

June 7, 2013

1006.008.02.002

SRMKII, LLC 520 6th Street South Kirkland WA 98033

Attention: Mr. Dave Tomson

VINYL CHLORIDE AREA ASSESSMENT REPORT FORMER PACE NATIONAL PROPERTY 500 7TH AVENUE SOUTH KIRKLAND, WASHINGTON

Dear Mr. Tomson:

PES Environmental, Inc. (PES) conducted an assessment of the vinyl chloride area located in the northwestern portion of the Former Pace National property, located at 500 7th Avenue South, in Kirkland, Washington (Property; Figure 1), currently owned by Ultra Corporation (Ultra). The purpose of the assessment was to assist SRMKII LLC (SRMKII) to further delineate the extent of the vinyl chloride-impacted perched water in this area to better direct the excavation activities.

Specific sampling objectives and tasks for this investigation are as follows:

- Evaluate the northern and southern extent of vinyl chloride-impacted water;
- Confirm the depth of the confining silt layer; and
- Collect samples of both the non-saturated and saturated soil for disposal characterization.

The assessment activities were conducted in accordance with PES's Sampling and Analysis Plan $(SAP)^1$.

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 Corporation 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 144 feet amsl along the western property line.

¹ PES Environmental, Inc. 2013. Sampling and Analysis Plan, Former Pace National Property, 500 7th Avenue South, Kirkland, Washington. February 14.

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 the Washington State Department of Ecology (Ecology). Ultra and Ecology have negotiated a Consent Decree for implementation of the selected final cleanup action. The final cleanup action included monitored natural attenuation of vinyl chloride in groundwater, but no further actions for soil. Ecology concluded that soil on the Property met applicable cleanup levels.

SRMKII's redevelopment 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. A two-story office complex will be constructed above the parking structure. A portion of the proposed subsurface parking garage is located over the area where vinyl chloride is present in perched water, near the northwestern corner of the Property (Figure 2). The water is perched on a glaciolacustrine layer (herein referred to as the confining silt layer), located at an estimated elevation of 130 to 148 feet amsl. At the future tenant's request, SRMKII will extend the excavation in this area to remove the saturated soils, including the perched water containing vinyl chloride at concentrations greater than the applicable cleanup level (0.2 micrograms per liter [µg/L]). This additional excavation is being conducted to mitigate potential concerns regarding vapor intrusion into the subsurface parking garage and overlying office complex.

This assessment was conducted to determine the final limits (vertical and horizontal) of the planned vinyl chloride area excavation. This information will be used during the redevelopment of the Property to design the depth and extent of the shoring system along the western and northern excavation sidewalls. Analytical results of soil samples collected and analyzed during this assessment will be used to profile and properly manage the excavated soils.

FIELD ACTIVITIES

Prior to conducting the drilling activities, public and private utility locates were conducted and the proposed boring locations were surveyed by D.R. Strong Consulting Engineers, Inc. (DRS).

On April 10 and 11, 2013, PES oversaw the drilling of seven borings (GP-26 through GP-31 and GP-27A). Cascade Drilling, Inc., a Washington State licensed drilling company, was subcontracted to drill the borings with a track-mounted direct-push drilling rig. The borings were hand-cleared to approximately 2 feet below ground surface (bgs) and advanced to depths of up to 25 feet bgs (at least two feet into the confining silt layer). The boring locations are shown on Figure 2. Difficult drilling conditions in the location of proposed boring GP-27 resulted in moving the boring approximately 10 feet south. Due to refusal at a depth of 15 feet in the new GP-27 location, one additional boring (GP-27A) was advanced southeast of GP-27. Refusal occurred at a depth of 15 feet bgs in GP-27A.

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 volatile organic compounds (VOCs) with a photo-ionization detector (PID). PES collected soil samples in the appropriate laboratory-approved sampling containers. Soil samples

were collected using syringe samplers following the United States Environmental Protection Agency (USEPA) Method 5035 protocols for volatile organic analysis. The syringe samples were placed in laboratory-provided bottles preserved with methanol for gasoline range organics (GRO) and VOC analyses; additional sample volume was collected in unpreserved glass soil sample jars for diesel range organics (DRO) and heavy oil range organics (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.

After completion of the soil sampling, temporary wells were installed in each boring using a tenfoot, one-inch diameter schedule 40 PVC well screen and casing. The bottom of each well was placed at the depth of the top of the confining silt layer for the purpose of collecting perched groundwater samples. The depths of the screened intervals of the temporary wells are included on the boring logs in Attachment A.

After allowing the water within the temporary well casings to equilibrate for no less than one hour, the water level was measured to the nearest 0.01 foot, using an electronic water level probe, and recorded. The probe tip was rinsed with distilled water between each temporary well to avoid cross contamination.

Each well was sampled using low flow sampling techniques, with a peristaltic pump fitted with new disposable silicon tubing at the pump head and polyethylene tubing down the well. The polyethylene tubing was slowly lowered into the well until the tubing intake was at least two feet below the measured depth to water. Low flow purging was conducted at pumping rates between 100 and 150 milliliters per minute (mL/min) and field parameters were recorded every three to five minutes. New disposable polyethylene tubing was used to sample each temporary well. Data collected during sampling was recorded on field sampling data sheets (included in Attachment B).

Upon completion of purging (stabilization of field parameters), samples were collected from the discharge end of the peristaltic pump tubing into the appropriate laboratory provided sampling containers (40 ml VOAs preserved with hydrochloric acid). The water samples were submitted to Fremont for analysis of vinyl chloride using USEPA Method 8260B.

After collection of the water samples, the polyethylene tubing and well casings were removed and the borings were abandoned by filling the bottom of the borings to the surface with hydrated bentonite chips, and completed with an asphalt or concrete surface patch. All used tubing and the temporary well casings were discarded appropriately.

Decontamination water, purge water, and soil cuttings were placed in stainless steel drums, currently being stored on-site pending characterization and disposal as set forth in the Sampling Residuals section of the SAP.

FIELD OBSERVATIONS OF SUBSURFACE CONDITIONS

The geology encountered at the Property generally consisted of an upper fill layer of silty sand to depths ranging from approximately 2 to 12 feet bgs, underlain by a tan, medium plasticity silt with iron oxide staining to depths ranging from approximately 8.5 to 23 feet bgs. The lower-most unit was a very hard, bluish gray, elastic silt layer to a maximum drilled depth of 25 feet bgs. Consistent with the lithology identified by Kleinfelder's geotechnical boring B-1, a wet sandy silt lens was observed within the dense silt layer in boring GP-28 from approximately 20 to 23 feet bgs, and in the bottom 2 to 3 inches at GP-27 and GP-27A respectively. Kleinfelder's draft boring logs are included in Attachment A.

No areas of staining (with the exception of iron oxide staining), notable chemical odors, or PID readings were observed in any of the soil borings.

LABORATORY ANALYTICAL RESULTS

<u>Soil.</u> One sample from the unsaturated soil zone (overburden) and one sample from the saturated zone were submitted for laboratory analysis from each boring. In addition, one sample from the lower saturated lens from boring GP-28 was submitted for analysis.

The soil samples were analyzed for VOCs using USEPA Method 8260B, GRO using Ecology Method NWTPH-Gx, and DRO and HO using Ecology Method NWTPH-Dx/Dx extended with silica gel cleanup. One composite sample was analyzed for Resource Conservation and Recovery Act (RCRA) 8 metals using USEPA Method 6020 and USEPA Method 7421 (mercury). A copy of the laboratory analytical report is included in Attachment C.

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. The data validation memorandum is included with the laboratory analytical report in Attachment C. The laboratory control sample (LCS) percent recovery (%R) for hexachlorobutadiene was below the lower control limit, indicating a potential low bias in sample results for hexachlorobutadiene. Because of the low %R for this compound, the laboratory reported initial calibration verification (ICV) results for this compound. The ICV results indicated that the instrument was in control during the analyses. Based upon the LCS and ICV results, all hexachlorobutadiene results reported for the project samples are qualified as estimated and assigned a J flag. No other qualifications were warranted and all of the soil data were deemed acceptable for site characterization.

Low concentrations of naphthalene were detected in the shallow, unsaturated soil samples collected from borings GP-27 and GP-30. Therefore, the unsaturated overburden will not be utilized as fill material on-site and will be characterized and transported off-site for disposal at a licensed facility, as required by applicable regulations. Low concentrations of petroleum hydrocarbons (diesel, heavy oil, and/or toluene) were detected in the saturated soil samples collected from borings GP-27 and GP-30. This analytical data will be used for profiling and managing the soil for appropriate handling and off-site disposal during the vinyl chloride area

excavation activities. The soil laboratory analytical results for petroleum hydrocarbons and VOCs are summarized in Tables 1 and 2, respectively.

<u>Water.</u> One perched water sample from each temporary well was submitted for laboratory analysis. The water sample from boring GP-27A was placed on hold pending the results of the GP-27 water sample and was not analyzed.

The water samples were analyzed for vinyl chloride using USEPA Method 8260B. A copy of the laboratory analytical report is included in Attachment C.

The final laboratory analytical report was reviewed and validated in accordance with USEPA data validation procedures to ensure that the data were acceptable for their intended use. The data validation memorandum is included with the laboratory analytical report in Attachment C. All of the water data were deemed acceptable for site characterization.

Vinyl chloride was detected in the water samples collected from temporary wells GP-28 and GP-30 at concentrations of 1.2 and 0.91 μ g/L, respectively (above the cleanup level). Vinyl chloride was not detected at or above the method reporting limit (MRL) of 0.2 μ g/L in the water samples from the remaining temporary wells. The laboratory analytical results are summarized in Table 3.

VINYL CHLORIDE EXCAVATION AREA

PES estimated the lateral extent of the vinyl chloride excavation area as shown on Figure 2. The lateral extent was estimated using vinyl chloride concentrations detected in the perched water during this current site assessment, the results of SoundEarth Strategies, Inc. (SES) semi-annual groundwater sampling of select wells, as well as historical groundwater sampling results presented by SES in the Cleanup Action Plan² (CAP). The lateral limits were drawn conservatively, extending the assumed vinyl chloride-contaminated perched water limits to the locations of borings with no vinyl chloride detected in samples from the temporary wells.

The elevation of the confining silt layer ranged from approximately 133 feet amsl along the northwestern portion of the vinyl chloride area to approximately 130 feet amsl along the southwestern portion of the vinyl chloride area. As indicated by previous site assessment activities, this confining silt layer increases in elevation toward the east, to an elevation of approximately 148 feet amsl at the eastern extent of the vinyl chloride area. The excavation will be extended to these depths to remove the saturated soil within the vinyl chloride area.

As indicated in the SAP, the excavation sidewall and bottom soil samples will be submitted for vinyl chloride analysis as well as any constituents detected during this assessment. Therefore, the samples will be submitted for diesel and heavy oil range petroleum hydrocarbons analysis using Ecology NWTPH-Dx/Dx extended and vinyl chloride, naphthalene, and toluene analysis using USEPA Method 8260B.

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² SoundEarth Strategies, Inc. 2011. *Cleanup Action Plan, Former Pace National Site*, 500 7th Avenue South #C335, Kirkland, Washington. April 13.

The results of the vinyl chloride assessment have identified the northern and southern limits of the vinyl chloride area, which are bounded by the perched water samples collected from borings GP-31 and GP-27, respectively. The depth to the confining silt layer in this area was also delineated during this assessment and ranges from 130 to 133 feet amsl.

