Matrix:** Soil

**Client Sample ID:** GP-2-14

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Hexachlorobutadiene	ND	0.116		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Naphthalene	ND	0.0349		mg/Kg-dry	1	8/23/2012 9:34:00 AM
1,2,3-Trichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 9:34:00 AM
Surr: 1-Bromo-4-fluorobenzene	93.6	63.1-141		%REC	1	8/23/2012 9:34:00 AM
Surr: Dibromofluoromethane	95.4	67.6-119		%REC	1	8/23/2012 9:34:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/23/2012 9:34:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	19.7			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 8:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-011

**Matrix:** Soil

**Client Sample ID:** GP-3-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	23.1		mg/Kg-dry	1	8/21/2012 11:16:00 PM
Diesel Range Organics (C12-C24)	ND	23.1		mg/Kg-dry	1	8/21/2012 11:16:00 PM
Heavy Oil	ND	57.8		mg/Kg-dry	1	8/21/2012 11:16:00 PM
Surr: 2-Fluorobiphenyl	84.8	50-150		%REC	1	8/21/2012 11:16:00 PM
Surr: o-Terphenyl	81.8	50-150		%REC	1	8/21/2012 11:16:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	4.69		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Gasoline Range Organics C6-C12	ND	4.69		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Surr: 1,2-Dichloroethane-d4	74.6	65-135		%REC	1	8/23/2012 10:05:00 AM
Surr: Fluorobenzene	99.3	65-135		%REC	1	8/23/2012 10:05:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0563		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Chloromethane	ND	0.0563		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Vinyl chloride	ND	0.00188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Bromomethane	ND	0.0844		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Chloroethane	ND	0.0563		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1-Dichloroethene	ND	0.0469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Methylene chloride	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
trans-1,2-Dichloroethene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1-Dichloroethane	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
2,2-Dichloropropane	ND	0.0469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
cis-1,2-Dichloroethene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Chloroform	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1-Dichloropropene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Carbon tetrachloride	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2-Dichloroethane (EDC)	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Benzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Trichloroethene (TCE)	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 8:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-011

**Matrix:** Soil

**Client Sample ID:** GP-3-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>					Batch ID: 3029	Analyst: EM
1,2-Dichloropropane	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Bromodichloromethane	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Dibromomethane	ND	0.0375		mg/Kg-dry	1	8/23/2012 10:05:00 AM
cis-1,3-Dichloropropene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Toluene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
trans-1,3-Dichloropropylene	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1,2-Trichloroethane	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,3-Dichloropropane	ND	0.0469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Tetrachloroethene (PCE)	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Dibromochloromethane	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2-Dibromoethane (EDB)	ND	0.00469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Chlorobenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Ethylbenzene	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
m,p-Xylene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
o-Xylene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Styrene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Isopropylbenzene	ND	0.0750		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Bromoform	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
n-Propylbenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Bromobenzene	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,3,5-Trimethylbenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
2-Chlorotoluene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
4-Chlorotoluene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
tert-Butylbenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2,3-Trichloropropane	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2,4-Trichlorobenzene	ND	0.0469		mg/Kg-dry	1	8/23/2012 10:05:00 AM
sec-Butylbenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
4-Isopropyltoluene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,3-Dichlorobenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,4-Dichlorobenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
n-Butylbenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2-Dichlorobenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 8:20:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-011

**Matrix:** Soil

**Client Sample ID:** GP-3-6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Hexachlorobutadiene	ND	0.0938		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Naphthalene	ND	0.0281		mg/Kg-dry	1	8/23/2012 10:05:00 AM
1,2,3-Trichlorobenzene	ND	0.0188		mg/Kg-dry	1	8/23/2012 10:05:00 AM
Surr: 1-Bromo-4-fluorobenzene	96.6	63.1-141		%REC	1	8/23/2012 10:05:00 AM
Surr: Dibromofluoromethane	98.8	67.6-119		%REC	1	8/23/2012 10:05:00 AM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/23/2012 10:05:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	15.7			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 8:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-013

**Matrix:** Soil

**Client Sample ID:** GP-3-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	23.6		mg/Kg-dry	1	8/21/2012 11:44:00 PM
Diesel Range Organics (C12-C24)	ND	23.6		mg/Kg-dry	1	8/21/2012 11:44:00 PM
Heavy Oil	ND	58.9		mg/Kg-dry	1	8/21/2012 11:44:00 PM
Surr: 2-Fluorobiphenyl	85.5	50-150		%REC	1	8/21/2012 11:44:00 PM
Surr: o-Terphenyl	83.5	50-150		%REC	1	8/21/2012 11:44:00 PM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	5.82		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Gasoline Range Organics C6-C12	ND	5.82		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Surr: 1,2-Dichloroethane-d4	69.7	65-135		%REC	1	8/23/2012 10:37:00 AM
Surr: Fluorobenzene	96.1	65-135		%REC	1	8/23/2012 10:37:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0698		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Chloromethane	ND	0.0698		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Vinyl chloride	ND	0.00233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Bromomethane	ND	0.105		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Chloroethane	ND	0.0698		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1-Dichloroethene	ND	0.0582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Methylene chloride	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
trans-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1-Dichloroethane	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
2,2-Dichloropropane	ND	0.0582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
cis-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Chloroform	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1-Dichloropropene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Carbon tetrachloride	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2-Dichloroethane (EDC)	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Benzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Trichloroethene (TCE)	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 8:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-013

**Matrix:** Soil

**Client Sample ID:** GP-3-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>					Batch ID: 3029	Analyst: EM
1,2-Dichloropropane	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Bromodichloromethane	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Dibromomethane	ND	0.0465		mg/Kg-dry	1	8/23/2012 10:37:00 AM
cis-1,3-Dichloropropene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Toluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
trans-1,3-Dichloropropylene	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1,2-Trichloroethane	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,3-Dichloropropane	ND	0.0582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Tetrachloroethene (PCE)	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Dibromochloromethane	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2-Dibromoethane (EDB)	ND	0.00582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Chlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Ethylbenzene	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
m,p-Xylene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
o-Xylene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Styrene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Isopropylbenzene	ND	0.0931		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Bromoform	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
n-Propylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Bromobenzene	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,3,5-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
2-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
4-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
tert-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2,3-Trichloropropane	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2,4-Trichlorobenzene	ND	0.0582		mg/Kg-dry	1	8/23/2012 10:37:00 AM
sec-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
4-Isopropyltoluene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,3-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,4-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
n-Butylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 8:35:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-013

**Matrix:** Soil

**Client Sample ID:** GP-3-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Hexachlorobutadiene	ND	0.116		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Naphthalene	ND	0.0349		mg/Kg-dry	1	8/23/2012 10:37:00 AM
1,2,3-Trichlorobenzene	ND	0.0233		mg/Kg-dry	1	8/23/2012 10:37:00 AM
Surr: 1-Bromo-4-fluorobenzene	91.6	63.1-141		%REC	1	8/23/2012 10:37:00 AM
Surr: Dibromofluoromethane	95.9	67.6-119		%REC	1	8/23/2012 10:37:00 AM
Surr: Toluene-d8	100	78.5-126		%REC	1	8/23/2012 10:37:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	20.4			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-016

**Matrix:** Soil

**Client Sample ID:** GP-14-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	20.2		mg/Kg-dry	1	8/22/2012 12:11:00 AM
Diesel Range Organics (C12-C24)	ND	20.2		mg/Kg-dry	1	8/22/2012 12:11:00 AM
Heavy Oil	ND	50.6		mg/Kg-dry	1	8/22/2012 12:11:00 AM
Surr: 2-Fluorobiphenyl	84.9	50-150		%REC	1	8/22/2012 12:11:00 AM
Surr: o-Terphenyl	82.7	50-150		%REC	1	8/22/2012 12:11:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	5.09		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Gasoline Range Organics C6-C12	ND	5.09		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Surr: 1,2-Dichloroethane-d4	71.0	65-135		%REC	1	8/23/2012 11:09:00 AM
Surr: Fluorobenzene	97.8	65-135		%REC	1	8/23/2012 11:09:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0610		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Chloromethane	ND	0.0610		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Vinyl chloride	ND	0.00203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Bromomethane	ND	0.0915		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Chloroethane	ND	0.0610		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1-Dichloroethene	ND	0.0509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Methylene chloride	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
trans-1,2-Dichloroethene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1-Dichloroethane	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
2,2-Dichloropropane	ND	0.0509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
cis-1,2-Dichloroethene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Chloroform	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1-Dichloropropene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Carbon tetrachloride	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2-Dichloroethane (EDC)	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Benzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Trichloroethene (TCE)	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-016

**Matrix:** Soil

**Client Sample ID:** GP-14-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Bromodichloromethane	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Dibromomethane	ND	0.0407		mg/Kg-dry	1	8/23/2012 11:09:00 AM
cis-1,3-Dichloropropene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Toluene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
trans-1,3-Dichloropropylene	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1,2-Trichloroethane	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,3-Dichloropropane	ND	0.0509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Tetrachloroethene (PCE)	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Dibromochloromethane	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2-Dibromoethane (EDB)	ND	0.00509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Chlorobenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Ethylbenzene	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
m,p-Xylene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
o-Xylene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Styrene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Isopropylbenzene	ND	0.0814		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Bromoform	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
n-Propylbenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Bromobenzene	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,3,5-Trimethylbenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
2-Chlorotoluene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
4-Chlorotoluene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
tert-Butylbenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2,3-Trichloropropane	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2,4-Trichlorobenzene	ND	0.0509		mg/Kg-dry	1	8/23/2012 11:09:00 AM
sec-Butylbenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
4-Isopropyltoluene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,3-Dichlorobenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,4-Dichlorobenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
n-Butylbenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2-Dichlorobenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 9:45:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-016

**Matrix:** Soil

**Client Sample ID:** GP-14-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Hexachlorobutadiene	ND	0.102		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Naphthalene	ND	0.0305		mg/Kg-dry	1	8/23/2012 11:09:00 AM
1,2,3-Trichlorobenzene	ND	0.0203		mg/Kg-dry	1	8/23/2012 11:09:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.5	63.1-141		%REC	1	8/23/2012 11:09:00 AM
Surr: Dibromofluoromethane	95.2	67.6-119		%REC	1	8/23/2012 11:09:00 AM
Surr: Toluene-d8	98.3	78.5-126		%REC	1	8/23/2012 11:09:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	5.63			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 9:55:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-018

**Matrix:** Soil

**Client Sample ID:** GP-14-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b><u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u></b>					Batch ID: 3009	Analyst: BR
Diesel (Fuel Oil)	ND	22.3		mg/Kg-dry	1	8/22/2012 12:39:00 AM
Diesel Range Organics (C12-C24)	ND	22.3		mg/Kg-dry	1	8/22/2012 12:39:00 AM
Heavy Oil	ND	55.8		mg/Kg-dry	1	8/22/2012 12:39:00 AM
Surr: 2-Fluorobiphenyl	86.4	50-150		%REC	1	8/22/2012 12:39:00 AM
Surr: o-Terphenyl	117	50-150		%REC	1	8/22/2012 12:39:00 AM