PES appreciates the opportunity to conduct these assessment services. 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 – Boring Locations and Proposed Excavation Area

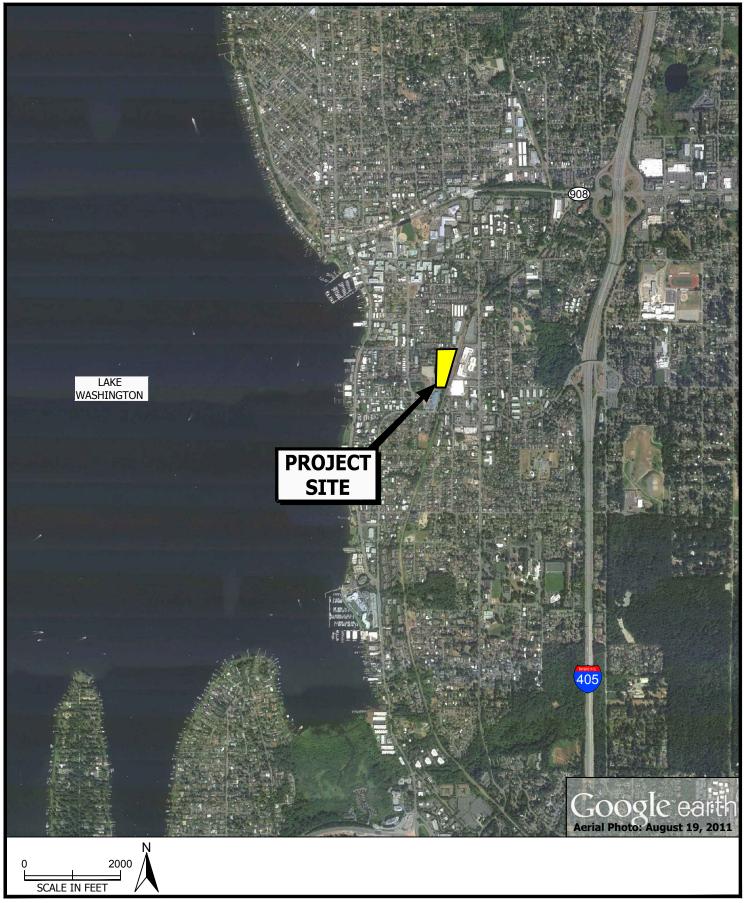
Table 1 – Summary of Soil Analytical Results – Total Petroleum Hydrocarbons

Table 2 – Summary of Soil Analytical Results – Detected VOCs Table 3 – Summary of Water Analytical Results – Vinyl Chloride

Attachment A – Soil Boring Logs

Attachment B – Field Sampling Data Sheets

Attachment C – Laboratory Analytical Reports and Data Validation Memoranda



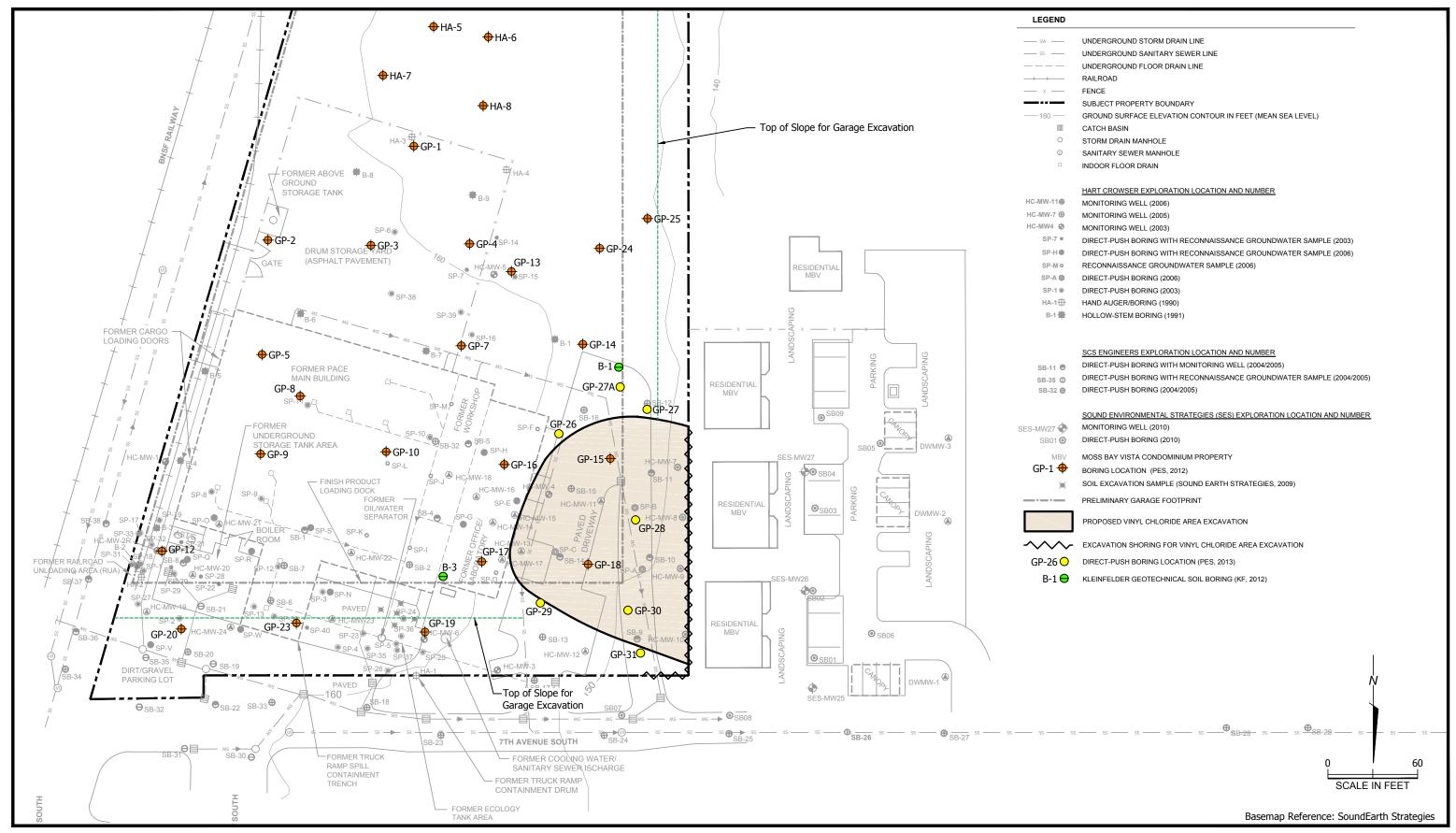


Site Location MapFormer Pace National Property
500 7th Avenue South
Kirkland, Washington

FIGURE

1

JOB NUMBER





Boring Locations and Proposed Excavation Areas
Former Pace National Property

500 7th Avenue South Kirkland, Washington 2

1006.008.02.002 100600802002_PhII_2

Table 1

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

			Surface		Estimated						
		Sample	Elevation	Depth	Elevation	Gasoli	ne	Dies	el	НО	
Boring ID	Sample ID	Date	(ft amsl)	(ft bgs)	(ft amsl)	(mg/k	g)	(mg/k	(g)	(mg/k	g)
GP-26	GP-26-2	04/11/13	159.17	2	157.17	3.82	U	21.7	U	54.2	U
	GP-26-6	04/11/13		6	153.17	4.61	U	23.5	U	58.7	U
GP-27	GP-27-5	04/11/13	156.87	5	151.87	4.81	U	18.0	U	44.9	U
	GP-27-14.5	04/11/13		14.5	142.37	4.99	U	20.2	U	78.7	
GP-28	GP-28-3	04/10/13	153.58	3	150.58	3.89	U	19.5	U	48.7	U
	GP-28-14	04/10/13		14	139.58	3.71	U	19.8	U	49.4	U
	GP-32-20 (Dupe)	04/10/13		14	139.58	4.20	U	19.4	U	48.5	U
	GP-28-22	04/10/13		22	131.58	2.81	U	22.0	U	55.1	U
GP-29	GP-29-3	04/11/13	157.01	3	154.01	2.92	U	19.9	U	49.8	U
	GP-29-5	04/11/13		5	152.01	3.95	U	19.5	U	48.7	U
GP-30	GP-30-3	04/10/13	149.73	3	146.73	3.19	U	20.9	U	52.3	U
	GP-30-8	04/10/13		8	141.73	6.02	U	38.1		78.2	
GP-31	GP-31-5	04/10/13	148.00	5	143.00	4.49	U	19.3	U	48.1	U
	GP-31-9	04/10/13		9	139.00	3.74	U	23.9	U	59.8	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 **bold**
- 4) ft bgs = feet below ground surface
- 5) ft amsl = feet above mean sea level, using a surveyed surface elevation (except GP-27 and GP-30 which are approximated)
- 6) Gasoline analysis by Ecology Method NWTPH-Gx
- 7) Diesel and Heavy Oil (HO) analysis by Ecology Method NWTPH-Dx/Dx extended with silica gel cleanup

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

			Surface		Estimated				
		Sample	Elevation	Depth	Elevation	Toluene	,	Naphthal	ene
Boring ID	Sample ID	Date	(ft amsl)	(ft bgs)	(ft amsl)	(mg/kg))	(mg/kg	()
GP-26	GP-26-2	04/11/13	159.17	2	157.17	0.0153	U	0.0229	U
	GP-26-6	04/11/13		6	153.17	0.0184	U	0.0277	U
GP-27	GP-27-5	04/11/13	156.87	5	151.87	0.0192	U	0.0692	
	GP-27-14.5	04/11/13		14.5	142.37	0.0200	U	0.0300	U
GP-28	GP-28-3	04/10/13	153.58	3	150.58	0.0156	U	0.0233	U
	GP-28-14	04/10/13		14	139.58	0.0148	U	0.0222	U
	GP-32-20 (Dupe)	04/10/13		14	139.58	0.0168	U	0.0252	U
	GP-28-22	04/10/13		22	131.58	0.0112	U	0.0169	U
GP-29	GP-29-3	04/11/13	157.01	3	154.01	0.0117	U	0.0175	U
	GP-29-5	04/11/13		5	152.01	0.0158	U	0.0237	U
GP-30	GP-30-3	04/10/13	149.73	3	146.73	0.0128	U	0.0195	
	GP-30-8	04/10/13		8	141.73	0.0331		0.0361	U
GP-31	GP-31-5	04/10/13	148.00	5	143.00	0.0179	U	0.0269	U
	GP-31-9	04/10/13		9	139.00	0.0150	U	0.0224	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) Detected results shown in **bold**
- 4) ft bgs = feet below ground surface
- 5) ft amsl = feet above mean sea level, using a surveyed surface elevation (except GP-27 and GP-30 which are approximated)
- 6) Volatile Organic Compound (VOC) analysis by USEPA Method 8260B
- 7) Detected VOCs are summarized in this table; see laboratory analytical report for entire VOC analytical results

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Table 3 Summary of Water Analytical Results - Vinyl Chloride Former Pace National Property 500 7th Avenue South, Kirkland, WA

		Sample	Vinyl Chloride
Boring ID	Sample ID	Date	(µg/l)
GP-26	GP-26-W	04/11/13	0.200 U
	GP-32-W (dupe)	04/11/13	0.200 U
GP-27	GP-27-W	04/11/13	0.200 U
GP-28	GP-28-W	04/10/13	1.20
GP-29	GP-29-W	04/11/13	0.200 U
GP-30	GP-30-W	04/10/13	0.910
GP-31	GP-31-W	04/10/13	0.200 U

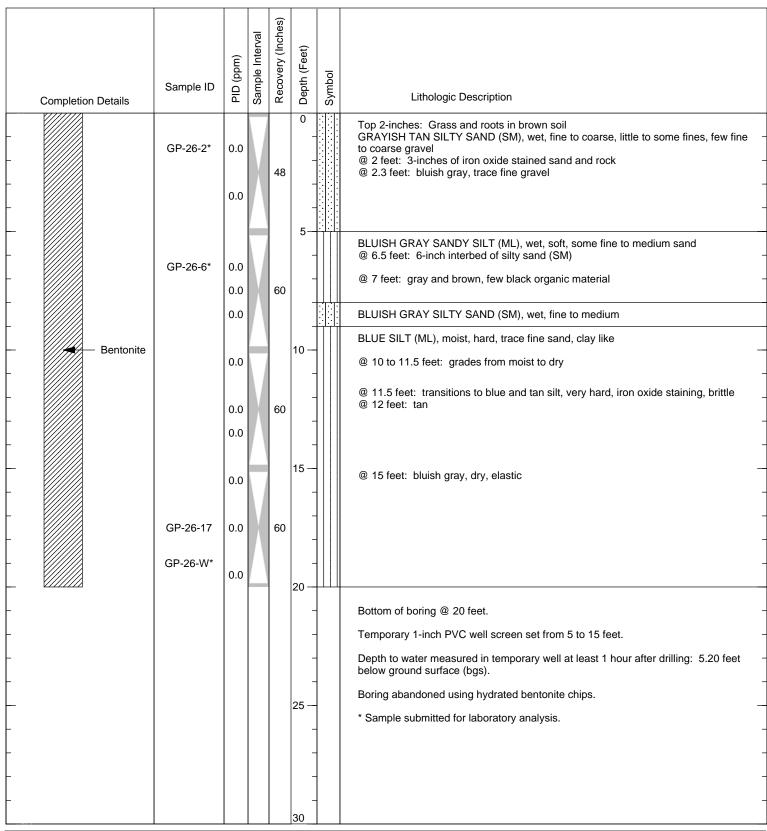
Notes:

- 1) $\mu g/l = micrograms per liter or parts per billion$
- 2) U = not detected at or above the method reporting limit shown
- 3) Detected results shown in **bold**
- 4) Vinyl Chloride analysis by EPA Method 8260B.