<b><u>Gasoline by NWTPH-Gx</u></b>					Batch ID: R5477	Analyst: EM
Gasoline	ND	5.77		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Gasoline Range Organics C6-C12	ND	5.77		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Surr: 1,2-Dichloroethane-d4	72.1	65-135		%REC	1	8/23/2012 11:41:00 AM
Surr: Fluorobenzene	101	65-135		%REC	1	8/23/2012 11:41:00 AM

<b><u>Volatile Organic Compounds by EPA Method 8260</u></b>					Batch ID: 3029	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0692		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Chloromethane	ND	0.0692		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Vinyl chloride	ND	0.00231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Bromomethane	ND	0.104		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Chloroethane	ND	0.0692		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1-Dichloroethene	ND	0.0577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Methylene chloride	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
trans-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1-Dichloroethane	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
2,2-Dichloropropane	ND	0.0577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
cis-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Chloroform	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1-Dichloropropene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Carbon tetrachloride	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2-Dichloroethane (EDC)	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Benzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Trichloroethene (TCE)	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM

**Qualifiers:**

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
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 9:55:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-018

**Matrix:** Soil

**Client Sample ID:** GP-14-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Bromodichloromethane	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Dibromomethane	ND	0.0462		mg/Kg-dry	1	8/23/2012 11:41:00 AM
cis-1,3-Dichloropropene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Toluene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
trans-1,3-Dichloropropylene	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1,2-Trichloroethane	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,3-Dichloropropane	ND	0.0577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Tetrachloroethene (PCE)	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Dibromochloromethane	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2-Dibromoethane (EDB)	ND	0.00577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Chlorobenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Ethylbenzene	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
m,p-Xylene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
o-Xylene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Styrene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Isopropylbenzene	ND	0.0923		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Bromoform	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
n-Propylbenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Bromobenzene	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,3,5-Trimethylbenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
2-Chlorotoluene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
4-Chlorotoluene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
tert-Butylbenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2,3-Trichloropropane	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2,4-Trichlorobenzene	ND	0.0577		mg/Kg-dry	1	8/23/2012 11:41:00 AM
sec-Butylbenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
4-Isopropyltoluene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,3-Dichlorobenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,4-Dichlorobenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
n-Butylbenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2-Dichlorobenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 9:55:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-018

**Matrix:** Soil

**Client Sample ID:** GP-14-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Hexachlorobutadiene	ND	0.115		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Naphthalene	ND	0.0346		mg/Kg-dry	1	8/23/2012 11:41:00 AM
1,2,3-Trichlorobenzene	ND	0.0231		mg/Kg-dry	1	8/23/2012 11:41:00 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	63.1-141		%REC	1	8/23/2012 11:41:00 AM
Surr: Dibromofluoromethane	93.9	67.6-119		%REC	1	8/23/2012 11:41:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/23/2012 11:41:00 AM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	16.9			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-021

**Matrix:** Soil

**Client Sample ID:** GP-8-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>					Batch ID: 3091	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0601		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Chloromethane	ND	0.0601		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Vinyl chloride	ND	0.00200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Bromomethane	ND	0.0901		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Chloroethane	ND	0.0601		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1-Dichloroethene	ND	0.0501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Methylene chloride	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1-Dichloroethane	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
2,2-Dichloropropane	ND	0.0501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Chloroform	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1-Dichloropropene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Carbon tetrachloride	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2-Dichloroethane (EDC)	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Benzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Trichloroethene (TCE)	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2-Dichloropropane	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Bromodichloromethane	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Dibromomethane	ND	0.0401		mg/Kg-dry	1	8/30/2012 3:21:00 PM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Toluene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
trans-1,3-Dichloropropylene	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1,2-Trichloroethane	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,3-Dichloropropane	ND	0.0501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Tetrachloroethene (PCE)	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Dibromochloromethane	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2-Dibromoethane (EDB)	ND	0.00501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Chlorobenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
m,p-Xylene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:05:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-021

**Matrix:** Soil

**Client Sample ID:** GP-8-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

o-Xylene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Styrene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Isopropylbenzene	ND	0.0801		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Bromoform	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
n-Propylbenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Bromobenzene	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,3,5-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
2-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
4-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
tert-Butylbenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2,3-Trichloropropane	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2,4-Trichlorobenzene	ND	0.0501		mg/Kg-dry	1	8/30/2012 3:21:00 PM
sec-Butylbenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
4-Isopropyltoluene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
n-Butylbenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Hexachlorobutadiene	ND	0.100		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Naphthalene	ND	0.0300		mg/Kg-dry	1	8/30/2012 3:21:00 PM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	8/30/2012 3:21:00 PM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%REC	1	8/30/2012 3:21:00 PM
Surr: Dibromofluoromethane	94.8	67.6-119		%REC	1	8/30/2012 3:21:00 PM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/30/2012 3:21:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5536

Analyst: MC

Percent Moisture	5.82			wt%	1	8/30/2012 12:25:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-022

**Matrix:** Soil

**Client Sample ID:** GP-8-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	21.3		mg/Kg-dry	1	8/22/2012 1:07:00 AM
Diesel Range Organics (C12-C24)	ND	21.3		mg/Kg-dry	1	8/22/2012 1:07:00 AM
Heavy Oil	ND	53.2		mg/Kg-dry	1	8/22/2012 1:07:00 AM
Surr: 2-Fluorobiphenyl	86.4	50-150		%REC	1	8/22/2012 1:07:00 AM
Surr: o-Terphenyl	82.6	50-150		%REC	1	8/22/2012 1:07:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	5.58		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Gasoline Range Organics C6-C12	ND	5.58		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Surr: 1,2-Dichloroethane-d4	73.0	65-135		%REC	1	8/23/2012 12:12:00 PM
Surr: Fluorobenzene	99.0	65-135		%REC	1	8/23/2012 12:12:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0670		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Chloromethane	ND	0.0670		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Vinyl chloride	ND	0.00223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Bromomethane	ND	0.101		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Chloroethane	ND	0.0670		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1-Dichloroethene	ND	0.0558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Methylene chloride	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
trans-1,2-Dichloroethene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1-Dichloroethane	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
2,2-Dichloropropane	ND	0.0558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
cis-1,2-Dichloroethene	0.0251	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Chloroform	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1-Dichloropropene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Carbon tetrachloride	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2-Dichloroethane (EDC)	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Benzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Trichloroethene (TCE)	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-022

**Matrix:** Soil

**Client Sample ID:** GP-8-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Bromodichloromethane	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Dibromomethane	ND	0.0447		mg/Kg-dry	1	8/23/2012 12:12:00 PM
cis-1,3-Dichloropropene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Toluene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
trans-1,3-Dichloropropylene	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1,2-Trichloroethane	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,3-Dichloropropane	ND	0.0558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Tetrachloroethene (PCE)	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Dibromochloromethane	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2-Dibromoethane (EDB)	ND	0.00558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Chlorobenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Ethylbenzene	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
m,p-Xylene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
o-Xylene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Styrene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Isopropylbenzene	ND	0.0893		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Bromoform	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
n-Propylbenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Bromobenzene	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,3,5-Trimethylbenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
2-Chlorotoluene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
4-Chlorotoluene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
tert-Butylbenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2,3-Trichloropropane	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2,4-Trichlorobenzene	ND	0.0558		mg/Kg-dry	1	8/23/2012 12:12:00 PM
sec-Butylbenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
4-Isopropyltoluene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,3-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,4-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
n-Butylbenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:10:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-022

**Matrix:** Soil

**Client Sample ID:** GP-8-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Hexachlorobutadiene	ND	0.112		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Naphthalene	ND	0.0335		mg/Kg-dry	1	8/23/2012 12:12:00 PM
1,2,3-Trichlorobenzene	ND	0.0223		mg/Kg-dry	1	8/23/2012 12:12:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.0	63.1-141		%REC	1	8/23/2012 12:12:00 PM
Surr: Dibromofluoromethane	93.3	67.6-119		%REC	1	8/23/2012 12:12:00 PM
Surr: Toluene-d8	98.7	78.5-126		%REC	1	8/23/2012 12:12:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	13.1			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:15:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-023

**Matrix:** Soil

**Client Sample ID:** GP-8-15

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0612		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Chloromethane	ND	0.0612		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Vinyl chloride	ND	0.00204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Bromomethane	ND	0.0919		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Chloroethane	ND	0.0612		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1-Dichloroethene	ND	0.0510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Methylene chloride	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
trans-1,2-Dichloroethene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1-Dichloroethane	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
2,2-Dichloropropane	ND	0.0510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
cis-1,2-Dichloroethene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Chloroform	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1-Dichloropropene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Carbon tetrachloride	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2-Dichloroethane (EDC)	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Benzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Trichloroethene (TCE)	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2-Dichloropropane	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Bromodichloromethane	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Dibromomethane	ND	0.0408		mg/Kg-dry	1	8/30/2012 6:05:00 PM
cis-1,3-Dichloropropene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Toluene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
trans-1,3-Dichloropropylene	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1,2-Trichloroethane	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,3-Dichloropropane	ND	0.0510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Tetrachloroethene (PCE)	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Dibromochloromethane	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2-Dibromoethane (EDB)	ND	0.00510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Chlorobenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Ethylbenzene	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
m,p-Xylene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:15:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-023

**Matrix:** Soil

**Client Sample ID:** GP-8-15

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

o-Xylene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Styrene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Isopropylbenzene	ND	0.0816		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Bromoform	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
n-Propylbenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Bromobenzene	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,3,5-Trimethylbenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
2-Chlorotoluene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
4-Chlorotoluene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
tert-Butylbenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2,3-Trichloropropane	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2,4-Trichlorobenzene	ND	0.0510		mg/Kg-dry	1	8/30/2012 6:05:00 PM
sec-Butylbenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
4-Isopropyltoluene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,3-Dichlorobenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,4-Dichlorobenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
n-Butylbenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2-Dichlorobenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2,4-Trimethylbenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Hexachlorobutadiene	ND	0.102		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Naphthalene	ND	0.0306		mg/Kg-dry	1	8/30/2012 6:05:00 PM
1,2,3-Trichlorobenzene	ND	0.0204		mg/Kg-dry	1	8/30/2012 6:05:00 PM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%REC	1	8/30/2012 6:05:00 PM
Surr: Dibromofluoromethane	96.1	67.6-119		%REC	1	8/30/2012 6:05:00 PM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/30/2012 6:05:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5536

Analyst: MC

Percent Moisture	12.3			wt%	1	8/30/2012 12:25:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-024

**Matrix:** Soil

**Client Sample ID:** GP-8-24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	23.7		mg/Kg-dry	1	8/22/2012 1:34:00 AM
Diesel Range Organics (C12-C24)	ND	23.7		mg/Kg-dry	1	8/22/2012 1:34:00 AM
Heavy Oil	ND	59.3		mg/Kg-dry	1	8/22/2012 1:34:00 AM
Surr: 2-Fluorobiphenyl	86.3	50-150		%REC	1	8/22/2012 1:34:00 AM
Surr: o-Terphenyl	83.2	50-150		%REC	1	8/22/2012 1:34:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	4.38		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Gasoline Range Organics C6-C12	ND	4.38		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Surr: 1,2-Dichloroethane-d4	75.2	65-135		%REC	1	8/23/2012 12:43:00 PM
Surr: Fluorobenzene	99.4	65-135		%REC	1	8/23/2012 12:43:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0526		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Chloromethane	ND	0.0526		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Vinyl chloride	ND	0.00175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Bromomethane	ND	0.0789		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Chloroethane	ND	0.0526		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1-Dichloroethene	ND	0.0438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Methylene chloride	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
trans-1,2-Dichloroethene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1-Dichloroethane	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
2,2-Dichloropropane	ND	0.0438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
cis-1,2-Dichloroethene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Chloroform	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1-Dichloropropene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Carbon tetrachloride	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2-Dichloroethane (EDC)	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Benzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Trichloroethene (TCE)	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-024

**Matrix:** Soil

**Client Sample ID:** GP-8-24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Bromodichloromethane	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Dibromomethane	ND	0.0351		mg/Kg-dry	1	8/23/2012 12:43:00 PM
cis-1,3-Dichloropropene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Toluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
trans-1,3-Dichloropropylene	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1,2-Trichloroethane	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,3-Dichloropropane	ND	0.0438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Tetrachloroethene (PCE)	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Dibromochloromethane	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2-Dibromoethane (EDB)	ND	0.00438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Chlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Ethylbenzene	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
m,p-Xylene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
o-Xylene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Styrene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Isopropylbenzene	ND	0.0701		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Bromoform	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
n-Propylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Bromobenzene	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,3,5-Trimethylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
2-Chlorotoluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
4-Chlorotoluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
tert-Butylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2,3-Trichloropropane	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2,4-Trichlorobenzene	ND	0.0438		mg/Kg-dry	1	8/23/2012 12:43:00 PM
sec-Butylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
4-Isopropyltoluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,3-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,4-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
n-Butylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 11:30:00 AM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-024

**Matrix:** Soil

**Client Sample ID:** GP-8-24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Hexachlorobutadiene	ND	0.0876		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Naphthalene	ND	0.0263		mg/Kg-dry	1	8/23/2012 12:43:00 PM
1,2,3-Trichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 12:43:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.6	63.1-141		%REC	1	8/23/2012 12:43:00 PM
Surr: Dibromofluoromethane	97.3	67.6-119		%REC	1	8/23/2012 12:43:00 PM
Surr: Toluene-d8	101	78.5-126		%REC	1	8/23/2012 12:43:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	20.5			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 12:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-026

**Matrix:** Soil

**Client Sample ID:** GP-5-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	20.9		mg/Kg-dry	1	8/22/2012 2:02:00 AM
Diesel Range Organics (C12-C24)	ND	20.9		mg/Kg-dry	1	8/22/2012 2:02:00 AM
Heavy Oil	ND	52.3		mg/Kg-dry	1	8/22/2012 2:02:00 AM
Surr: 2-Fluorobiphenyl	85.7	50-150		%REC	1	8/22/2012 2:02:00 AM
Surr: o-Terphenyl	81.8	50-150		%REC	1	8/22/2012 2:02:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	4.38		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Gasoline Range Organics C6-C12	ND	4.38		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Surr: 1,2-Dichloroethane-d4	70.4	65-135		%REC	1	8/23/2012 1:15:00 PM
Surr: Fluorobenzene	98.3	65-135		%REC	1	8/23/2012 1:15:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0526		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Chloromethane	ND	0.0526		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Vinyl chloride	ND	0.00175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Bromomethane	ND	0.0788		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Chloroethane	ND	0.0526		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1-Dichloroethene	ND	0.0438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Methylene chloride	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
trans-1,2-Dichloroethene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1-Dichloroethane	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
2,2-Dichloropropane	ND	0.0438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
cis-1,2-Dichloroethene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Chloroform	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1-Dichloropropene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Carbon tetrachloride	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2-Dichloroethane (EDC)	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Benzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Trichloroethene (TCE)	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 12:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-026

**Matrix:** Soil

**Client Sample ID:** GP-5-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>					Batch ID: 3029	Analyst: EM
1,2-Dichloropropane	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Bromodichloromethane	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Dibromomethane	ND	0.0350		mg/Kg-dry	1	8/23/2012 1:15:00 PM
cis-1,3-Dichloropropene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Toluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
trans-1,3-Dichloropropylene	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1,2-Trichloroethane	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,3-Dichloropropane	ND	0.0438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Tetrachloroethene (PCE)	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Dibromochloromethane	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2-Dibromoethane (EDB)	ND	0.00438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Chlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Ethylbenzene	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
m,p-Xylene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
o-Xylene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Styrene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Isopropylbenzene	ND	0.0701		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Bromoform	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
n-Propylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Bromobenzene	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,3,5-Trimethylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
2-Chlorotoluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
4-Chlorotoluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
tert-Butylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2,3-Trichloropropane	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2,4-Trichlorobenzene	ND	0.0438		mg/Kg-dry	1	8/23/2012 1:15:00 PM
sec-Butylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
4-Isopropyltoluene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,3-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,4-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
n-Butylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 12:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-026

**Matrix:** Soil

**Client Sample ID:** GP-5-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Hexachlorobutadiene	ND	0.0876		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Naphthalene	ND	0.0263		mg/Kg-dry	1	8/23/2012 1:15:00 PM
1,2,3-Trichlorobenzene	ND	0.0175		mg/Kg-dry	1	8/23/2012 1:15:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	63.1-141		%REC	1	8/23/2012 1:15:00 PM
Surr: Dibromofluoromethane	92.2	67.6-119		%REC	1	8/23/2012 1:15:00 PM
Surr: Toluene-d8	102	78.5-126		%REC	1	8/23/2012 1:15:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	11.1			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-028

**Matrix:** Soil

**Client Sample ID:** GP-5-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	22.9		mg/Kg-dry	1	8/22/2012 2:30:00 AM
Diesel Range Organics (C12-C24)	ND	22.9		mg/Kg-dry	1	8/22/2012 2:30:00 AM
Heavy Oil	ND	57.2		mg/Kg-dry	1	8/22/2012 2:30:00 AM
Surr: 2-Fluorobiphenyl	86.2	50-150		%REC	1	8/22/2012 2:30:00 AM
Surr: o-Terphenyl	81.9	50-150		%REC	1	8/22/2012 2:30:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	9.34		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Gasoline Range Organics C6-C12	ND	9.34		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Surr: 1,2-Dichloroethane-d4	69.4	65-135		%REC	1	8/23/2012 1:47:00 PM
Surr: Fluorobenzene	97.6	65-135		%REC	1	8/23/2012 1:47:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.112		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Chloromethane	ND	0.112		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Vinyl chloride	ND	0.00374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Bromomethane	ND	0.168		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Chloroethane	ND	0.112		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1-Dichloroethene	ND	0.0934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Methylene chloride	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
trans-1,2-Dichloroethene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1-Dichloroethane	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
2,2-Dichloropropane	ND	0.0934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
cis-1,2-Dichloroethene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Chloroform	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1-Dichloropropene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Carbon tetrachloride	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2-Dichloroethane (EDC)	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Benzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Trichloroethene (TCE)	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-028

**Matrix:** Soil

**Client Sample ID:** GP-5-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Bromodichloromethane	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Dibromomethane	ND	0.0747		mg/Kg-dry	1	8/23/2012 1:47:00 PM
cis-1,3-Dichloropropene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Toluene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
trans-1,3-Dichloropropylene	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1,2-Trichloroethane	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,3-Dichloropropane	ND	0.0934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Tetrachloroethene (PCE)	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Dibromochloromethane	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2-Dibromoethane (EDB)	ND	0.00934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Chlorobenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Ethylbenzene	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
m,p-Xylene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
o-Xylene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Styrene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Isopropylbenzene	ND	0.149		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Bromoform	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
n-Propylbenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Bromobenzene	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,3,5-Trimethylbenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
2-Chlorotoluene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
4-Chlorotoluene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
tert-Butylbenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2,3-Trichloropropane	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2,4-Trichlorobenzene	ND	0.0934		mg/Kg-dry	1	8/23/2012 1:47:00 PM
sec-Butylbenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
4-Isopropyltoluene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,3-Dichlorobenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,4-Dichlorobenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
n-Butylbenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2-Dichlorobenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 12:45:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-028

**Matrix:** Soil

**Client Sample ID:** GP-5-18

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Hexachlorobutadiene	ND	0.187		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Naphthalene	ND	0.0560		mg/Kg-dry	1	8/23/2012 1:47:00 PM
1,2,3-Trichlorobenzene	ND	0.0374		mg/Kg-dry	1	8/23/2012 1:47:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.2	63.1-141		%REC	1	8/23/2012 1:47:00 PM
Surr: Dibromofluoromethane	93.9	67.6-119		%REC	1	8/23/2012 1:47:00 PM
Surr: Toluene-d8	104	78.5-126		%REC	1	8/23/2012 1:47:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	21.4			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-029

**Matrix:** Soil

**Client Sample ID:** GP-10-2.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3088

Analyst: BR

Diesel (Fuel Oil)	ND	18.7		mg/Kg-dry	1	8/31/2012 2:41:00 AM
Diesel Range Organics (C12-C24)	ND	18.7		mg/Kg-dry	1	8/31/2012 2:41:00 AM
Heavy Oil	ND	46.7		mg/Kg-dry	1	8/31/2012 2:41:00 AM
Surr: 2-Fluorobiphenyl	115	50-150		%REC	1	8/31/2012 2:41:00 AM
Surr: o-Terphenyl	111	50-150		%REC	1	8/31/2012 2:41:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: 3130

Analyst: EM

Gasoline	ND	4.05	H	mg/Kg-dry	1	9/5/2012 11:32:00 AM
Gasoline Range Organics C6-C12	ND	4.05	H	mg/Kg-dry	1	9/5/2012 11:32:00 AM
Surr: 1,2-Dichloroethane-d4	97.6	65-135	H	%REC	1	9/5/2012 11:32:00 AM
Surr: Fluorobenzene	97.5	65-135	H	%REC	1	9/5/2012 11:32:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0578		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chloromethane	ND	0.0578		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Vinyl chloride	ND	0.00193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Bromomethane	ND	0.0866		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chloroethane	ND	0.0578		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1-Dichloroethene	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Methylene chloride	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
trans-1,2-Dichloroethene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1-Dichloroethane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
2,2-Dichloropropane	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
cis-1,2-Dichloroethene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chloroform	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1-Dichloropropene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Carbon tetrachloride	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2-Dichloroethane (EDC)	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Benzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Trichloroethene (TCE)	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-029