S100600801R_1722_T1-3 Page 1 of 1



1 of 1



Project: Former Pace National

Project Number: 1006.008.02

Site Location: Kirkland, Washington

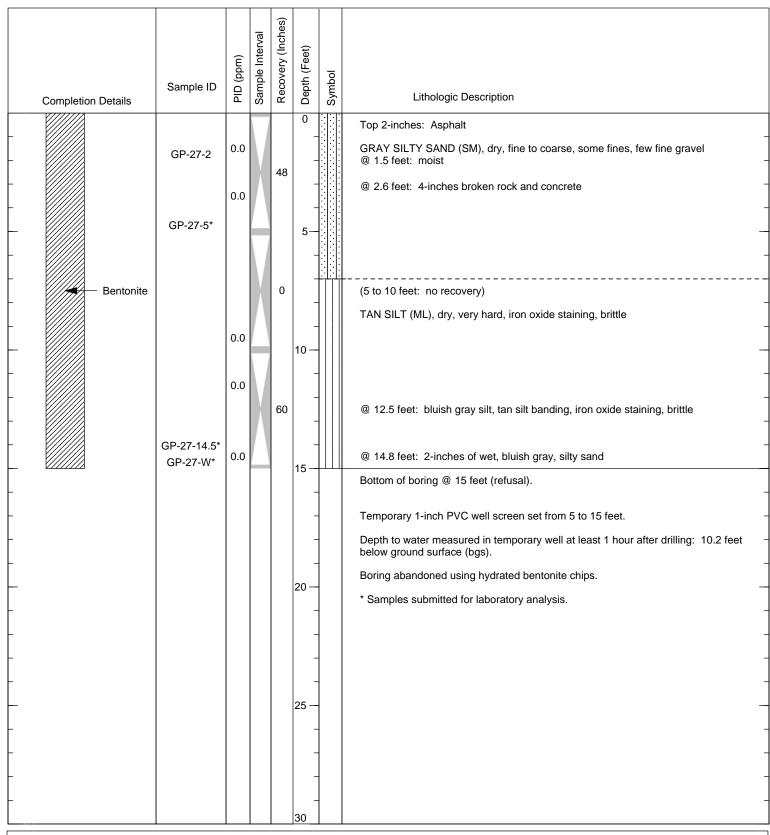
Logged By: L. Doody

Sample Method: Five foot acetate liners

Total Boring Depth: 20 feet
Diameter of Boring: 2 inches
Date Drilled: 4/11/13
Drilled By: Cascade Drilling



1 of 1



Project: Former Pace National

Project Number: 1006.008.02 Site Location: Kirkland, Washington

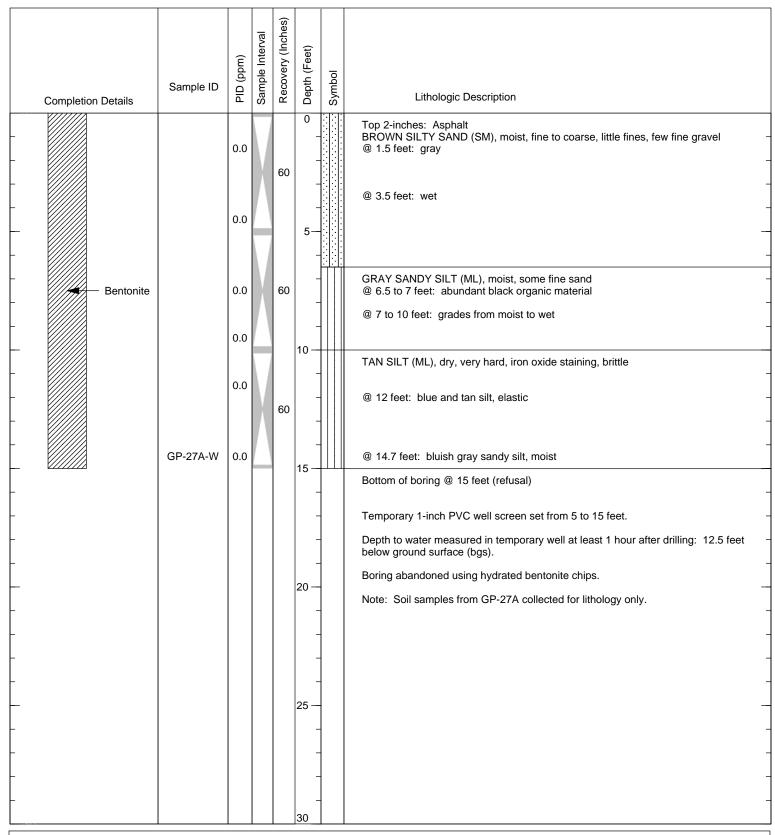
Logged By: L. Doody

Sample Method: Five foot acetate liners

Total Boring Depth: 15 feet
Diameter of Boring: 2 inches
Date Drilled: 4/11/13
Drilled By: 4cascade Drilling



1 of 1



Project: Former Pace National

Project Number: 1006.008.02

Site Location: Kirkland, Washington

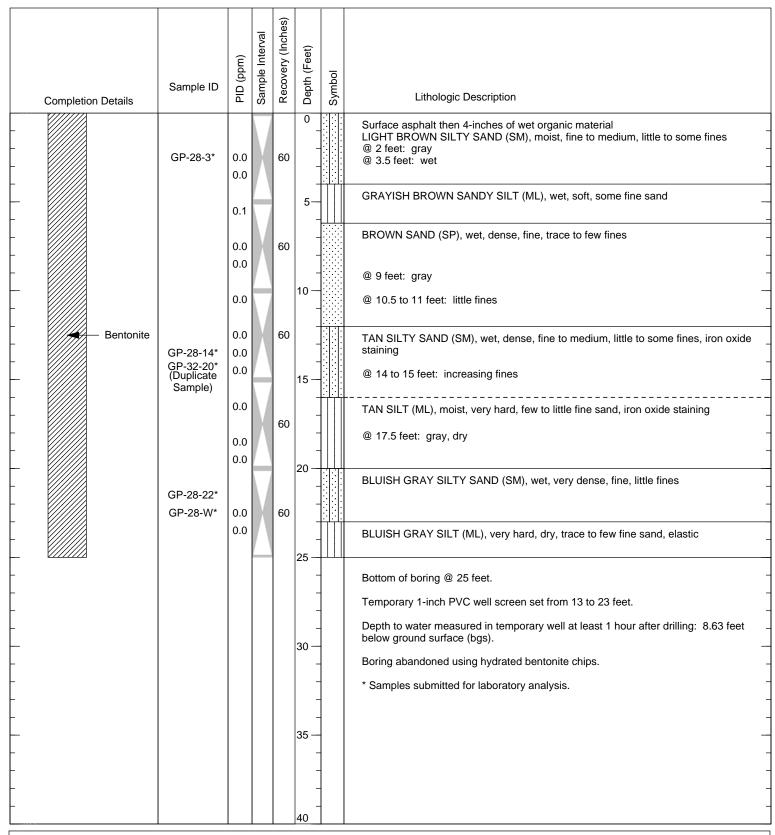
Logged By: L. Doody

Sample Method: Five foot acetate liners

Total Boring Depth: 15 feet
Diameter of Boring: 2 inches
Date Drilled: 4/11/13
Drilled By: Cascade Drilling



1 of 1



Project: Former Pace National

Project Number: 1006.008.02

Site Location: Kirkland, Washington

Logged By: L. Doody

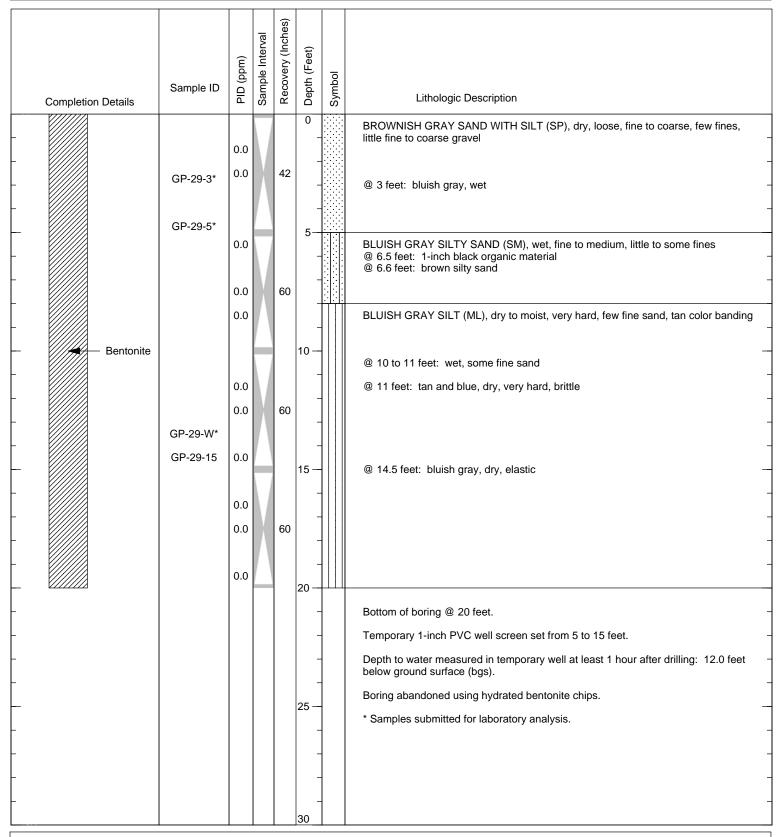
Sample Method: Five foot acetate liners

Total Boring Depth: 25 feet 2 inches Diameter of Boring: Date Drilled: 4/10/13 Drilled By:

Cascade Drilling



1 of 1



Project: Former Pace National

Project Number: 1006.008.02

Site Location: Kirkland, Washington

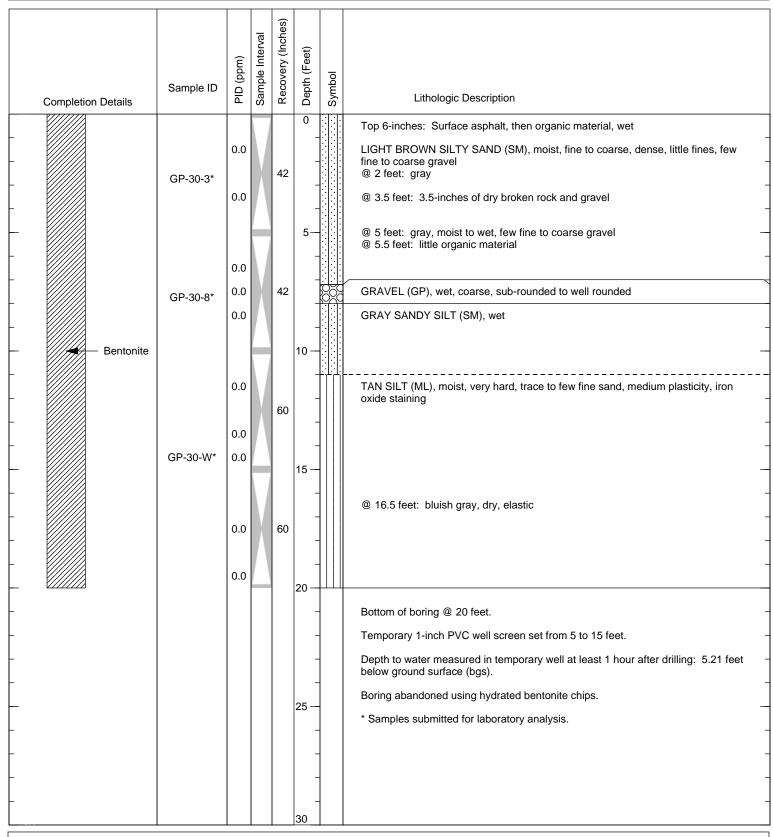
Logged By: L. Doody

Sample Method: Five foot acetate liners

Total Boring Depth: 20 feet
Diameter of Boring: 2 inches
Date Drilled: 4/11/13
Drilled By: Cascade Drilling