**Matrix:** Soil

**Client Sample ID:** GP-10-2.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

1,2-Dichloropropane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Bromodichloromethane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Dibromomethane	ND	0.0385		mg/Kg-dry	1	8/30/2012 6:38:00 PM
cis-1,3-Dichloropropene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Toluene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
trans-1,3-Dichloropropylene	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1,2-Trichloroethane	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,3-Dichloropropane	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Tetrachloroethene (PCE)	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Dibromochloromethane	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2-Dibromoethane (EDB)	ND	0.00481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chlorobenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Ethylbenzene	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
m,p-Xylene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
o-Xylene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Styrene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Isopropylbenzene	ND	0.0770		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Bromoform	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
n-Propylbenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Bromobenzene	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,3,5-Trimethylbenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
2-Chlorotoluene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
4-Chlorotoluene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
tert-Butylbenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2,3-Trichloropropane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2,4-Trichlorobenzene	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
sec-Butylbenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
4-Isopropyltoluene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,3-Dichlorobenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,4-Dichlorobenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
n-Butylbenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2-Dichlorobenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-029

**Matrix:** Soil

**Client Sample ID:** GP-10-2.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Hexachlorobutadiene	ND	0.0963		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Naphthalene	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2,3-Trichlorobenzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.7	63.1-141		%REC	1	8/30/2012 6:38:00 PM
Surr: Dibromofluoromethane	97.2	67.6-119		%REC	1	8/30/2012 6:38:00 PM
Surr: Toluene-d8	107	78.5-126		%REC	1	8/30/2012 6:38:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5536

Analyst: MC

Percent Moisture	7.94			wt%	1	8/30/2012 12:25:04 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-030

**Matrix:** Soil

**Client Sample ID:** GP-10-14.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	5,890	211	D	mg/Kg-dry	10	8/22/2012 6:01:00 PM
Diesel Range Organics (C12-C24)	ND	21.1		mg/Kg-dry	1	8/22/2012 2:57:00 AM
Heavy Oil	ND	52.7		mg/Kg-dry	1	8/22/2012 2:57:00 AM
Surr: 2-Fluorobiphenyl	102	50-150		%REC	1	8/22/2012 2:57:00 AM
Surr: o-Terphenyl	83.0	50-150		%REC	1	8/22/2012 2:57:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	4.44		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Gasoline Range Organics C6-C12	6,070	444	D	mg/Kg-dry	100	8/27/2012 3:44:00 PM
Surr: 1,2-Dichloroethane-d4	68.9	65-135		%REC	1	8/23/2012 3:22:00 PM
Surr: Fluorobenzene	94.8	65-135		%REC	1	8/23/2012 3:22:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0532		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Chloromethane	ND	0.0532		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Vinyl chloride	ND	0.00177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Bromomethane	ND	0.0798		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Chloroethane	ND	0.0532		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1-Dichloroethene	ND	0.0444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Methylene chloride	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
trans-1,2-Dichloroethene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1-Dichloroethane	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
2,2-Dichloropropane	ND	0.0444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
cis-1,2-Dichloroethene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Chloroform	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1-Dichloropropene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Carbon tetrachloride	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,2-Dichloroethane (EDC)	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Benzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Trichloroethene (TCE)	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-030

**Matrix:** Soil

**Client Sample ID:** GP-10-14.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Bromodichloromethane	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Dibromomethane	ND	0.0355		mg/Kg-dry	1	8/23/2012 3:22:00 PM
cis-1,3-Dichloropropene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Toluene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
trans-1,3-Dichloropropylene	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1,2-Trichloroethane	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,3-Dichloropropane	ND	0.0444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Tetrachloroethene (PCE)	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Dibromochloromethane	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,2-Dibromoethane (EDB)	ND	0.00444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Chlorobenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Ethylbenzene	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
m,p-Xylene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
o-Xylene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Styrene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Isopropylbenzene	2.28	0.710	D	mg/Kg-dry	10	8/27/2012 4:16:00 PM
Bromoform	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
n-Propylbenzene	6.54	0.177	D	mg/Kg-dry	10	8/27/2012 4:16:00 PM
Bromobenzene	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,3,5-Trimethylbenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
2-Chlorotoluene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
4-Chlorotoluene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
tert-Butylbenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,2,3-Trichloropropane	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,2,4-Trichlorobenzene	ND	0.0444		mg/Kg-dry	1	8/23/2012 3:22:00 PM
sec-Butylbenzene	4.35	0.177	D	mg/Kg-dry	10	8/27/2012 4:16:00 PM
4-Isopropyltoluene	3.52	0.177	D	mg/Kg-dry	10	8/27/2012 4:16:00 PM
1,3-Dichlorobenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,4-Dichlorobenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
n-Butylbenzene	5.47	0.177	D	mg/Kg-dry	10	8/27/2012 4:16:00 PM
1,2-Dichlorobenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:25:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-030

**Matrix:** Soil

**Client Sample ID:** GP-10-14.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Hexachlorobutadiene	ND	0.0887		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Naphthalene	ND	0.0266		mg/Kg-dry	1	8/23/2012 3:22:00 PM
1,2,3-Trichlorobenzene	ND	0.0177		mg/Kg-dry	1	8/23/2012 3:22:00 PM
Surr: 1-Bromo-4-fluorobenzene	114	63.1-141		%REC	1	8/23/2012 3:22:00 PM
Surr: Dibromofluoromethane	94.4	67.6-119		%REC	1	8/23/2012 3:22:00 PM
Surr: Toluene-d8	114	78.5-126		%REC	1	8/23/2012 3:22:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	16.0			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-032

**Matrix:** Soil

**Client Sample ID:** GP-10-22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3009

Analyst: BR

Diesel (Fuel Oil)	ND	22.1		mg/Kg-dry	1	8/22/2012 3:53:00 AM
Diesel Range Organics (C12-C24)	ND	22.1		mg/Kg-dry	1	8/22/2012 3:53:00 AM
Heavy Oil	ND	55.2		mg/Kg-dry	1	8/22/2012 3:53:00 AM
Surr: 2-Fluorobiphenyl	87.6	50-150		%REC	1	8/22/2012 3:53:00 AM
Surr: o-Terphenyl	83.9	50-150		%REC	1	8/22/2012 3:53:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: R5477

Analyst: EM

Gasoline	ND	4.57		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Gasoline Range Organics C6-C12	ND	4.57		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Surr: 1,2-Dichloroethane-d4	74.9	65-135		%REC	1	8/23/2012 2:19:00 PM
Surr: Fluorobenzene	99.9	65-135		%REC	1	8/23/2012 2:19:00 PM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0549		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Chloromethane	ND	0.0549		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Vinyl chloride	ND	0.00183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Bromomethane	ND	0.0823		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Chloroethane	ND	0.0549		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1-Dichloroethene	ND	0.0457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Methylene chloride	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
trans-1,2-Dichloroethene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1-Dichloroethane	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
2,2-Dichloropropane	ND	0.0457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
cis-1,2-Dichloroethene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Chloroform	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1-Dichloropropene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Carbon tetrachloride	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2-Dichloroethane (EDC)	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Benzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Trichloroethene (TCE)	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-032

**Matrix:** Soil

**Client Sample ID:** GP-10-22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2-Dichloropropane	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Bromodichloromethane	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Dibromomethane	ND	0.0366		mg/Kg-dry	1	8/23/2012 2:19:00 PM
cis-1,3-Dichloropropene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Toluene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
trans-1,3-Dichloropropylene	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1,2-Trichloroethane	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,3-Dichloropropane	ND	0.0457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Tetrachloroethene (PCE)	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Dibromochloromethane	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2-Dibromoethane (EDB)	ND	0.00457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Chlorobenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Ethylbenzene	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
m,p-Xylene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
o-Xylene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Styrene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Isopropylbenzene	ND	0.0732		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Bromoform	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
n-Propylbenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Bromobenzene	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,3,5-Trimethylbenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
2-Chlorotoluene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
4-Chlorotoluene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
tert-Butylbenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2,3-Trichloropropane	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2,4-Trichlorobenzene	ND	0.0457		mg/Kg-dry	1	8/23/2012 2:19:00 PM
sec-Butylbenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
4-Isopropyltoluene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,3-Dichlorobenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,4-Dichlorobenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
n-Butylbenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2-Dichlorobenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1208108

Date Reported: 9/11/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 2:00:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-032

**Matrix:** Soil

**Client Sample ID:** GP-10-22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3029

Analyst: EM

1,2,4-Trimethylbenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Hexachlorobutadiene	ND	0.0915		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Naphthalene	ND	0.0274		mg/Kg-dry	1	8/23/2012 2:19:00 PM
1,2,3-Trichlorobenzene	ND	0.0183		mg/Kg-dry	1	8/23/2012 2:19:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.1	63.1-141		%REC	1	8/23/2012 2:19:00 PM
Surr: Dibromofluoromethane	95.6	67.6-119		%REC	1	8/23/2012 2:19:00 PM
Surr: Toluene-d8	103	78.5-126		%REC	1	8/23/2012 2:19:00 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5402

Analyst: SC

Percent Moisture	20.4			wt%	1	8/21/2012 1:05:09 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>1208108-001BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/21/2012</b>	RunNo: <b>5420</b>							
Client ID: <b>GP-1-1</b>	Batch ID: <b>3009</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106157</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	22.4						0	0	30	
Diesel Range Organics (C12-C24)	ND	22.4						0	0	30	
Heavy Oil	ND	56.1						0	0	30	
Surr: 2-Fluorobiphenyl	19.0		22.44		84.7	50	150		0		
Surr: o-Terphenyl	18.1		22.44		80.8	50	150		0		

Sample ID: <b>LCS-3009</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/21/2012</b>	RunNo: <b>5420</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3009</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106173</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	447	20.0	500.0	0	89.4	65	135				
Surr: 2-Fluorobiphenyl	16.1		20.00		80.6	50	150				
Surr: o-Terphenyl	16.0		20.00		79.8	50	150				

Sample ID: <b>MB-3009</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/21/2012</b>	RunNo: <b>5420</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3009</b>		Analysis Date: <b>8/21/2012</b>	SeqNo: <b>106174</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	16.2		20.00		81.2	50	150				
Surr: o-Terphenyl	15.8		20.00		79.0	50	150				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Sample ID: <b>1208108-029BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/30/2012</b>	RunNo: <b>5554</b>							
Client ID: <b>GP-10-2.5</b>	Batch ID: <b>3088</b>		Analysis Date: <b>8/31/2012</b>	SeqNo: <b>109266</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.3						0	0	30	
Diesel Range Organics (C12-C24)	ND	20.3						0	0	30	
Heavy Oil	ND	50.8						0	0	30	
Surr: 2-Fluorobiphenyl	24.0		20.30		118	50	150		0		
Surr: o-Terphenyl	22.8		20.30		112	50	150		0		

Sample ID: <b>LCS-3088</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/30/2012</b>	RunNo: <b>5554</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3088</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109273</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	504	20.0	500.0	0	101	65	135				
Surr: 2-Fluorobiphenyl	24.4		20.00		122	50	150				
Surr: o-Terphenyl	23.5		20.00		118	50	150				

Sample ID: <b>MB-3088</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/30/2012</b>	RunNo: <b>5554</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3088</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109274</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Diesel Range Organics (C12-C24)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	24.9		20.00		124	50	150				
Surr: o-Terphenyl	24.3		20.00		122	50	150				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208108-032ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5477</b>							
Client ID: <b>GP-10-22</b>	Batch ID: <b>R5477</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>107404</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	4.57						0	0	30	
Gasoline Range Organics C6-C12	ND	4.57						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.342		0.4574		74.8	65	135		0		
Surr: Fluorobenzene	0.455		0.4574		99.5	65	135		0		