1 of 1



Project: Former Pace National

Project Number: 1006.008.02

Site Location: Kirkland, Washington

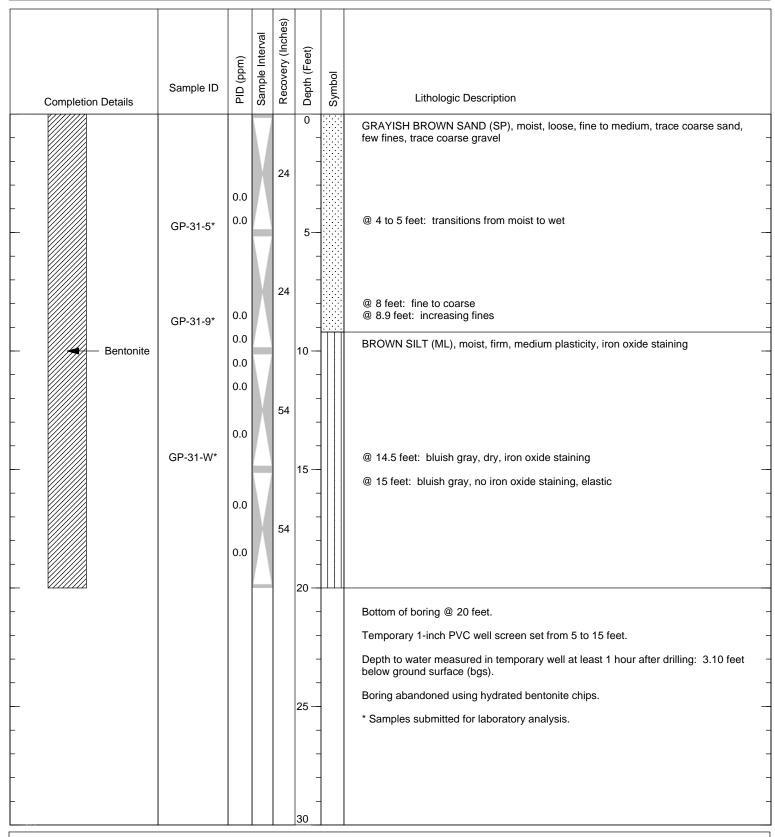
Logged By: L. Doody

Sample Method: Five foot acetate liners

Total Boring Depth: 20 feet
Diameter of Boring: 2 inches
Date Drilled: 4/10/13
Drilled By: Cascade Drilling



1 of 1



Project: Former Pace National

Project Number: 1006.008.02

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: 4/10/13
Drilled By: Cascade Drilling

Date Begin - End: Boretec 11/7/12 **Drill Company: BORING LOG B-1** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Recovery (NR=No Recovery) Plasticity Index (NP=No Plasticity) Passing #200 Sieve (%) Liquid Limit (NV=No Value) Approximate Elevation (feet) Latitude: 47.66982° N Longitude: 122.19968° W Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 157.0 USCS Symbol ▲ Water Content Plot Surface Condition: Asphalt (%) 20 30 40 Asphalt: 3 inches asphalt. Fill Sandy Lean CLAY with Gravel (CL): medium -155 plasticity fines, bluish gray with black mottling, moist, firm, fine to medium sand, subangular to angular gravel up to 1 inch, some asphalt and wood debris. BC=7 11" 6 -150 **Glaciolacustrine** SILT (ML): low plasticity fines, bluish gray, moist, firm to hard, some fine sand in upper 5 feet, trace fine sand below upper 5 feet. 10 BC=18 6' 145 15 BC=37 14" 21 140 Glaciolacustrine Silty SAND (SM): gray, wet, very dense, fine sand. $\bar{\Delta}$ 20 18' SM 26.1 19 17 135▼ Glaciolacustrine SILT (ML): low plasticity fines, gray, moist to wet, firm, common parting laminations 26 25 BC=10 15" 130 **PLATE** PROJECT NO.: 130525 **BORING LOG B-1** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

BORING WITH N-PLOT

[KLF]

GINT_LIBRARY_SR.1.GLB

STANDARD

R:KLF

U:\1projects\130525 Google Campus Expansion\logs\google Boring Logs.gpj

Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-1** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Passing #200 Sieve (%) Liquid Limit (NV=No Value) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. <u>ල</u> Latitude: 47.66982° N Graphical Log Pocket Pen(PP)= Passing No.4 Sieve (%) Uncorrected N-VALUE Sample Type Longitude: 122.19968° W Water Content (%) Depth (feet) Dry Density ((blows/ft) Approximate Surface Elevation (ft): 157.0 USCS Symbol Water Content Plot Surface Condition: Asphalt (%) 226 30 18' Glaciolacustrine 11 SILT (ML): low plasticity fines, gray, moist to wet, firm, common parting laminations PP=3.5-4 -125 **Glacial Outwash** Silty SAND with Gravel (SM): gray, wet, very dense, medium to coarse sand, subrounded fine to coarse gravel, trace cobbles. 35 BC=50/1" 120 **BORING WITH N-PLOT** 40 BC=23 37 - Poorly graded gravel with silt and sand lense at least 16' 16 inches thick encountered at 40 feet bgs. Sand is 50/4" medium to coarse grained and gravel is subrounded up to 1 inch diameter. FF 115 GINT_LIBRARY_SR.1.GLB 50 45 BC=10 17' - Some silt lenses up to 6 inches thick encountered below 45 feet bgs. 50/5" 110 STANDARD 50 R:KLF 50 BC=50/6" 6" GROUNDWATER LEVEL INFORMATION:
Groundwater was observed at approximately 20 ft. below ground surface during drilling.
Groundwater was observed at approximately 22 ft. below ground gbj The exploration was terminated at approximately 50.5 -ogs. ft. below ground surface. The exploration was 105 backfilled with bentonite on November 07, 2012. U:\1projects\130525 Google Campus Expansion\logs\google Boring | surface at the end of drilling. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder A Garmin 76CSx GPS unit was used to locate the exploration with 55 an accuracy of 20 feet. 100 **PLATE** PROJECT NO.: 130525 **BORING LOG B-1** DRAWN BY: CLL CHECKED BY: **RDL** KLEINFELDER Google Campus Expansion 5th St S & 7th Ave S FILE Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-2** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Liquid Limit (NV=No Value) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Passing #200 Sieve (%) Latitude: 47.66988° N Longitude: 122.19862° W Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 167.0 USCS Symbol ▲ Water Content Plot Surface Condition: Grass (%) 20 30 40 <u>Fill</u> Clayey SAND with Gravel (SC): medium brown, moist with some wet zones, medium dense, iron-oxide staining, fine to coarse sand, subangular to -165 subrounded fine to coarse gravel, trace cobbles up to 4 inches, some zones of sandy lean clay with gravel also encountered. $\overline{\Delta}$ BC=9 15' 160 Glaciolacustrine SILT (ML): low plasticity fines, bluish gray, moist with some wet zones, firm to hard, trace fine sand, trace 10 BC=9 18' wet fine sand lenses less than 1/16" thick, some parting laminations 17 PP=>4.5 155 15 BC=9 18' 150 32 20 BC=8 18' 19 145 32 25 18" 13 19 140 **PLATE** PROJECT NO.: 130525 **BORING LOG B-2** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

BORING WITH N-PLOT

[KLF]

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Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-2** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Liquid Limit (NV=No Value) Passing #200 Sieve (%) Approximate Elevation (feet) Latitude: 47.66988° N Longitude: 122.19862° W Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf, Graphical Log Pocket Pen(PP)= Passing No.4 Sieve (%) Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 167.0 USCS Symbol ▲ Water Content Plot Surface Condition: Grass (%) 10 2020 30 Glaciolacustrine 18' 8 SILT (ML): low plasticity fines, bluish gray, moist with 12 some wet zones, firm to hard, trace fine sand, trace wet fine sand lenses less than 1/16" thick, some parting -135 laminations 35 BC=7 18' PP=3.5 130 **BORING WITH N-PLOT** 40 BC=8 18' 12 PP=4-4.5 KLF 125 STANDARD_GINT_LIBRARY_SR.1.GLB 45 BC=8 18' 120 29 R:KLF 50 18' 18 .gpj Logs. 115 The exploration was terminated at approximately 51.5 **GROUNDWATER LEVEL INFORMATION:** U:\1projects\130525 Google Campus Expansion\logs\google Boring | $\overline{\Delta}$ Perched groundwater was observed at approximately 5 ft. below ft. below ground surface. The exploration was ground surface during drilling. backfilled with bentonite on November 07, 2012. Groundwater was observed at approximately 44 ft. below ground surface at the end of drilling. GENERAL NOTES: The exploration location and elevation are approximate and were 55 estimated by Kleinfelder. A Garmin 76CSx GPS unit was used to locate the exploration with an accuracy of 20 feet. 110 **PLATE** PROJECT NO.: 130525 **BORING LOG B-2** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S . FILE: Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

Date Begin - End: Boretec 11/7/12 **Drill Company: BORING LOG B-3** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Recovery (NR=No Recovery) Plasticity Index (NP=No Plasticity) Passing #200 Sieve (%) Liquid Limit (NV=No Value) Approximate Elevation (feet) Latitude: 47.67018° N Longitude: 122.1992° W Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 162.0 USCS Symbol ▲ Water Content Plot Surface Condition: Grass (%) 20 30 40 <u>Fill</u> Poorly-Graded GRAVEL with Silt And Sand (GP-GM): medium brown, moist to wet, dense, fine to medium sand, fine to coarse subrounded gravel, trace cobbles -160 up to 4 inches. ∇ 50 BC=26 25 12' 26 155 Poorly-Graded SAND with Silt (SP-SM): medium brown, moist, medium dense, fine to medium sand, trace subrounded fine gravel. 10 BC=8 9" 150 Glaciolacustrine SILT (ML): low plasticity fines, bluish gray, moist, firm to hard, trace fine sand, few fine sand lenses up to 15 BC=13 18' 1/16" thick. 19 145 20 BC=8 - Becomes gray at 20 feet bgs. 18' 20 140 20 25 18" 8 12 135 **PLATE** PROJECT NO.: 130525 **BORING LOG B-3** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

BORING WITH N-PLOT

[KLF]

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Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-3** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Recovery (NR=No Recovery) Plasticity Index (NP=No Plasticity) Passing #200 Sieve (%) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. (pg Liquid Limit (NV=No Value) Latitude: 47.67018° N Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Longitude: 122.1992° W Water Content (%) Depth (feet) Dry Density (blows/ft) Approximate Surface Elevation (ft): 162.0 USCS Symbol ▲ Water Content Plot Surface Condition: Grass (%) 1(17 20 30 Glaciolacustrine 18' 26.9 25 NP 26.9 SILT (ML): low plasticity fines, bluish gray, moist, firm 10 to hard, trace fine sand, few fine sand lenses up to PP=3.5-4 130 $\overline{\Delta}$ 35 - Some soft wet zones encountered at 35 feet bgs. 18' 10 PP=3.5-4 125 **BORING WITH N-PLOT** 40 BC=6 18' 13 FLF 120 GINT_LIBRARY_SR.1.GLB 45 BC=7 18' 20 115 STANDARD R:KLF 50 BC=8 18' 36 .gpj **Glacial Outwash** Silty SAND (SM): gray, wet, very dense, fine to Logs. 110 GROUNDWATER LEVEL INFORMATION: medium sand. Boring L Perched groundwater was observed at approximately 4 ft. below ground surface during drilling. The exploration was terminated at approximately 51.5 Groundwater was observed at approximately 35 ft. below ground U:\1projects\130525 Google Campus Expansion\logs\google ft. below ground surface. The exploration was surface during drilling. Groundwater was observed at approximately 49 ft. below ground backfilled with bentonite on November 07, 2012. surface at the end of drilling. 55 **GENERAL NOTES:** The exploration location and elevation are approximate and were estimated by Kleinfelder. A Garmin 76CSx GPS unit was used to locate the exploration with 105 an accuracy of 20 feet. **PLATE** PROJECT NO.: 130525 **BORING LOG B-3** DRAWN BY: CLL CHECKED BY: **RDL** .EINFELDER Google Campus Expansion 5th St S & 7th Ave S . FILE: Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

Date Begin - End: 11/8/12 **Drill Company:** Boretec **BORING LOG B-4** Logged By: C. Leibli **Drill Crew:** Jim Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 40's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Liquid Limit (NV=No Value) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Passing #200 Sieve (%) Latitude: 47.66922° N Longitude: 122.19977° W Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 151.0 USCS Symbol Water Content Plot Surface Condition: Brush (%) 20 30 40 Topsoil: 6 to 8 inches dark brown organic topsoil. **Weathered Glacial Till** -150 Silty SAND with Gravel (SM): medium brown, moist, medium dense, iron-oxide staining, fine to medium sand, subrounded fine gravel. BC=9 12" 12 -145 10 18' Glaciolacustrine 10 SILT (ML): low plasticity fines, bluish gray, moist, firm 140 to hard, trace fine sand, common parting laminations. PP=>4.5 15 BC=15 17 18" 135 30 32 20 18' 130 19 $\underline{\mathbb{Y}}_{25}$ 18" - Becomes gray at 25 feet bgs. 12 16 125 **PLATE** PROJECT NO.: 130525 **BORING LOG B-4** DRAWN BY: CLL CHECKED BY: **RDL** A-5 EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

[KLF_BORING WITH N-PLOT]