Sample ID: <b>LCS-R5477</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5477</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R5477</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>107407</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	26.4	5.00	25.00	0	105	65	135				
Surr: 1,2-Dichloroethane-d4	0.417		0.5000		83.4	65	135				
Surr: Fluorobenzene	0.512		0.5000		102	65	135				

Sample ID: <b>MB-R5477</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5477</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>R5477</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>107408</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.344		0.5000		68.7	65	135				
Surr: Fluorobenzene	0.433		0.5000		86.6	65	135				

Sample ID: <b>1208208-003ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>9/4/2012</b>	RunNo: <b>5594</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3130</b>		Analysis Date: <b>9/5/2012</b>	SeqNo: <b>110070</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	6.71						0	0	30	
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**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Gasoline by NWTPH-Gx**

Sample ID: <b>1208208-003ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>9/4/2012</b>	RunNo: <b>5594</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3130</b>		Analysis Date: <b>9/5/2012</b>	SeqNo: <b>110070</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline Range Organics C6-C12	ND	6.71						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.654		0.6705		97.5	65	135		0		
Surr: Fluorobenzene	0.662		0.6705		98.8	65	135		0		

Sample ID: <b>LCS-3130</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/4/2012</b>	RunNo: <b>5594</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3130</b>		Analysis Date: <b>9/5/2012</b>	SeqNo: <b>110074</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	25.5	5.00	25.00	0	102	65	135				
Surr: 1,2-Dichloroethane-d4	0.506		0.5000		101	65	135				
Surr: Fluorobenzene	0.505		0.5000		101	65	135				

Sample ID: <b>MB-3130</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/4/2012</b>	RunNo: <b>5594</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3130</b>		Analysis Date: <b>9/5/2012</b>	SeqNo: <b>110075</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Gasoline Range Organics C6-C12	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.499		0.5000		99.7	65	135				
Surr: Fluorobenzene	0.498		0.5000		99.6	65	135				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208128-003AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106285</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.572	0.0670	1.117	0	51.3	43.5	121				
Chloromethane	0.897	0.0670	1.117	0	80.4	45	130				
Vinyl chloride	0.887	0.00223	1.117	0	79.4	51.2	146				
Bromomethane	0.753	0.101	1.117	0	67.5	70	130				S
Trichlorofluoromethane (CFC-11)	0.208	0.0558	1.117	0	18.7	52.2	132				S
Chloroethane	0.310	0.0670	1.117	0	27.8	43.8	117				S
1,1-Dichloroethene	0.711	0.0558	1.117	0	63.7	61.9	141				
Methylene chloride	0.905	0.0223	1.117	0	81.0	54.7	142				
trans-1,2-Dichloroethene	0.979	0.0223	1.117	0	87.7	52	136				
Methyl tert-butyl ether (MTBE)	0.893	0.0558	1.117	0	80.0	54.4	132				
1,1-Dichloroethane	0.975	0.0223	1.117	0	87.3	51.8	141				
2,2-Dichloropropane	0.833	0.0558	1.117	0	74.6	36	123				
cis-1,2-Dichloroethene	1.07	0.0223	1.117	0	95.4	58.6	136				
Chloroform	1.11	0.0223	1.117	0	99.3	53.2	129				
1,1,1-Trichloroethane (TCA)	1.05	0.0223	1.117	0	94.1	58.3	145				
1,1-Dichloropropene	1.06	0.0223	1.117	0	95.2	55.1	138				
Carbon tetrachloride	1.08	0.0223	1.117	0	96.5	53.3	144				
1,2-Dichloroethane (EDC)	0.975	0.0335	1.117	0	87.4	51.3	139				
Benzene	1.06	0.0223	1.117	0	95.0	63.5	133				
Trichloroethene (TCE)	1.08	0.0335	1.117	0	96.6	68.6	132				
1,2-Dichloropropane	1.09	0.0223	1.117	0	97.3	59	136				
Bromodichloromethane	1.05	0.0223	1.117	0	93.6	50.7	141				
Dibromomethane	1.04	0.0447	1.117	0	93.2	50.6	137				
cis-1,3-Dichloropropene	0.742	0.0223	1.117	0	66.4	52.3	129				
Toluene	1.14	0.0223	1.117	0	102	67.8	129				
trans-1,3-Dichloropropylene	0.742	0.0335	1.117	0	66.4	52.2	138				
1,1,2-Trichloroethane	1.04	0.0335	1.117	0	93.0	51.6	137				
1,3-Dichloropropane	1.06	0.0558	1.117	0	94.8	53.1	134				
Tetrachloroethene (PCE)	1.11	0.0223	1.117	0	99.8	44.1	141				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208128-003AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106285</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	1.07	0.0335	1.117	0	95.9	55.3	140				
1,2-Dibromoethane (EDB)	0.999	0.00558	1.117	0	89.5	50.4	136				
Chlorobenzene	1.06	0.0223	1.117	0	95.2	60	133				
1,1,1,2-Tetrachloroethane	1.01	0.0335	1.117	0	90.9	53.1	142				
Ethylbenzene	1.02	0.0335	1.117	0	91.6	54.5	134				
m,p-Xylene	2.02	0.0223	2.233	0	90.2	53.1	132				
o-Xylene	0.975	0.0223	1.117	0	87.4	53.3	139				
Styrene	1.05	0.0223	1.117	0	94.3	51.1	132				
Isopropylbenzene	1.06	0.0893	1.117	0	95.2	58.9	138				
Bromoform	0.908	0.0223	1.117	0	81.4	57.9	130				
1,1,2,2-Tetrachloroethane	0.911	0.0223	1.117	0	81.6	51.9	131				
n-Propylbenzene	1.02	0.0223	1.117	0	91.4	53.6	140				
Bromobenzene	1.04	0.0335	1.117	0	93.2	54.2	140				
1,3,5-Trimethylbenzene	1.05	0.0223	1.117	0	94.3	51.8	136				
2-Chlorotoluene	0.994	0.0223	1.117	0	89.0	51.6	136				
4-Chlorotoluene	0.998	0.0223	1.117	0	89.4	50.1	139				
tert-Butylbenzene	1.01	0.0223	1.117	0	90.2	50.5	135				
1,2,3-Trichloropropane	0.935	0.0223	1.117	0	83.7	50.5	131				
1,2,4-Trichlorobenzene	0.959	0.0558	1.117	0	85.9	50.8	130				
sec-Butylbenzene	0.986	0.0223	1.117	0	88.3	52.6	141				
4-Isopropyltoluene	1.05	0.0223	1.117	0	93.9	52.9	134				
1,3-Dichlorobenzene	1.09	0.0223	1.117	0	97.2	52.6	131				
1,4-Dichlorobenzene	1.02	0.0223	1.117	0	91.1	52.9	129				
n-Butylbenzene	0.994	0.0223	1.117	0	89.0	52.6	130				
1,2-Dichlorobenzene	1.04	0.0223	1.117	0	93.0	55.8	129				
1,2-Dibromo-3-chloropropane	0.822	0.0335	1.117	0	73.6	53	129				
1,2,4-Trimethylbenzene	1.01	0.0223	1.117	0	90.6	50.6	137				
Hexachlorobutadiene	0.969	0.112	1.117	0	86.8	51.5	130				
Naphthalene	0.951	0.0335	1.117	0	85.2	52.3	124				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208128-003AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106285</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	0.925	0.0223	1.117	0	82.8	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.529		0.5584		94.8	63.1	141				
Surr: Dibromofluoromethane	0.540		0.5584		96.7	67.6	119				
Surr: Toluene-d8	0.586		0.5584		105	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Sample ID: <b>LCS-3029</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106288</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.750	0.0600	1.000	0	75.0	41.5	132				
Chloromethane	0.954	0.0600	1.000	0	95.4	52.3	129				
Vinyl chloride	0.900	0.00200	1.000	0	90.0	51.1	134				
Bromomethane	1.29	0.0900	1.000	0	129	54.6	148				
Trichlorofluoromethane (CFC-11)	0.906	0.0500	1.000	0	90.7	59.7	131				
Chloroethane	1.15	0.0600	1.000	0	115	53.9	135				
1,1-Dichloroethene	0.966	0.0500	1.000	0	96.6	58	139				
Methylene chloride	1.07	0.0200	1.000	0	107	58.7	141				
trans-1,2-Dichloroethene	1.00	0.0200	1.000	0	100	70	130				
Methyl tert-butyl ether (MTBE)	0.992	0.0500	1.000	0	99.2	70	130				
1,1-Dichloroethane	1.00	0.0200	1.000	0	100	67.6	127				
2,2-Dichloropropane	0.880	0.0500	1.000	0	88.0	40.1	133				
cis-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	70	130				
Chloroform	1.07	0.0200	1.000	0	107	64	127				
1,1,1-Trichloroethane (TCA)	0.991	0.0200	1.000	0	99.0	68.9	132				
1,1-Dichloropropene	0.992	0.0200	1.000	0	99.2	70	130				
Carbon tetrachloride	1.02	0.0200	1.000	0	102	56.3	141				
1,2-Dichloroethane (EDC)	0.983	0.0300	1.000	0	98.2	69.4	131				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3029</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106288</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.980	0.0200	1.000	0	98.0	72.3	125				
Trichloroethene (TCE)	1.04	0.0300	1.000	0	104	73.5	130				
1,2-Dichloropropane	1.01	0.0200	1.000	0	101	70	130				
Bromodichloromethane	1.04	0.0200	1.000	0	104	70	130				
Dibromomethane	1.02	0.0400	1.000	0	102	70	130				
cis-1,3-Dichloropropene	0.870	0.0200	1.000	0	87.1	58.7	141				
Toluene	1.01	0.0200	1.000	0	101	73.6	126				
trans-1,3-Dichloropropylene	0.870	0.0300	1.000	0	87.1	55.3	142				
1,1,2-Trichloroethane	0.986	0.0300	1.000	0	98.6	70	130				
1,3-Dichloropropane	0.998	0.0500	1.000	0	99.8	70	130				
Tetrachloroethene (PCE)	1.06	0.0200	1.000	0	106	55.2	151				
Dibromochloromethane	1.03	0.0300	1.000	0	103	71.5	142				
1,2-Dibromoethane (EDB)	0.996	0.00500	1.000	0	99.6	70	130				
Chlorobenzene	1.01	0.0200	1.000	0	101	74.2	122				
1,1,1,2-Tetrachloroethane	1.02	0.0300	1.000	0	102	70	130				
Ethylbenzene	0.975	0.0300	1.000	0	97.5	70	130				
m,p-Xylene	2.02	0.0200	2.000	0	101	70	130				
o-Xylene	0.950	0.0200	1.000	0	95.0	70	130				
Styrene	1.06	0.0200	1.000	0	106	70	130				
Isopropylbenzene	1.05	0.0800	1.000	0	105	70	130				
Bromoform	1.09	0.0200	1.000	0	109	70.9	147				
1,1,2,2-Tetrachloroethane	0.968	0.0200	1.000	0	96.8	61.9	136				
n-Propylbenzene	1.00	0.0200	1.000	0	100	70	130				
Bromobenzene	1.07	0.0300	1.000	0	107	52.7	146				
1,3,5-Trimethylbenzene	1.03	0.0200	1.000	0	103	70	130				
2-Chlorotoluene	1.02	0.0200	1.000	0	102	70	130				
4-Chlorotoluene	1.00	0.0200	1.000	0	100	70	130				
tert-Butylbenzene	0.940	0.0200	1.000	0	94.0	70	130				
1,2,3-Trichloropropane	1.01	0.0200	1.000	0	101	61.7	138				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3029</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106288</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,4-Trichlorobenzene	1.06	0.0500	1.000	0	106	57.5	138				
sec-Butylbenzene	1.02	0.0200	1.000	0	102	70	130				
4-Isopropyltoluene	0.997	0.0200	1.000	0	99.7	52	149				
1,3-Dichlorobenzene	1.02	0.0200	1.000	0	102	70	130				
1,4-Dichlorobenzene	0.957	0.0200	1.000	0	95.7	70	130				
n-Butylbenzene	0.973	0.0200	1.000	0	97.3	59.2	136				
1,2-Dichlorobenzene	1.01	0.0200	1.000	0	101	70	130				
1,2-Dibromo-3-chloropropane	1.03	0.0300	1.000	0	103	60.6	137				
1,2,4-Trimethylbenzene	1.03	0.0200	1.000	0	103	70	130				
Hexachlorobutadiene	1.02	0.100	1.000	0	102	54.7	137				
Naphthalene	1.01	0.0300	1.000	0	101	53.2	136				
1,2,3-Trichlorobenzene	1.01	0.0200	1.000	0	101	51	140				
Surr: 1-Bromo-4-fluorobenzene	0.494		0.5000		98.7	63.1	141				
Surr: Dibromofluoromethane	0.501		0.5000		100	67.6	119				
Surr: Toluene-d8	0.508		0.5000		102	78.5	126				