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Date Begin - End: 11/8/12 **Drill Company:** Boretec **BORING LOG B-4** Logged By: C. Leibli **Drill Crew:** Jim Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 40's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Liquid Limit (NV=No Value) Passing #200 Sieve (%) Blow Counts(BC)= Uncorr. blows/6 in. (pg Approximate Elevation (feet) Latitude: 47.66922° N Longitude: 122.19977° W Graphical Log Pocket Pen(PP)= Passing No.4 Sieve (%) Uncorrected N-VALUE Sample Type Depth (feet) Content (%) Dry Density ((blows/ft) Approximate Surface Elevation (ft): 151.0 USCS Symbol Water Content Plot Water Surface Condition: Brush (%) 40 20 320 Glaciolacustrine 18' SILT (ML): low plasticity fines, bluish gray, moist, firm -120 18 to hard, trace fine sand, common parting laminations. BC=9 ∇ 18' 13 -115 40 BC=32 12' 36 50/4" 110 PP=1-1.5 [KLF] Glacial Outwash GRAVEL with Silt And Sand (GP-GM): gray, wet, very STANDARD_GINT_LIBRARY_SR.1.GLB dense, medium to coarse sand, subangular to subrounded fine gravel, common interbedded silt and sand layers up to 6 inches thick. 50 BC=15 12' 105 42 50 50 BC=50/6" 6" 100 GROUNDWATER LEVEL INFORMATION:
Groundwater was observed at approximately 35.5 ft. below ground surface during drilling.
Groundwater was observed at approximately 25 ft. below ground U:\1projects\130525 Google Campus Expansion\logs\google Boring Logs.gpj The exploration was terminated at approximately 50.5 ft. below ground surface. The exploration was backfilled with bentonite on November 08, 2012. surface 30 minutes after drilling completion. **GENERAL NOTES:** The exploration location and elevation are approximate and were estimated by Kleinfelder A Garmin 76CSx GPS unit was used to locate the exploration with 55 an accuracy of 20 feet. -95 **PLATE** PROJECT NO.: 130525 **BORING LOG B-4** DRAWN BY: CLL CHECKED BY: **RDL** .EINFELDER Google Campus Expansion 5th St S & 7th Ave S . FILE: Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

BORING WITH N-PLOT

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Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-5** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Liquid Limit (NV=No Value) Passing #200 Sieve (%) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf, Latitude: 47.66958° N Longitude: 122.19913° W Passing No.4 Sieve (%) Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 162.5 USCS Symbol Water Content Plot Surface Condition: Asphalt (%) 20 30 40 Asphalt: 2 inches asphalt. Fill Clayey GRAVEL with Sand (GC): medium brown with gray mottling, moist, medium dense, subangular to -160 subrounded gravel up to 1 inch. Silty SAND (SM): black to brown, moist to wet, loose, some subangular fine gravel, some glass and asphalt BC=5 18' 4 <u>Glaciolacustrine</u> 155 SILT (ML): low plasticity fines, bluish gray, moist, firm, trace fine sand, common parting laminations. 10 BC=22 31 21 10' -150 BC=14 18' 20 145 Glaciolacustrine Silty SAND (SM): gray, wet, very dense, fine sand, some zones of sandy silt. 20 BC=19 18' 21 29 140 Glaciolacustrine SILT (ML): low plasticity fines, gray, moist, firm to hard, trace fine sand. 25 18' PP=3.5 135 **PLATE** PROJECT NO.: 130525 **BORING LOG B-5** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

BORING WITH N-PLOT

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Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-5** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) Recovery (NR=No Recovery) Passing #200 Sieve (%) Approximate Elevation (feet) Latitude: 47.66958° N Longitude: 122.19913° W Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Liquid Limit (NV=No Value) Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 162.5 USCS Symbol ▲ Water Content Plot Surface Condition: Asphalt (%) 10 18 20 30 Glaciolacustrine 18' 27.9 25 NP 8 SILT (ML): low plasticity fines, gray, moist, firm to 10 hard, trace fine sand. PP=3-3.5 130 $\overline{\Delta}$ 35 - Some wet soft zones encountered below 35 feet bgs. 18" 10 125 **BORING WITH N-PLOT** 40 BC=7 18' 13 PP=3.5 IKLF -120 GINT_LIBRARY_SR.1.GLB 45 BC=7 15 STANDARD 115 R:KLF 50 BC=9 50/5 -ogs.gpj <u>GROUNDWATER LEVEL INFORMATION:</u>
Perched groundwater was observed at approximately 8 ft. below ground surface during drilling. The exploration was terminated at approximately 51.4 110 U:\1projects\130525 Google Campus Expansion\logs\google Boring I ft. below ground surface. The exploration was backfilled with bentonite on November 07, 2012. Groundwater was observed at approximately 35 ft. below ground surface during drilling. **GENERAL NOTES:** The exploration location and elevation are approximate and were 55 estimated by Kleinfelder A Garmin 76CSx GPS unit was used to locate the exploration with an accuracy of 20 feet. 105 **PLATE** PROJECT NO.: 130525 **BORING LOG B-5** DRAWN BY: CLL CHECKED BY: **RDL** A-6 EINFELDER Google Campus Expansion 5th St S & 7th Ave S . FILE: Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

Date Begin - End: Boretec 11/7/12 **Drill Company: BORING LOG B-6** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D FIELD EXPLORATION LABORATORY RESULTS Recovery (NR=No Recovery) Plasticity Index (NP=No Plasticity) Liquid Limit (NV=No Value) Passing #200 Sieve (%) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Latitude: 47.66933° N Longitude: 122.19859° W Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 166.0 USCS Symbol ▲ Water Content Plot Surface Condition: Brush (%) 20 30 40 <u>Fill</u> Clayey SAND (SC): medium brown, moist to wet, -165 loose, fine to medium sand, some subangular fine gravel, trace organics. BC=3 12" 2 -160 ∇ Weathered Glacial Till Silty SAND (SM): bluish gray with some orange mottling, moist, medium dense, fine to medium sand, 10 BC=8 18' some subrounded fine gravel. 15 -155 PP=>4.5 Glaciolacustrine SILT (ML): low plasticity fines, gray, moist, firm to hard, trace fine sand, few fine sand lenses up to 1/16" 15 BC=6 18' 150 13 31 20 18' 145 18 22 25 18" 9 13 140 **PLATE** PROJECT NO.: 130525 **BORING LOG B-6** DRAWN BY: CLL CHECKED BY: **RDL** A-7 *EINFELDER* Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

[KLF_BORING WITH N-PLOT]

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Date Begin - End: 11/7/12 **Drill Company:** Boretec **BORING LOG B-6** Logged By: C. Leibli **Drill Crew:** Bob Hor.-Vert. Datum: NAVD88 - WGS84 **Drill Equipment:** EC-55 Track Drill Hammer Type - Drop: 140 lb. Cathead - 30 in. Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 50's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) , Recovery) Liquid Limit (NV=No Value) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. <u>ල</u> Latitude: 47.66933° N Graphical Log Pocket Pen(PP)= Passing No.4 Sieve (%) Uncorrected N-VALUE Sample Type Passing #200 Sieve (* Longitude: 122.19859° W Water Content (%) Depth (feet) Dry Density ((blows/ft) Approximate Surface Elevation (ft): 166.0 Recovery (NR=No R USCS Symbol ▲ Water Content Plot Surface Condition: Brush (%) 10 18 20 40 30 Glaciolacustrine 18' SILT (ML): low plasticity fines, gray, moist, firm to -135 hard, trace fine sand, few fine sand lenses up to 1/16" PP=3 - Some wet zones encountered below 30 feet bgs. 35 BC=7 18' -130 PP=3.5 **BORING WITH N-PLOT** Glacial Outwash Silty SAND (SM): gray, wet, very dense, fine to medium sand, some subangular fine gravel. 40 BC=13 8" 36 125 쥐 STANDARD_GINT_LIBRARY_SR.1.GLB Glacial Outwash Well-Graded SAND (SW): white and gray, wet, very dense, fine to medium sand. 50 BC=10 16' 50/4" 120 **Glacial Outwash** Silty SAND (SM): gray, wet, very dense, fine to medium sand, some subangular fine gravel. 50 R:KLF 50 BC=50/4 3" 115 $\begin{tabular}{ll} \cong $GROUNDWATER LEVEL INFORMATION: \\ \cong Perched groundwater was observed at approximately 8 ft. below \\ \end{tabular}$ The exploration was terminated at approximately 50.3 Logs.gpj ft. below ground surface. The exploration was ground surface during drilling. backfilled with bentonite on November 07, 2012. Groundwater was observed at approximately 30 ft. below ground Boring surface during drilling. Groundwater was observed at approximately 23 ft. below ground surface at the end of drilling. U:\1projects\130525 Google Campus Expansion\logs\google **GENERAL NOTES:** The exploration location and elevation are approximate and were 55 estimated by Kleinfelder A Garmin 76CSx GPS unit was used to locate the exploration with 110 an accuracy of 20 feet. **PLATE** PROJECT NO.: 130525 **BORING LOG B-6** DRAWN BY: CLL CHECKED BY: **RDL** A-7 .EINFELDER Google Campus Expansion 5th St S & 7th Ave S FILE Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

Date Begin - End: 11/8/12 **Drill Company:** Boretec **BORING LOG B-7** Logged By: C. Leibli **Drill Crew:** Jim Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 40's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D FIELD EXPLORATION LABORATORY RESULTS Recovery (NR=No Recovery) Plasticity Index (NP=No Plasticity) Passing #200 Sieve (%) Liquid Limit (NV=No Value) Approximate Elevation (feet) Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Latitude: 47.66838° N Longitude: 122.19949° W Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 156.0 USCS Symbol Water Content Plot Surface Condition: Brush (%) 20 30 40 Topsoil: 6 to 12 inches dark brown organic topsoil. -155 Glaciolacustrine SILT with Sand (ML): low plasticity fines, medium brown wth gray mottling, moist, firm to hard, iron-oxide staining, fine to medium sand. 46 18" 22 24 -150 **Glaciolacustrine** SILT (ML): low plasticity fines, gray, moist, firm to hard, trace fine sand. 10 BC=10 18' 15 -₁₄₅ <u>Y</u> 26 15 BC=5 18' 140 20 BC=10 18' 17 135 $\bar{\Delta}$ 25 - Some wet fine sand lenses up to 1/16 inch thick 12 20 encountered below 25 feet. 130 **PLATE** PROJECT NO.: 130525 **BORING LOG B-7** DRAWN BY: CLL CHECKED BY: **RDL** A-8 EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

[KLF_BORING WITH N-PLOT]

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Date Begin - End: 11/8/12 **Drill Company:** Boretec **BORING LOG B-7** Logged By: C. Leibli **Drill Crew:** Jim Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 40's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) (Recovery Passing #200 Sieve (%) Liquid Limit (NV=No Value) Approximate Elevation (feet) Latitude: 47.66838° N Longitude: 122.19949° W Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf, Graphical Log Pocket Pen(PP)= Passing No.4 Sieve (%) Uncorrected N-VALUE Sample Type Water Content (%) Depth (feet) (blows/ft) Approximate Surface Elevation (ft): 156.0 USCS Symbol Water Content Plot Surface Condition: Brush (%) 20 30 40 50 8" **Glacial Outwash** 50/2' Silty SAND with Gravel (SM): gray, wet, very dense, -125 fine to coarse sand, subrounded gravel up to 1 inch, common interbedded silty gravel with sand and silt layers 1 to 12 inches thick. 50 35 BC=31 17 26 50/5" 120 **BORING WITH N-PLOT** 40 BC=50/5 5' 115 [KLF] STANDARD_GINT_LIBRARY_SR.1.GLB 50 45 BC=50/6" 6" 110 50 R:KLF 50 BC=50/6' 105 GROUNDWATER LEVEL INFORMATION:
Groundwater was observed at approximately 25 ft. below ground surface during drilling.
Groundwater was observed at approximately 11 ft. below ground U:\1projects\130525 Google Campus Expansion\logs\google Boring Logs.gpj The exploration was terminated at approximately 50.5 ft. below ground surface. The exploration was backfilled with bentonite on November 08, 2012. surface 2 hours after drilling completion. **GENERAL NOTES:** The exploration location and elevation are approximate and were estimated by Kleinfelder A Garmin 76CSx GPS unit was used to locate the exploration with 55 an accuracy of 20 feet. 100 **PLATE** PROJECT NO.: 130525 **BORING LOG B-7** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S . FILE: Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

Date Begin - End: 11/8/12 **Drill Company:** Boretec **BORING LOG B-8** Logged By: C. Leibli **Drill Crew:** Jim Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 40's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D FIELD EXPLORATION LABORATORY RESULTS Recovery (NR=No Recovery) Plasticity Index (NP=No Plasticity) Liquid Limit (NV=No Value) Passing #200 Sieve (%) Blow Counts(BC)= Uncorr. blows/6 in. Dry Density (pcf) Latitude: 47.66857° N Longitude: 122.19906° W Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Depth (feet) Sample Type Water Content (%) (blows/ft) Approximate Surface Elevation (ft): 165.0 USCS Symbol ▲ Water Content Plot Surface Condition: Brush (%) 20 30 40 Topsoil: 6 to 12 inches dark brown organic topsoil. Glaciolacustrine SILT with Sand (ML): low plasticity fines, medium brown wth gray mottling, moist, firm to hard, iron-oxide staining, fine to medium sand. 50 160 BC=26 28 3" Glaciolacustrine SILT (ML): low plasticity fines, gray, moist, firm to hard, trace fine sand, common parting laminations. 155 10 BC=7 18" PP=4->4.5 40 150 15 BC=11 18' 26 39 145 20 18' 23 - 3 inch thick soft wet zone encountered at 21 feet bgs. 35 25 140 BC=7 12' ∇ Glacial Outwash Poorly-Graded SAND with Silt And Gravel (SP-SM): gray, wet, very dense, fine to coarse sand, subrounded gravel up to 1 inch, common interbedded silty gravel with sand and silt layers 1 to 12 inches thick. **PLATE** PROJECT NO.: 130525 **BORING LOG B-8** DRAWN BY: CLL CHECKED BY: **RDL** EINFELDER Google Campus Expansion 5th St S & 7th Ave S Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 1 of 2

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Date Begin - End: 11/8/12 **Drill Company:** Boretec **BORING LOG B-8** Logged By: C. Leibli **Drill Crew:** Jim Hor.-Vert. Datum: NAVD88 - WGS84 Hammer Type - Drop: 140 lb. Cathead - 30 in. **Drill Equipment:** EC-55 Track Drill Angle from Vert.: 0 degrees Exploration Method: Hollow Stem Auger Weather: Partly Cloudy, Calm, 40's Bit - Auger Diameter: 8 in. O.D. - 6 in. O.D. FIELD EXPLORATION LABORATORY RESULTS Plasticity Index (NP=No Plasticity) (Recovery Liquid Limit (NV=No Value) Passing #200 Sieve (%) v Counts(BC)= orr. blows/6 in. Approximate Elevation (feet) (pg Latitude: 47.66857° N Passing No.4 Sieve (%) Graphical Log Pocket Pen(PP)= Uncorrected N-VALUE Sample Type Longitude: 122.19906° W Water Content (%) Depth (feet) Dry Density ((blows/ft) Approximate Surface Elevation (ft): 165.0 Recovery (NR=No R USCS Symbol Water Content Plot Surface Condition: Brush Uncorr. (%) Blow 20 40 50 10 30 18' SM 13.8 82 13 **Glacial Outwash** 13.8 21 46 Poorly-Graded SAND with Silt And Gravel (SP-SM): gray, wet, very dense, fine to coarse sand, subrounded gravel up to 1 inch, common interbedded silty gravel with sand and silt layers 1 to 12 inches thick. 50 130 35 BC=29 17 30 50/5" 125 40 BC=25 11' 50/5' STANDARD_GINT_LIBRARY_SR.1.GLB 50 120 45 BC=34 10' 50 115 50 BC=50/6" 6" SAMPLE BOTTOM IS GROUNDWATER LEVEL INFORMATION:
Groundwater was observed at approximately 26 ft. below ground Logs.gpj The exploration was terminated at approximately 50.5 **GREATER THAN THE** ft. below ground surface. The exploration was **TOTAL HOLE DEPTH!** surface during drilling.

Artesian groundwater was observed at approximately 0 ft. below backfilled with bentonite on November 08, 2012. Boring ground surface 2 hours after drilling completion. GENERAL NOTES: U:\1projects\130525 Google Campus Expansion\logs\google The exploration location and elevation are approximate and were estimated by Kleinfelder A Garmin 76CSx GPS unit was used to locate the exploration with 110 55 an accuracy of 20 feet. **PLATE** PROJECT NO.: 130525 **BORING LOG B-8** DRAWN BY: CLL CHECKED BY: **RDL** .EINFELDER Google Campus Expansion 5th St S & 7th Ave S . FILE: Bright People. Right Solutions. DATE: 11/16/2012 Kirkland, WA REVISED: 11/16/2012 PAGE: 2 of 2

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Du	plicate Sample	e No.	Time	Volume	1	A	nalyses	egantes mine escale es partir de la companya de la	Bottle Type	Preservative
			o de la companya de l	-	Park Service					

Analyses **Bottle Type** Preservative Field Blank Sample No. Time Volume



Pump rate: approximately 1000 mL/miriute

*// 3 89/4	ES Environm			Page: 1 of 7 Date/Time: 4/11/13		
	neering & Environme ER SAMPLING F	- mP	Project Name: Former Pace National Job No: 1006.008.01 Recorded By: L Doedy			
Well Type: Well Waterial:	Monitoring PVC	☐ Extraction ☐ Stainless Steat	Other	Sampled By: L Deedy Well No:		
PURGE VOLUME Gasing Diameter (D i	ما قال فلط بالما المحدود في المحدود والمحدود والمحدود والمحدود والمحدود والمحدود والمحدود والمحدود والمحدود وا المحدود والمحدود والم	WELL PURCING M PURCING M D Ballet - ty	ETHÓD			
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Notes: let Well RecHArge Alles Rurg Belore Collecting SAMPL WELL SAMPLING DTW 001529								_		00

□ Bottoffi

Depth in test (BTOC):

Screen Interval feet (BTOC) from

☐ Bailer Peristalic Sample No. Bottle Type Time Volume Analyses Preservative

QUALITY CONTROL SAMPLES

	Duplicaté Sample No.	Time	Volume	Analyses	Bottle Type	Preservative
					er er	
	: Field Blank Sample No.	Time	Volume	- Analyses	Sottle Type	Presama liya
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/ell fÿr	262.	4	vionitoring	ПЕхі	raction		Cother	Well No:
lell Ma			PVC	☐ Stainless Steel ☐ Other] Other	GY-30	
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mp rate	э. арунохип	activ <u>- W</u>	#118m/1(111)	and a Nati	Screen in	iterval fee	et (BTOC)	from 5 to 15
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S ne	Gallons Removed	pН	Conductivity (µmhes/cm)	Temperature (°C)	DTW (feet bgs)	ORP	00	Observations (color, well condition, odo cloudiness, etc.)
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Preservative > Bottle Type Analyses Volume Duplicate Sample No. Time Preservative Bottle Type Analyses Field Stank Sample No. Time Volume



PES Environmental, Inc.

· Indicated	Page: of						
Becameras Communica Communicación	Date/Time: 4/10/12						
	Project Name: Former Pace National						
	Job No: 1006.008.01						
200	Recorded By: L Doody						
a de la constantina della cons	Sampled By: L Doody						
9)	Well No:						
er	GP-31						
***************************************	and the country was a second suppression and second						

GROUNDWATER SAMPLING FORM TEMP Recorded By: L Doody Sampled By: L Doody Well Type: Monitoring Extraction Other Well No:	
TEM Sampled By: L Doody	DATE ACTIVATION OF THE PERSON NO. AND ASSESSMENT ASSESSMENT ASSESSMENT OF THE PERSON NO. AND ASSESSMENT OF THE PERSON NO. ASSESSMENT OF THE PERSON
Well Type:	Albertania al minos agrapassion
Well Maderhal: ☐ FVC ☐ Stainless Steel ☐ Other ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
WELL PUKGING	
PURGE VOLUME PURGING METHOD	
Casing Diameter (D in inches)	
□ 2-inch □ 4-inch □ 6-inch □ Other 1.5 □ Submersible □ Centrifugal □ Bladder	Å
Total Depth of Casing (TD in feet below top of casing): 5	
Water-Level Depth (WL in feet below top of casing) <u>PUMP INTAKE SETTING</u> ☐ Bofforn ☐ Top Ø Middle	
Pump rate: approximately 120 mL/minute 3,10 Depth in feet (BTOC): 10	
Screen interval feet (BTOC) from 5 to 15	
FIELD PARAMETER MEASUREMENTS	
	TO THE PARTY OF TH
START TIME: 1338 STOP TIME: TOTAL GALLONS REMOVED:	
Time Gallons pH Conductivity Temperature DTW (feet ORP DO Observations (color, well condition, or	lor,
Removed (#minos/cm) (°C) bgs) CR7 DO cloudiness, etc.)	
1338 let well lorge by 17 monutes to clear sedorent Before	and the second
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	erest a erantistraer office each.
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Semple Nb. Time Volume Analyses Bottle Type Preser	vative
Gl-21-1 1405	
L. G. S. Lander Land T. Land Land Land Report Land	www.www.eneroes
QUALITY CONTROL SAMPLES	

Duplicate Sample No. Volume Analyses Bottle Type Preservative Field Blank Sample No. Time Volume Analyses Preservative

Chain of Custody Record		# 1.	A A	, A & A & A & A & A & A & A & A & A & A	Project No: 1006_00.00			Commission	茶	SAN XI F. B.					· *	-63	, T		Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti ŤI U V Zn	AT	Special Remarks: // / / / / / / / / / / / / / / / / /	FISS V V VEST A.	いるようないできません	N EN	10 10 10 10 10 10 10 10 10 10 10 10 10 1	www.fremontanalytical.com
5	Laboratory Project No (internal):	age d	CONC. Location: KRKKA	524 4460 Collected by: LDOON	ONE CON & BOSHOW. COM	0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100 100 100	100 100 000 100 100 100 100 100 100 100					· *	·×			×	, yž	Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni	O-Phosphate Fluoride Nitrate+Nitrite	e may be assessed if samples are retained after 30 days.)	Received Date/Time	eivēd pate/Time			
FERMONT	3600 Fremont Ave N. Tel: 206-352-3790 Senttle WA 98103 Env: 206-353-7178	X	S. Tale 4th Alle	Tel: 7	Reports To (PM): Kelly Kell fax:			Sample Name Jate Time (Matrix)	12/23/V 410 145 WR	2 (10-30-W His 15w -	3 CTP- 28-W 4/10 1520	4 CID-32-W 4IN 1200 1	5 CM. 26 -W 4/12 1350 1	1 0th 11th M- 12-000 0	1 66 34 - W HII 1530 -	8 COBANNAM SO	· O 21.6	10	*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL	**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide	Sample Disposal: (A fee may be assessed	Relinquished Date/Time	elinquished	×		Distribution: White - Lab, Yellow - File, Pink - Originator



3600 Fremont Ave. N.
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 Lab ID: 1304102

April 18, 2013

Attention Kelly Rankich:

Fremont Analytical, Inc. received 19 sample(s) on 4/12/2013 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Gasoline by NWTPH-Gx

Mercury by EPA Method 7471

Sample Moisture (Percent Moisture)

Total Metals by EPA Method 6020

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,

MGR

Michael Dee

Sr. Chemist / Principal

Date: 04/18/2013



CLIENT: PES Environmental, Inc. Work Order Sample Summary

Project: Former Pace **Lab Order:** 1304102

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1304102-001	GP-31-5	04/10/2013 9:30 AM	04/12/2013 1:11 PM
1304102-002	GP-31-9	04/10/2013 9:50 AM	04/12/2013 1:11 PM
1304102-003	GP-30-3	04/10/2013 10:50 AM	04/12/2013 1:11 PM
1304102-004	GP-30-8	04/10/2013 11:00 AM	04/12/2013 1:11 PM
1304102-005	GP-28-3	04/10/2013 12:00 AM	04/12/2013 1:11 PM
1304102-006	GP-28-14	04/10/2013 12:00 AM	04/12/2013 1:11 PM
1304102-007	GP-28-22	04/10/2013 1:00 PM	04/12/2013 1:11 PM
1304102-008	GP-32-20	04/10/2013 12:00 AM	04/12/2013 1:11 PM
1304102-009	GP-27-2	04/11/2013 10:10 AM	04/12/2013 1:11 PM
1304102-010	GP-27-5	04/11/2013 10:20 AM	04/12/2013 1:11 PM
1304102-011	GP-27-14.5	04/11/2013 10:50 AM	04/12/2013 1:11 PM
1304102-012	GP-26-2	04/11/2013 11:20 AM	04/12/2013 1:11 PM
1304102-013	GP-26-6	04/11/2013 11:30 AM	04/12/2013 1:11 PM
1304102-014	GP-26-17	04/11/2013 12:00 PM	04/12/2013 1:11 PM
1304102-015	GP-29-3	04/11/2013 12:10 PM	04/12/2013 1:11 PM
1304102-016	GP-29-5	04/11/2013 12:30 PM	04/12/2013 1:11 PM
1304102-017	GP-29-15	04/11/2013 12:40 PM	04/12/2013 1:11 PM
1304102-018	Soil Comp	04/11/2013 4:30 PM	04/12/2013 1:11 PM
1304102-019	Trip Blank	04/12/2013 12:00 AM	04/12/2013 1:11 PM



Case Narrative

WO#: **1304102**Date: **4/18/2013**

CLIENT: PES Environmental, Inc.

Project: Former Pace

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

Prep Comments for METHOD (PREP-DX-S): Silica Gel Cleanup Procedure performed as requested.

Prep Comments for PREP-DX-S, Sample 1304102-010B: High Moisture Content



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:30:00 AM

Project: Former Pace

Lab ID: 1304102-001 **Matrix:** Soil

Client Sample ID: GP-31-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 44	33 Analyst: BR
Diesel (Fuel Oil)	ND	19.3		mg/Kg-dry	1	4/15/2013 6:37:00 PM
Heavy Oil	ND	48.1		mg/Kg-dry	1	4/15/2013 6:37:00 PM
Surr: 2-Fluorobiphenyl	119	50-150		%REC	1	4/15/2013 6:37:00 PM
Surr: o-Terphenyl	122	50-150		%REC	1	4/15/2013 6:37:00 PM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	4.49		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Surr: 1,2-Dichloroethane-d4	99.5	65-135		%REC	1	4/16/2013 11:50:00 AM
Surr: Fluorobenzene	100	65-135		%REC	1	4/16/2013 11:50:00 AM
Volatile Organic Compounds by	/ EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0538		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Chloromethane	ND	0.0538		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Vinyl chloride	ND	0.00179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Bromomethane	ND	0.0808		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0449		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Chloroethane	ND	0.0538		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,1-Dichloroethene	ND	0.0449		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Methylene chloride	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
trans-1,2-Dichloroethene	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0449		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,1-Dichloroethane	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
2,2-Dichloropropane	ND	0.0449		mg/Kg-dry	1	4/16/2013 11:50:00 AM
cis-1,2-Dichloroethene	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Chloroform	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,1-Dichloropropene	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Carbon tetrachloride	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,2-Dichloroethane (EDC)	ND	0.0269		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Benzene	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Trichloroethene (TCE)	ND	0.0269		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,2-Dichloropropane	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Bromodichloromethane	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:30:00 AM

Project: Former Pace

Lab ID: 1304102-001 **Matrix**: Soil

Client Sample ID: GP-31-5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 11:50:00 AM 0.0359 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM Toluene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 0.0269 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,1,2-Trichloroethane ND 0.0269 4/16/2013 11:50:00 AM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0449 mg/Kg-dry 1 4/16/2013 11:50:00 AM Tetrachloroethene (PCE) ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM Dibromochloromethane ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2-Dibromoethane (EDB) ND 0.00449 mg/Kg-dry 1 4/16/2013 11:50:00 AM Chlorobenzene ND 4/16/2013 11:50:00 AM 0.0179 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 11:50:00 AM ND 0.0269 mg/Kg-dry 1 Ethylbenzene ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM m,p-Xylene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM o-Xylene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM ND 0.0179 1 4/16/2013 11:50:00 AM Styrene mg/Kg-dry Isopropylbenzene ND 0.0718 mg/Kg-dry 1 4/16/2013 11:50:00 AM Bromoform ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,1,2,2-Tetrachloroethane ND 0.0179 4/16/2013 11:50:00 AM mg/Kg-dry 1 ND 4/16/2013 11:50:00 AM n-Propylbenzene 0.0179 mg/Kg-dry 1 ND Bromobenzene 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,3,5-Trimethylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 2-Chlorotoluene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM ND 4-Chlorotoluene 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM tert-Butylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2,3-Trichloropropane ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2,4-Trichlorobenzene ND 4/16/2013 11:50:00 AM 0.0449 mg/Kg-dry 1 sec-Butylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 4-Isopropyltoluene ND 0.0179 1 4/16/2013 11:50:00 AM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0179 1 4/16/2013 11:50:00 AM mg/Kg-dry ND 4/16/2013 11:50:00 AM 1,4-Dichlorobenzene 0.0179 mg/Kg-dry 1 ND n-Butylbenzene 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2-Dichlorobenzene ND 1 4/16/2013 11:50:00 AM 0.0179 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2,4-Trimethylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM Hexachlorobutadiene ND 0.0897 mg/Kg-dry 4/16/2013 11:50:00 AM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:30:00 AM

Project: Former Pace

Lab ID: 1304102-001 **Matrix:** Soil

Client Sample ID: GP-31-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	436 Analyst: EM
Naphthalene	ND	0.0269		mg/Kg-dry	1	4/16/2013 11:50:00 AM
1,2,3-Trichlorobenzene	ND	0.0179		mg/Kg-dry	1	4/16/2013 11:50:00 AM
Surr: Dibromofluoromethane	97.3	67.6-119		%REC	1	4/16/2013 11:50:00 AM
Surr: Toluene-d8	97.0	67-139		%REC	1	4/16/2013 11:50:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.8	63.1-141		%REC	1	4/16/2013 11:50:00 AM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R	8181 Analyst: JS
Percent Moisture	6.27			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:50:00 AM

Project: Former Pace

Lab ID: 1304102-002 **Matrix:** Soil

Client Sample ID: GP-31-9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batcl	n ID: 443	3 Analyst: BR
Discol (Fuel Oil)	ND	00.0			4	4/45/0040 7:04:00 DM
Diesel (Fuel Oil)	ND	23.9		mg/Kg-dry	1	4/15/2013 7:34:00 PM
Heavy Oil	ND	59.8		mg/Kg-dry	1	4/15/2013 7:34:00 PM
Surr: 2-Fluorobiphenyl	116	50-150 50-150		%REC %REC	1 1	4/15/2013 7:34:00 PM
Surr: o-Terphenyl	121	50-150		%REC	1	4/15/2013 7:34:00 PM
Gasoline by NWTPH-Gx				Batcl	n ID: R81	78 Analyst: EM
Gasoline	ND	3.74		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Surr: 1,2-Dichloroethane-d4	100	65-135		%REC	1	4/16/2013 12:18:00 PM
Surr: Fluorobenzene	99.3	65-135		%REC	1	4/16/2013 12:18:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batcl	n ID: 443	6 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0449		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Chloromethane	ND	0.0449		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Vinyl chloride	ND	0.00150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Bromomethane	ND	0.0673		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0374		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Chloroethane	ND	0.0449		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,1-Dichloroethene	ND	0.0374		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Methylene chloride	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
trans-1,2-Dichloroethene	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0374		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,1-Dichloroethane	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
2,2-Dichloropropane	ND	0.0374		mg/Kg-dry	1	4/16/2013 12:18:00 PM
cis-1,2-Dichloroethene	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Chloroform	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,1-Dichloropropene	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Carbon tetrachloride	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,2-Dichloroethane (EDC)	ND	0.0224		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Benzene	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Trichloroethene (TCE)	ND	0.0224		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,2-Dichloropropane	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Bromodichloromethane	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:50:00 AM

Project: Former Pace

Lab ID: 1304102-002 **Matrix**: Soil

Client Sample ID: GP-31-9

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 12:18:00 PM 0.0299 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Toluene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM trans-1,3-Dichloropropylene ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,1,2-Trichloroethane ND 0.0224 4/16/2013 12:18:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0374 mg/Kg-dry 1 4/16/2013 12:18:00 PM Tetrachloroethene (PCE) ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Dibromochloromethane ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2-Dibromoethane (EDB) ND 0.00374 mg/Kg-dry 1 4/16/2013 12:18:00 PM Chlorobenzene ND 4/16/2013 12:18:00 PM 0.0150 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 12:18:00 PM ND 0.0224 mg/Kg-dry 1 Ethylbenzene ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM m,p-Xylene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM o-Xylene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM ND 0.0150 1 4/16/2013 12:18:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0598 mg/Kg-dry 1 4/16/2013 12:18:00 PM Bromoform ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,1,2,2-Tetrachloroethane ND 0.0150 4/16/2013 12:18:00 PM mg/Kg-dry 1 ND 4/16/2013 12:18:00 PM n-Propylbenzene 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Bromobenzene ND 0.0224 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 2-Chlorotoluene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM ND 4/16/2013 12:18:00 PM 4-Chlorotoluene 0.0150 mg/Kg-dry 1 tert-Butylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2,3-Trichloropropane ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 0.0374 1,2,4-Trichlorobenzene ND 4/16/2013 12:18:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 4-Isopropyltoluene ND 0.0150 1 4/16/2013 12:18:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0150 1 4/16/2013 12:18:00 PM mg/Kg-dry ND 4/16/2013 12:18:00 PM 1,4-Dichlorobenzene 0.0150 mg/Kg-dry 1 ND n-Butylbenzene 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 12:18:00 PM 0.0150 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2,4-Trimethylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Hexachlorobutadiene ND 0.0748 mg/Kg-dry 4/16/2013 12:18:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:50:00 AM

Project: Former Pace

Lab ID: 1304102-002 **Matrix:** Soil

Client Sample ID: GP-31-9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	.36 Analyst: EM
Naphthalene	ND	0.0224		mg/Kg-dry	1	4/16/2013 12:18:00 PM
1,2,3-Trichlorobenzene	ND	0.0150		mg/Kg-dry	1	4/16/2013 12:18:00 PM
Surr: Dibromofluoromethane	98.0	67.6-119		%REC	1	4/16/2013 12:18:00 PM
Surr: Toluene-d8	97.9	67-139		%REC	1	4/16/2013 12:18:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.9	63.1-141		%REC	1	4/16/2013 12:18:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R	3181 Analyst: JS
Percent Moisture	20.3			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-003 **Matrix:** Soil

Client Sample ID: GP-30-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 443	3 Analyst: BR
Diesel (Fuel Oil)	ND	20.9		mg/Kg-dry	1	4/15/2013 8:01:00 PM
Heavy Oil	ND	52.3		mg/Kg-dry	1	4/15/2013 8:01:00 PM
Surr: 2-Fluorobiphenyl	113	50-150		%REC	1	4/15/2013 8:01:00 PM
Surr: o-Terphenyl	115	50-150		%REC	1	4/15/2013 8:01:00 PM
Gasoline by NWTPH-Gx				Batch	n ID: R81	78 Analyst: EM
Gasoline	ND	3.19		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Surr: 1,2-Dichloroethane-d4	98.0	65-135		%REC	1	4/16/2013 12:47:00 PM
Surr: Fluorobenzene	99.5	65-135		%REC	1	4/16/2013 12:47:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	n ID: 443	6 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0383		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Chloromethane	ND	0.0383		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Vinyl chloride	ND	0.00128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Bromomethane	ND	0.0575		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0319		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Chloroethane	ND	0.0383		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,1-Dichloroethene	ND	0.0319		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Methylene chloride	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
trans-1,2-Dichloroethene	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0319		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,1-Dichloroethane	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
2,2-Dichloropropane	ND	0.0319		mg/Kg-dry	1	4/16/2013 12:47:00 PM
cis-1,2-Dichloroethene	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Chloroform	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,1-Dichloropropene	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Carbon tetrachloride	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,2-Dichloroethane (EDC)	ND	0.0192		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Benzene	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Trichloroethene (TCE)	ND	0.0192		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,2-Dichloropropane	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Bromodichloromethane	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental. Inc. Collection Date: 4/10/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-003 **Matrix:** Soil

Client Sample ID: GP-30-3

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0255 4/16/2013 12:47:00 PM mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Toluene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 0.0192 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,1,2-Trichloroethane ND 0.0192 4/16/2013 12:47:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0319 mg/Kg-dry 1 4/16/2013 12:47:00 PM Tetrachloroethene (PCE) ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Dibromochloromethane ND 0.0192 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2-Dibromoethane (EDB) ND 0.00319 mg/Kg-dry 1 4/16/2013 12:47:00 PM Chlorobenzene ND 4/16/2013 12:47:00 PM 0.0128 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 12:47:00 PM ND 0.0192 mg/Kg-dry 1 Ethylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 12:47:00 PM m,p-Xylene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM o-Xylene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM ND 0.0128 1 4/16/2013 12:47:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0511 mg/Kg-dry 1 4/16/2013 12:47:00 PM Bromoform ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,1,2,2-Tetrachloroethane ND 0.0128 4/16/2013 12:47:00 PM mg/Kg-dry 1 ND 4/16/2013 12:47:00 PM n-Propylbenzene 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Bromobenzene ND 0.0192 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 2-Chlorotoluene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM ND 4-Chlorotoluene 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM tert-Butylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2,3-Trichloropropane ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2,4-Trichlorobenzene ND 0.0319 4/16/2013 12:47:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 4-Isopropyltoluene ND 1 4/16/2013 12:47:00 PM 0.0128 mg/Kg-dry 1,3-Dichlorobenzene ND 0.0128 1 4/16/2013 12:47:00 PM mg/Kg-dry ND 4/16/2013 12:47:00 PM 1,4-Dichlorobenzene 0.0128 mg/Kg-dry 1 ND n-Butylbenzene 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 12:47:00 PM 0.0128 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0192 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2,4-Trimethylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Hexachlorobutadiene ND 0.0639 mg/Kg-dry 4/16/2013 12:47:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-003 **Matrix:** Soil

Client Sample ID: GP-30-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by	y EPA Method	8260		Batch	n ID: 44	36 Analyst: EM
Naphthalene	0.0195	0.0192		mg/Kg-dry	1	4/16/2013 12:47:00 PM
1,2,3-Trichlorobenzene	ND	0.0128		mg/Kg-dry	1	4/16/2013 12:47:00 PM
Surr: Dibromofluoromethane	97.3	67.6-119		%REC	1	4/16/2013 12:47:00 PM
Surr: Toluene-d8	96.1	67-139		%REC	1	4/16/2013 12:47:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.5	63.1-141		%REC	1	4/16/2013 12:47:00 PM
Sample Moisture (Percent Mois	ture)			Batch	ı ID: R	3181 Analyst: JS
Percent Moisture	10.3			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 11:00:00 AM

Project: Former Pace

Lab ID: 1304102-004 **Matrix:** Soil

Client Sample ID: GP-30-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	-Dx/Dx Ext.			Batch	n ID: 44	.33 Analyst: BR
Diesel (Fuel Oil)	38.1	26.6		mg/Kg-dry	1	4/15/2013 8:29:00 PM
Heavy Oil	78.2	66.6		mg/Kg-dry	1	4/15/2013 8:29:00 PM
Surr: 2-Fluorobiphenyl	117	50-150		%REC	1	4/15/2013 8:29:00 PM
Surr: o-Terphenyl	118	50-150		%REC	1	4/15/2013 8:29:00 PM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	6.02		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Surr: 1,2-Dichloroethane-d4	94.4	65-135		%REC	1	4/16/2013 1:16:00 PM
Surr: Fluorobenzene	99.1	65-135		%REC	1	4/16/2013 1:16:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0723		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Chloromethane	ND	0.0723		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Vinyl chloride	ND	0.00241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Bromomethane	ND	0.108		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0602		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Chloroethane	ND	0.0723		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,1-Dichloroethene	ND	0.0602		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Methylene chloride	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
trans-1,2-Dichloroethene	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0602		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,1-Dichloroethane	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
2,2-Dichloropropane	ND	0.0602		mg/Kg-dry	1	4/16/2013 1:16:00 PM
cis-1,2-Dichloroethene	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Chloroform	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,1-Dichloropropene	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Carbon tetrachloride	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,2-Dichloroethane (EDC)	ND	0.0361		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Benzene	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Trichloroethene (TCE)	ND	0.0361		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,2-Dichloropropane	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Bromodichloromethane	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental. Inc. Collection Date: 4/10/2013 11:00:00 AM

Project: Former Pace

Lab ID: 1304102-004 **Matrix:** Soil

Client Sample ID: GP-30-8

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0482 4/16/2013 1:16:00 PM mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 0.0331 Toluene 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND trans-1,3-Dichloropropylene 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND 1,1,2-Trichloroethane 0.0361 4/16/2013 1:16:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0602 mg/Kg-dry 1 4/16/2013 1:16:00 PM Tetrachloroethene (PCE) ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM Dibromochloromethane ND 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2-Dibromoethane (EDB) ND 0.00602 mg/Kg-dry 1 4/16/2013 1:16:00 PM Chlorobenzene ND 4/16/2013 1:16:00 PM 0.0241 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 1:16:00 PM ND 0.0361 mg/Kg-dry 1 Ethylbenzene ND 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM m,p-Xylene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM o-Xylene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM Styrene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry Isopropylbenzene ND 0.0964 mg/Kg-dry 1 4/16/2013 1:16:00 PM Bromoform ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,1,2,2-Tetrachloroethane ND 0.0241 4/16/2013 1:16:00 PM mg/Kg-dry 1 ND 4/16/2013 1:16:00 PM n-Propylbenzene 0.0241 mg/Kg-dry 1 ND 4/16/2013 1:16:00 PM Bromobenzene 0.0361 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 2-Chlorotoluene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND 4/16/2013 1:16:00 PM 4-Chlorotoluene 0.0241 mg/Kg-dry 1 tert-Butylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2,3-Trichloropropane ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2,4-Trichlorobenzene ND 0.0602 4/16/2013 1:16:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 4-Isopropyltoluene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry ND 4/16/2013 1:16:00 PM 1,4-Dichlorobenzene 0.0241 mg/Kg-dry 1 ND n-Butylbenzene 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2-Dichlorobenzene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2,4-Trimethylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM Hexachlorobutadiene ND 0.120 mg/Kg-dry 4/16/2013 1:16:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 11:00:00 AM

Project: Former Pace

Lab ID: 1304102-004 **Matrix:** Soil

Client Sample ID: GP-30-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Naphthalene	ND	0.0361		mg/Kg-dry	1	4/16/2013 1:16:00 PM
1,2,3-Trichlorobenzene	ND	0.0241		mg/Kg-dry	1	4/16/2013 1:16:00 PM
Surr: Dibromofluoromethane	99.7	67.6-119		%REC	1	4/16/2013 1:16:00 PM
Surr: Toluene-d8	97.9	67-139		%REC	1	4/16/2013 1:16:00 PM
Surr: 1-Bromo-4-fluorobenzene	97.8	63.1-141		%REC	1	4/16/2013 1:16:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R8	3181 Analyst: JS
Percent Moisture	31.7			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-005 **Matrix:** Soil

Client Sample ID: GP-28-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 44	33 Analyst: BR
Diesel (Fuel Oil)	ND	19.5		mg/Kg-dry	1	4/15/2013 8:57:00 PM
Heavy Oil	ND	48.7		mg/Kg-dry	1	4/15/2013 8:57:00 PM
Surr: 2-Fluorobiphenyl	113	50-150		%REC	1	4/15/2013 8:57:00 PM
Surr: o-Terphenyl	116	50-150		%REC	1	4/15/2013 8:57:00 PM
Gasoline by NWTPH-Gx				Batch	n ID: R8	3178 Analyst: EM
Gasoline	ND	3.89		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Surr: 1,2-Dichloroethane-d4	98.6	65-135		%REC	1	4/16/2013 1:45:00 PM
Surr: Fluorobenzene	99.0	65-135		%REC	1	4/16/2013 1:45:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0467		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Chloromethane	ND	0.0467		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Vinyl chloride	ND	0.00156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Bromomethane	ND	0.0700		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0389		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Chloroethane	ND	0.0467		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,1-Dichloroethene	ND	0.0389		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Methylene chloride	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
trans-1,2-Dichloroethene	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0389		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,1-Dichloroethane	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
2,2-Dichloropropane	ND	0.0389		mg/Kg-dry	1	4/16/2013 1:45:00 PM
cis-1,2-Dichloroethene	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Chloroform	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,1-Dichloropropene	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Carbon tetrachloride	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,2-Dichloroethane (EDC)	ND	0.0233		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Benzene	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Trichloroethene (TCE)	ND	0.0233		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,2-Dichloropropane	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Bromodichloromethane	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-005 **Matrix:** Soil

Client Sample ID: GP-28-3

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0311 4/16/2013 1:45:00 PM mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM Toluene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM trans-1,3-Dichloropropylene ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,1,2-Trichloroethane ND 0.0233 4/16/2013 1:45:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0389 mg/Kg-dry 1 4/16/2013 1:45:00 PM Tetrachloroethene (PCE) ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM Dibromochloromethane ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2-Dibromoethane (EDB) ND 0.00389 mg/Kg-dry 1 4/16/2013 1:45:00 PM Chlorobenzene ND 4/16/2013 1:45:00 PM 0.0156 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 1:45:00 PM ND 0.0233 mg/Kg-dry 1 Ethylbenzene ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM m,p-Xylene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM o-Xylene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 0.0156 Styrene ND 1 4/16/2013 1:45:00 PM mg/Kg-dry Isopropylbenzene ND 0.0623 mg/Kg-dry 1 4/16/2013 1:45:00 PM Bromoform ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,1,2,2-Tetrachloroethane ND 0.0156 4/16/2013 1:45:00 PM mg/Kg-dry 1 ND 4/16/2013 1:45:00 PM n-Propylbenzene 0.0156 mg/Kg-dry 1 ND 4/16/2013 1:45:00 PM Bromobenzene 0.0233 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 2-Chlorotoluene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM ND 4-Chlorotoluene 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM tert-Butylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2,3-Trichloropropane ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 0.0389 1,2,4-Trichlorobenzene ND 4/16/2013 1:45:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 4-Isopropyltoluene ND 0.0156 1 4/16/2013 1:45:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0156 1 4/16/2013 1:45:00 PM mg/Kg-dry ND 4/16/2013 1:45:00 PM 1,4-Dichlorobenzene 0.0156 mg/Kg-dry 1 ND n-Butylbenzene 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 1:45:00 PM 0.0156 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2,4-Trimethylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM Hexachlorobutadiene ND 0.0778 mg/Kg-dry 4/16/2013 1:45:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-005 **Matrix:** Soil

Client Sample ID: GP-28-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	Batch ID: 4436 Analyst:					
Naphthalene	ND	0.0233		mg/Kg-dry	1	4/16/2013 1:45:00 PM
1,2,3-Trichlorobenzene	ND	0.0156		mg/Kg-dry	1	4/16/2013 1:45:00 PM
Surr: Dibromofluoromethane	98.0	67.6-119		%REC	1	4/16/2013 1:45:00 PM
Surr: Toluene-d8	97.4	67-139		%REC	1	4/16/2013 1:45:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.3	63.1-141		%REC	1	4/16/2013 1:45:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R	3181 Analyst: JS
Percent Moisture	12.7			wt%	1	4/16/2013 2:19:23 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



WO#: 1304102 Date Reported: 4/18/2013

Collection Date: 4/10/2013 Client: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304102-006 Matrix: Soil

Client Sample ID: GP-28-14

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-	Dx/Dx Ext.			Batch	n ID: 44	.33 Analyst: BR
Diesel (Fuel Oil)	ND	19.8		mg/Kg-dry	1	4/15/2013 9:25:00 PM
Heavy Oil	ND	49.4		mg/Kg-dry	1	4/15/2013 9:25:00 PM
Surr: 2-Fluorobiphenyl	116	50-150		%REC	1	4/15/2013 9:25:00 PM
Surr: o-Terphenyl	120	50-150		%REC	1	4/15/2013 9:25:00 PM
Gasoline by NWTPH-Gx				Batch	ı ID: R	3178 Analyst: EM
Gasoline	ND	3.71		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Surr: 1,2-Dichloroethane-d4	101	65-135		%REC	1	4/16/2013 4:09:00 PM
Surr: Fluorobenzene	99.9	65-135		%REC	1	4/16/2013 4:09:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	36 Analyst: EM	
Dichlorodifluoromethane (CFC-12)	ND	0.0445		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Chloromethane	ND	0.0445		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Vinyl chloride	ND	0.00148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Bromomethane	ND	0.0667		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0371		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Chloroethane	ND	0.0445		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,1-Dichloroethene	ND	0.0371		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Methylene chloride	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
trans-1,2-Dichloroethene	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0371		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,1-Dichloroethane	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
2,2-Dichloropropane	ND	0.0371		mg/Kg-dry	1	4/16/2013 4:09:00 PM
cis-1,2-Dichloroethene	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Chloroform	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,1-Dichloropropene	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Carbon tetrachloride	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,2-Dichloroethane (EDC)	ND	0.0222		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Benzene	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Trichloroethene (TCE)	ND	0.0222		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,2-Dichloropropane	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Bromodichloromethane	ND	0.0148		mg/Kg-dry	1	4/16/2013 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
- Н Holding times for preparation or analysis exceeded
- ND Not detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-006 **Matrix**: Soil

Client Sample ID: GP-28-14

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0296 4/16/2013 4:09:00 PM mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM Toluene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 0.0222 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,1,2-Trichloroethane ND 0.0222 4/16/2013 4:09:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0371 mg/Kg-dry 1 4/16/2013 4:09:00 PM Tetrachloroethene (PCE) ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM Dibromochloromethane ND 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2-Dibromoethane (EDB) ND 0.00371 mg/Kg-dry 1 4/16/2013 4:09:00 PM Chlorobenzene ND 4/16/2013 4:09:00 PM 0.0148 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 4:09:00 PM ND 0.0222 mg/Kg-dry 1 Ethylbenzene ND 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM m,p-Xylene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM o-Xylene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM ND 0.0148 1 4/16/2013 4:09:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0593 mg/Kg-dry 1 4/16/2013 4:09:00 PM Bromoform ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,1,2,2-Tetrachloroethane ND 0.0148 4/16/2013 4:09:00 PM mg/Kg-dry 1 ND 4/16/2013 4:09:00 PM n-Propylbenzene 0.0148 mg/Kg