Sample ID: <b>MB-3029</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106289</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3029</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106289</b>							
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	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3029</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>106289</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.523		0.5000		105	63.1	141				
Surr: Dibromofluoromethane	0.496		0.5000		99.2	67.6	119				
Surr: Toluene-d8	0.548		0.5000		110	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-032ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>GP-10-22</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>107389</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0549						0	0	30	
Chloromethane	ND	0.0549						0	0	30	
Vinyl chloride	ND	0.00183						0	0	30	
Bromomethane	ND	0.0823						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0457						0	0	30	
Chloroethane	ND	0.0549						0	0	30	
1,1-Dichloroethene	ND	0.0457						0	0	30	
Methylene chloride	ND	0.0183						0	0	30	
trans-1,2-Dichloroethene	ND	0.0183						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0457						0	0	30	
1,1-Dichloroethane	ND	0.0183						0	0	30	
2,2-Dichloropropane	ND	0.0457						0	0	30	
cis-1,2-Dichloroethene	ND	0.0183						0	0	30	
Chloroform	ND	0.0183						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0183						0	0	30	
1,1-Dichloropropene	ND	0.0183						0	0	30	
Carbon tetrachloride	ND	0.0183						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0274						0	0	30	
Benzene	ND	0.0183						0	0	30	
Trichloroethene (TCE)	ND	0.0274						0	0	30	
1,2-Dichloropropane	ND	0.0183						0	0	30	
Bromodichloromethane	ND	0.0183						0	0	30	
Dibromomethane	ND	0.0366						0	0	30	
cis-1,3-Dichloropropene	ND	0.0183						0	0	30	
Toluene	ND	0.0183						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0274						0	0	30	
1,1,2-Trichloroethane	ND	0.0274						0	0	30	
1,3-Dichloropropane	ND	0.0457						0	0	30	
Tetrachloroethene (PCE)	ND	0.0183						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-032ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>GP-10-22</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>107389</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.0274						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00457						0	0	30	
Chlorobenzene	ND	0.0183						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0274						0	0	30	
Ethylbenzene	ND	0.0274						0	0	30	
m,p-Xylene	ND	0.0183						0	0	30	
o-Xylene	ND	0.0183						0	0	30	
Styrene	ND	0.0183						0	0	30	
Isopropylbenzene	ND	0.0732						0	0	30	
Bromoform	ND	0.0183						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0183						0	0	30	
n-Propylbenzene	ND	0.0183						0	0	30	
Bromobenzene	ND	0.0274						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0183						0	0	30	
2-Chlorotoluene	ND	0.0183						0	0	30	
4-Chlorotoluene	ND	0.0183						0	0	30	
tert-Butylbenzene	ND	0.0183						0	0	30	
1,2,3-Trichloropropane	ND	0.0183						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0457						0	0	30	
sec-Butylbenzene	ND	0.0183						0	0	30	
4-Isopropyltoluene	ND	0.0183						0	0	30	
1,3-Dichlorobenzene	ND	0.0183						0	0	30	
1,4-Dichlorobenzene	ND	0.0183						0	0	30	
n-Butylbenzene	ND	0.0183						0	0	30	
1,2-Dichlorobenzene	ND	0.0183						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0274						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0183						0	0	30	
Hexachlorobutadiene	ND	0.0915						0	0	30	
Naphthalene	ND	0.0274						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-032ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/22/2012</b>	RunNo: <b>5426</b>							
Client ID: <b>GP-10-22</b>	Batch ID: <b>3029</b>		Analysis Date: <b>8/23/2012</b>	SeqNo: <b>107389</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0183						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.442		0.4574		96.6	63.1	141		0		
Surr: Dibromofluoromethane	0.443		0.4574		96.9	67.6	119		0		
Surr: Toluene-d8	0.463		0.4574		101	78.5	126		0		

Sample ID: <b>LCS-3091</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>108770</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	1.12	0.0600	1.000	0	112	37.7	136				
Chloromethane	1.16	0.0600	1.000	0	116	38.8	132				
Vinyl chloride	1.18	0.00200	1.000	0	118	56.1	130				
Bromomethane	1.27	0.0900	1.000	0	127	44.3	149				
Trichlorofluoromethane (CFC-11)	1.23	0.0500	1.000	0	123	61.8	130				
Chloroethane	1.29	0.0600	1.000	0	129	52.2	131				
1,1-Dichloroethene	1.24	0.0500	1.000	0	124	64.6	134				
Methylene chloride	1.32	0.0200	1.000	0	132	60.6	140				
trans-1,2-Dichloroethene	1.21	0.0200	1.000	0	121	68.7	127				
Methyl tert-butyl ether (MTBE)	1.17	0.0500	1.000	0	117	73.4	128				
1,1-Dichloroethane	1.20	0.0200	1.000	0	120	65.5	132				
2,2-Dichloropropane	1.21	0.0500	1.000	0	121	28.1	149				
cis-1,2-Dichloroethene	1.18	0.0200	1.000	0	118	71.6	123				
Chloroform	1.18	0.0200	1.000	0	118	67.5	129				
1,1,1-Trichloroethane (TCA)	1.18	0.0200	1.000	0	118	74.4	130				
1,1-Dichloropropene	1.20	0.0200	1.000	0	120	72.7	131				
Carbon tetrachloride	1.21	0.0200	1.000	0	121	73	136				
1,2-Dichloroethane (EDC)	1.10	0.0300	1.000	0	110	68.7	133				
Benzene	1.12	0.0200	1.000	0	112	74.6	124				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3091</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>108770</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	1.18	0.0300	1.000	0	118	71.5	134				
1,2-Dichloropropane	1.13	0.0200	1.000	0	113	72.7	133				
Bromodichloromethane	1.13	0.0200	1.000	0	113	76.1	136				
Dibromomethane	1.09	0.0400	1.000	0	109	70	130				
cis-1,3-Dichloropropene	1.16	0.0200	1.000	0	116	59.1	143				
Toluene	1.14	0.0200	1.000	0	114	81.1	123				
trans-1,3-Dichloropropylene	1.16	0.0300	1.000	0	116	49.2	149				
1,1,2-Trichloroethane	1.14	0.0300	1.000	0	114	74.5	129				
1,3-Dichloropropane	1.15	0.0500	1.000	0	115	70	130				
Tetrachloroethene (PCE)	1.18	0.0200	1.000	0	118	64.4	150				
Dibromochloromethane	1.12	0.0300	1.000	0	112	70.6	144				
1,2-Dibromoethane (EDB)	1.11	0.00500	1.000	0	111	70	130				
Chlorobenzene	1.10	0.0200	1.000	0	110	76.1	123				
1,1,1,2-Tetrachloroethane	1.11	0.0300	1.000	0	111	74.8	131				
Ethylbenzene	1.12	0.0300	1.000	0	112	74	129				
m,p-Xylene	2.16	0.0200	2.000	0	108	79.8	128				
o-Xylene	1.11	0.0200	1.000	0	111	77.3	128				
Styrene	1.13	0.0200	1.000	0	113	76.8	130				
Isopropylbenzene	1.14	0.0800	1.000	0	114	70	130				
Bromoform	1.10	0.0200	1.000	0	110	67	154				
1,1,2,2-Tetrachloroethane	1.08	0.0200	1.000	0	108	61.9	139				
n-Propylbenzene	1.10	0.0200	1.000	0	110	78	130				
Bromobenzene	1.04	0.0300	1.000	0	104	49.2	144				
1,3,5-Trimethylbenzene	1.14	0.0200	1.000	0	114	79.7	128				
2-Chlorotoluene	1.08	0.0200	1.000	0	108	76.7	129				
4-Chlorotoluene	1.11	0.0200	1.000	0	111	77.5	125				
tert-Butylbenzene	1.02	0.0200	1.000	0	102	74.2	128				
1,2,3-Trichloropropane	1.05	0.0200	1.000	0	105	67.9	136				
1,2,4-Trichlorobenzene	1.07	0.0500	1.000	0	107	65.6	137				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3091</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>108770</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

sec-Butylbenzene	1.12	0.0200	1.000	0	112	75.6	133				
4-Isopropyltoluene	1.10	0.0200	1.000	0	110	76.8	131				
1,3-Dichlorobenzene	1.16	0.0200	1.000	0	116	72.8	128				
1,4-Dichlorobenzene	1.25	0.0200	1.000	0	125	72.6	126				
n-Butylbenzene	1.18	0.0200	1.000	0	118	65.3	136				
1,2-Dichlorobenzene	1.18	0.0200	1.000	0	118	72.8	126				
1,2-Dibromo-3-chloropropane	1.17	0.0300	1.000	0	117	64.3	135				
1,2,4-Trimethylbenzene	1.10	0.0200	1.000	0	110	77.5	129				
Hexachlorobutadiene	1.05	0.100	1.000	0	105	42	151				
Naphthalene	1.16	0.0300	1.000	0	116	64	130				
1,2,3-Trichlorobenzene	1.16	0.0200	1.000	0	116	62.1	140				
Surr: 1-Bromo-4-fluorobenzene	0.502		0.5000		100	63.1	141				
Surr: Dibromofluoromethane	0.509		0.5000		102	67.6	119				
Surr: Toluene-d8	0.506		0.5000		101	78.5	126				

Sample ID: <b>MB-3091</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>108771</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3091</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>MBLKS</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>108771</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
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	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3091</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>
Client ID: <b>MBLKS</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>108771</b>

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
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	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.516		0.5000		103	63.1	141				
Surr: Dibromofluoromethane	0.503		0.5000		101	67.6	119				
Surr: Toluene-d8	0.500		0.5000		100	78.5	126				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-002ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>GP-1-7.5</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109936</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0743						0	0	30	
Chloromethane	ND	0.0743						0	0	30	
Vinyl chloride	ND	0.00248						0	0	30	
Bromomethane	ND	0.112						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0620						0	0	30	
Chloroethane	ND	0.0743						0	0	30	
1,1-Dichloroethene	ND	0.0620						0	0	30	
Methylene chloride	ND	0.0248						0	0	30	
trans-1,2-Dichloroethene	ND	0.0248						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0620						0	0	30	
1,1-Dichloroethane	ND	0.0248						0	0	30	
2,2-Dichloropropane	ND	0.0620						0	0	30	
cis-1,2-Dichloroethene	ND	0.0248						0	0	30	
Chloroform	ND	0.0248						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0248						0	0	30	
1,1-Dichloropropene	ND	0.0248						0	0	30	
Carbon tetrachloride	ND	0.0248						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0372						0	0	30	
Benzene	ND	0.0248						0	0	30	
Trichloroethene (TCE)	ND	0.0372						0	0	30	
1,2-Dichloropropane	ND	0.0248						0	0	30	
Bromodichloromethane	ND	0.0248						0	0	30	
Dibromomethane	ND	0.0496						0	0	30	
cis-1,3-Dichloropropene	ND	0.0248						0	0	30	
Toluene	ND	0.0248						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0372						0	0	30	
1,1,2-Trichloroethane	ND	0.0372						0	0	30	
1,3-Dichloropropane	ND	0.0620						0	0	30	
Tetrachloroethene (PCE)	ND	0.0248						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/11/2012

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-002ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>GP-1-7.5</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109936</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.0372						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00620						0	0	30	
Chlorobenzene	ND	0.0248						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0372						0	0	30	
Ethylbenzene	ND	0.0372						0	0	30	
m,p-Xylene	ND	0.0248						0	0	30	
o-Xylene	ND	0.0248						0	0	30	
Styrene	ND	0.0248						0	0	30	
Isopropylbenzene	ND	0.0991						0	0	30	
Bromoform	ND	0.0248						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0248						0	0	30	
n-Propylbenzene	ND	0.0248						0	0	30	
Bromobenzene	ND	0.0372						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0248						0	0	30	
2-Chlorotoluene	ND	0.0248						0	0	30	
4-Chlorotoluene	ND	0.0248						0	0	30	
tert-Butylbenzene	ND	0.0248						0	0	30	
1,2,3-Trichloropropane	ND	0.0248						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0620						0	0	30	
sec-Butylbenzene	ND	0.0248						0	0	30	
4-Isopropyltoluene	ND	0.0248						0	0	30	
1,3-Dichlorobenzene	ND	0.0248						0	0	30	
1,4-Dichlorobenzene	ND	0.0248						0	0	30	
n-Butylbenzene	ND	0.0248						0	0	30	
1,2-Dichlorobenzene	ND	0.0248						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0372						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0248						0	0	30	
Hexachlorobutadiene	ND	0.124						0	0	30	
Naphthalene	ND	0.0372						0	0	30	

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-002ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>GP-1-7.5</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109936</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	0.0248						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.646		0.6196		104	63.1	141		0		
Surr: Dibromofluoromethane	0.600		0.6196		96.9	67.6	119		0		
Surr: Toluene-d8	0.669		0.6196		108	78.5	126		0		

Sample ID: <b>1208108-021AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>GP-8-7</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109936</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.755	0.0601	1.002	0	75.4	43.5	121				
Chloromethane	0.898	0.0601	1.002	0	89.7	45	130				
Vinyl chloride	0.974	0.00200	1.002	0	97.3	51.2	146				
Bromomethane	0.551	0.0901	1.002	0	55.1	70	130				S
Trichlorofluoromethane (CFC-11)	0.207	0.0501	1.002	0	20.7	52.2	132				S
Chloroethane	0.426	0.0601	1.002	0	42.5	43.8	117				S
1,1-Dichloroethene	0.704	0.0501	1.002	0	70.3	61.9	141				
Methylene chloride	0.858	0.0200	1.002	0	85.7	54.7	142				
trans-1,2-Dichloroethene	0.875	0.0200	1.002	0	87.4	52	136				
Methyl tert-butyl ether (MTBE)	0.873	0.0501	1.002	0	87.2	54.4	132				
1,1-Dichloroethane	0.803	0.0200	1.002	0	80.2	51.8	141				
2,2-Dichloropropane	0.606	0.0501	1.002	0	60.6	36	123				
cis-1,2-Dichloroethene	0.917	0.0200	1.002	0.003505	91.2	58.6	136				
Chloroform	0.912	0.0200	1.002	0	91.1	53.2	129				
1,1,1-Trichloroethane (TCA)	0.904	0.0200	1.002	0	90.3	58.3	145				
1,1-Dichloropropene	0.903	0.0200	1.002	0	90.2	55.1	138				
Carbon tetrachloride	0.820	0.0200	1.002	0	81.9	53.3	144				
1,2-Dichloroethane (EDC)	0.931	0.0300	1.002	0	93.0	51.3	139				
Benzene	0.917	0.0200	1.002	0	91.6	63.5	133				

**Qualifiers:**

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-021AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>GP-8-7</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109938</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	0.936	0.0300	1.002	0	93.5	68.6	132				
1,2-Dichloropropane	0.946	0.0200	1.002	0	94.5	59	136				
Bromodichloromethane	0.873	0.0200	1.002	0	87.2	50.7	141				
Dibromomethane	0.894	0.0401	1.002	0	89.3	50.6	137				
cis-1,3-Dichloropropene	0.796	0.0200	1.002	0	79.5	52.3	129				
Toluene	0.953	0.0200	1.002	0	95.2	67.8	129				
trans-1,3-Dichloropropylene	0.796	0.0300	1.002	0	79.5	52.2	138				
1,1,2-Trichloroethane	0.923	0.0300	1.002	0	92.2	51.6	137				
1,3-Dichloropropane	0.928	0.0501	1.002	0	92.7	53.1	134				
Tetrachloroethene (PCE)	0.708	0.0200	1.002	0	70.7	44.1	141				
Dibromochloromethane	0.814	0.0300	1.002	0	81.3	55.3	140				
1,2-Dibromoethane (EDB)	0.930	0.00501	1.002	0	92.9	50.4	136				
Chlorobenzene	0.936	0.0200	1.002	0	93.5	60	133				
1,1,1,2-Tetrachloroethane	0.811	0.0300	1.002	0	81.0	53.1	142				
Ethylbenzene	0.941	0.0300	1.002	0	94.0	54.5	134				
m,p-Xylene	1.77	0.0200	2.003	0	88.4	53.1	132				
o-Xylene	0.896	0.0200	1.002	0	89.5	53.3	139				
Styrene	0.873	0.0200	1.002	0	87.2	51.1	132				
Isopropylbenzene	0.893	0.0801	1.002	0	89.2	58.9	138				
Bromoform	0.710	0.0200	1.002	0	70.9	57.9	130				
1,1,2,2-Tetrachloroethane	0.945	0.0200	1.002	0	94.4	51.9	131				
n-Propylbenzene	0.903	0.0200	1.002	0	90.2	53.6	140				
Bromobenzene	0.821	0.0300	1.002	0	82.0	54.2	140				
1,3,5-Trimethylbenzene	0.846	0.0200	1.002	0	84.5	51.8	136				
2-Chlorotoluene	0.854	0.0200	1.002	0	85.3	51.6	136				
4-Chlorotoluene	0.858	0.0200	1.002	0	85.7	50.1	139				
tert-Butylbenzene	0.875	0.0200	1.002	0	87.4	50.5	135				
1,2,3-Trichloropropane	0.852	0.0200	1.002	0	85.1	50.5	131				
1,2,4-Trichlorobenzene	0.990	0.0501	1.002	0	98.9	50.8	130				

<b>Qualifiers:</b>	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	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	R RPD outside accepted recovery limits	RL Reporting Limit	S Spike recovery outside accepted recovery limits

**Work Order:** 1208108  
**CLIENT:** PES Environmental, Inc.  
**Project:** Former Pace Kirkland

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1208108-021AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>8/29/2012</b>	RunNo: <b>5538</b>							
Client ID: <b>GP-8-7</b>	Batch ID: <b>3091</b>		Analysis Date: <b>8/30/2012</b>	SeqNo: <b>109938</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

sec-Butylbenzene	0.897	0.0200	1.002	0	89.6	52.6	141				
4-Isopropyltoluene	0.894	0.0200	1.002	0	89.3	52.9	134				
1,3-Dichlorobenzene	0.934	0.0200	1.002	0	93.3	52.6	131				
1,4-Dichlorobenzene	1.05	0.0200	1.002	0	105	52.9	129				
n-Butylbenzene	0.940	0.0200	1.002	0	93.9	52.6	130				
1,2-Dichlorobenzene	0.959	0.0200	1.002	0	95.8	55.8	129				
1,2-Dibromo-3-chloropropane	0.875	0.0300	1.002	0	87.4	53	129				
1,2,4-Trimethylbenzene	0.830	0.0200	1.002	0	82.9	50.6	137				
Hexachlorobutadiene	1.09	0.100	1.002	0	109	51.5	130				
Naphthalene	0.901	0.0300	1.002	0	90.0	52.3	124				
1,2,3-Trichlorobenzene	0.974	0.0200	1.002	0	97.3	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.500		0.5008		99.9	63.1	141				
Surr: Dibromofluoromethane	0.488		0.5008		97.4	67.6	119				
Surr: Toluene-d8	0.519		0.5008		104	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

<b>Qualifiers:</b>	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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **PES**

 Work Order Number: **1208108**

 Logged by: **Troy Zehr**

 Date Received: **8/17/2012 3:03:00 PM**

### Chain of Custody

1. Were custodial seals present? Yes  No  Not Required
2. Is Chain of Custody complete? Yes  No  Not Present
3. How was the sample delivered? Courier

### Log In

4. Coolers are present? Yes  No  NA
5. Was an attempt made to cool the samples? Yes  No  NA
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes  No  NA
7. Sample(s) in proper container(s)? Yes  No
8. Sufficient sample volume for indicated test(s)? Yes  No
9. Are samples properly preserved? Yes  No
10. Was preservative added to bottles? Yes  No  NA
11. Is there headspace present in VOA vials? Yes  No  NA
12. Did all sample containers arrive in good condition?(unbroken) Yes  No
13. Does paperwork match bottle labels? Yes  No
14. Are matrices correctly identified on Chain of Custody? Yes  No
15. Is it clear what analyses were requested? Yes  No
16. Were all holding times able to be met? Yes  No

### Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<u>Leora</u>	Date:	<u>8/17/2012</u>
By Whom:	<u>Troy Zehr</u>	Via:	<input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<u>GP-10-7 no sample, yet it is on COC.</u>		
Client Instructions:	<u>Should have been left off Chain, it was not sampled.</u>		

18. Additional remarks/Discrepancies

### Item Information

Item #	Temp °C	Condition
Cooler 1	1.9	Good
Cooler 2	2.4	Good











**From:** [Kelly Rankich](#)  
**To:** [Michael C. Ridgeway](#);  
**Subject:** FW: Your new Fremont Analytical, Inc. report for WO# 1208108, Former Pace Kirkland.  
**Date:** Wednesday, August 29, 2012 9:13:37 AM

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Mike, could you please run the following samples that are on hold:

GP-1-7.5 for BTEX with 8260  
GP-8-7 for VOCs  
GP-8-15 for VOCs  
GP-10-2.5 for GRO, DRO with silica gel, and VOCs

Thanks,  
Kelly

## MEMORANDUM

**TO:** Project File **DATE:** September 10, 2012  
**FROM:** Jerry Harris  
**SUBJECT:** Laboratory Data Validation Review  
**PROJECT:** Former Pace Facility Kirkland, WA  
**PROJECT #:** 1006.008.01.003  
**TASK:** August 17, 2012 Soil Samples  
**LAB:** Fremont Analytical Service Request No. 1208108

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Soil sampling was conducted at the former Pace facility in Kirkland, Washington on August 17, 2012. Thirty-four (34) soil samples were collected from the site. In addition, one trip blank was prepared and shipped with the samples.

Selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as diesel (fuel oil), diesel-range organics (DRO), and heavy oil (HO) by the Northwest TPH Dx (NWTPH-Dx) method, TPH as gasoline by the NWTPH-Gx method, and volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260. The TPH-Dx analyses were performed in two analysis groups (IDs 3009 and 3088); the TPH-Gx analyses were performed in two analysis groups (IDs 5477 and 3031); and the VOC analyses were performed in two primary analysis groups (IDs 3029 and 3091). Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1208108.

The quality assurance review of the groundwater samples data is summarized below.

### DATA QUALIFICATIONS

Guidelines established by USEPA for 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 Organic Data Review (USEPA, 1999).

### DATA VALIDATION

#### Completeness

All samples were collected and analyzed as requested.

## **Sample Collection and Preservation**

The samples were collected in appropriately preserved containers supplied by the analytical laboratory. The laboratory reported that the samples were received in good condition. The laboratory received the samples in two coolers at temperatures of 1.9 and 2.4 degrees centigrade (°C). The latter cooler temperature was within the USEPA recommended temperature range of  $4^{\circ} \pm 2^{\circ}\text{C}$ . The former cooler temperature was 0.1°C below the recommended range. The samples in both coolers were appropriately preserved with ice and no shipping anomalies were identified by the laboratory. The samples were received by the laboratory on the day of sample collection within 0.75 hrs of the completion of the sample collection effort. Based upon this information, the 0.1°C exceedance in the first cooler is not considered sufficient cause to warrant qualification of the data because the samples were properly preserved and immediately transported directly to the laboratory on the day of sampling. No data qualifications were warranted based upon the laboratory receipt temperatures.

## **Holding Times**

### *NWTPH-Dx*

The extractions and analyses for the NWTPH-Dx method were performed within the recommended 14 day holding time limit for soil samples.

### *NWTPH-Gx*

The analyses for the NWTPH Gx method were performed within the recommended 14 day holding time limit for soil samples except for sample GP-10-2.5, which was analyzed 19 days after collection. Based upon this exceedance, the NWTPH-Gx result for sample GP-10-2.5 is qualified as estimated and assigned a J flag. The laboratory report page showing the qualification is attached. The five-day exceedance was not considered sufficient cause to warrant rejection of the data due to proper preservation while at the laboratory. No other qualifications were warranted.

### *USEPA Method 8260*

The analyses for VOCS were performed within the recommended 14 day holding time limit for soil samples. No data were qualified based upon holding times.

## **Initial Calibration**

Hard copies of the initial calibration verification (ICV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in initial calibration results associated with the project analyses if they occur. No discrepancies were reported; therefore no data qualifications were warranted.

## **Continuing Calibration**

Hard copies of the continuing calibration verification (CCV) data for this project are not required in the data deliverable. The laboratory is required to discuss discrepancies in continuing calibration results associated with the project analyses. No discrepancies were reported; therefore no data qualifications were warranted.

## **Method Blank Results**

### *NWTPH-Dx*

Two method blanks were analyzed with the two analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the Method Reporting Limits (MRLs). No data qualifications were warranted.

### *NWTPH-Gx*

Two method blanks were analyzed with the two analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

### *USEPA Method 8260*

Two method blanks were analyzed with the two primary analysis groups. This meets the required method blank frequency for the analytical method. The method blank results did not report any compounds at concentrations at or above the MRLs. No data qualifications were warranted.

## **Trip Blank Results**

A trip blank was prepared and shipped with the samples but was not analyzed. Trip blank analyses were not required for this sampling event.

## **Field Duplicate Analyses**

No field duplicates were required or collected during this field event.

## **Laboratory Duplicate Analyses**

### *NWTPH-Dx*

The laboratory prepared one duplicate soil sample for analysis group 3009 from project sample GP-1-1 and one duplicate for analysis group 3088 from sample GP-10-2.5. The primary and laboratory duplicate pairs were analyzed by the NWTPH Dx method. The relative percent differences (RPD) for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

### *NWTPH-Gx*

The laboratory prepared two duplicate soil samples; one for each of the two analysis groups. For analysis group 5477, a duplicate was prepared from primary sample GP-10-22. For analysis group 3031, the duplicate was prepared from a batch (non-project) sample. The primary and laboratory duplicate pairs were analyzed by the NWTPH Gx method. The RPD for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data were qualified.

### *USEPA Method 8260*

The laboratory prepared a duplicate soil sample for batch 3029; the duplicate was prepared from

project sample GP-10-22. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. For batch 3091, one duplicate was prepared from project sample GP-10-22. The RPDs for all target analyte pairs in the primary and duplicate samples were within the laboratory control criteria of 30 RPD. No data qualifications were warranted.

### **Surrogate Recoveries**

#### *NWTPH-Dx*

The surrogate percent recovery (%R) results for all NWTPH Dx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 50 to 150%R.

#### *NWTPH-Gx*

The surrogate %R results for all NWTPH Gx soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits of 65 to 135%. No data qualifications were warranted.

#### *USEPA Method 8260*

The surrogate %R results for all USEPA Method 8260 soil samples, laboratory control samples, matrix spikes, duplicates and method blanks were within the laboratory surrogate control limits. No data qualifications were warranted.

### **Laboratory Control Samples**

#### *NWTPH-Dx*

Two laboratory control samples (LCS) were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *NWTPH-Gx*

Two laboratory control samples (LCS) were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted.

#### *USEPA Method 8260*

Two LCSs were prepared and analyzed; one for each analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits. No qualifications were warranted. For the re-analysis batches (5418 and 5611), the primary LCS results apply. The laboratory reported CCV results for batch 5418 and ICV results for batch 5611. These results are discussed in the CCV and ICV sections above.

### **Matrix Spike/Matrix Spike Duplicates**

#### *NWTPH-Dx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Dx method.

### *NWTPH-Gx*

Matrix spikes and matrix spike duplicates (MS/MSD) are not required for the NWTPH Gx method.

### *USEPA Method 8260*

Two soil MSs were prepared and analyzed with the project samples; one for each of the analytical batches. Sample duplicates were analyzed in lieu of MSDs for the samples. This is acceptable. The MS %Rs for all target analytes in analytical batch 3029 were within the laboratory control limits except for bromomethane, trichlorofluoromethane and chloroethane. The %Rs for these compounds were below the lower control limit, indicating a potential matrix-induced variability in sample results for these compounds. However, because the MS for this batch was prepared from a batch (non-project) sample, the compounds were not detected in any project samples, and because there were no other quality control issues associated with these compounds in the remaining quality control data, the MS exceedances are not considered sufficient cause to warrant qualification of the data. No data in analytical group 3029 were qualified. For analytical batch 3091, the MS %Rs for all target analytes were within the laboratory control limits except for bromomethane, trichlorofluoromethane and chloroethane. These compounds were not detected in any project samples and because there were no other quality control issues associated with these compounds in the remaining quality control data, the MS exceedances are not considered sufficient cause to warrant qualification of the data. No data in analytical group 3091 were qualified. No other qualifications were warranted.

### **Other Quality Control Issues**

No other laboratory quality control issues were identified in the laboratory report.

### **Quantitation Limits**

The MRLs were acceptable for the project; therefore, no data qualifiers were assigned.

### **Data Assessment**

The NWTPH-Gx result for sample GP-10-2.5 is qualified as estimated and assigned a J flag. The laboratory report page with the indicated qualifier is attached. All data, including the J qualified data, are judged to be acceptable for their intended use. No data was rejected.





# Analytical Report

WO#: 1208108

Date Reported: 9/6/2012

**Client:** PES Environmental, Inc.

**Collection Date:** 8/17/2012 1:10:00 PM

**Project:** Former Pace Kirkland

**Lab ID:** 1208108-029

**Matrix:** Soil

**Client Sample ID:** GP-10-2.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.**

Batch ID: 3088

Analyst: BR

Diesel (Fuel Oil)	ND	18.7		mg/Kg-dry	1	8/31/2012 2:41:00 AM
Heavy Oil	ND	46.7		mg/Kg-dry	1	8/31/2012 2:41:00 AM
Surr: 2-Fluorobiphenyl	115	50-150		%REC	1	8/31/2012 2:41:00 AM
Surr: o-Terphenyl	111	50-150		%REC	1	8/31/2012 2:41:00 AM

**Gasoline by NWTPH-Gx**

Batch ID: 3130

Analyst: EM

Gasoline	ND <b>J</b>	4.05	H	mg/Kg-dry	1	9/5/2012 11:32:00 AM
Surr: 1,2-Dichloroethane-d4	97.6	65-135	H	%REC	1	9/5/2012 11:32:00 AM
Surr: Fluorobenzene	97.5	65-135	H	%REC	1	9/5/2012 11:32:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3091

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0578		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chloromethane	ND	0.0578		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Vinyl chloride	ND	0.00193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Bromomethane	ND	0.0866		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chloroethane	ND	0.0578		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1-Dichloroethene	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Methylene chloride	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
trans-1,2-Dichloroethene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1-Dichloroethane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
2,2-Dichloropropane	ND	0.0481		mg/Kg-dry	1	8/30/2012 6:38:00 PM
cis-1,2-Dichloroethene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Chloroform	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,1-Dichloropropene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Carbon tetrachloride	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2-Dichloroethane (EDC)	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Benzene	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Trichloroethene (TCE)	ND	0.0289		mg/Kg-dry	1	8/30/2012 6:38:00 PM
1,2-Dichloropropane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM
Bromodichloromethane	ND	0.0193		mg/Kg-dry	1	8/30/2012 6:38:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits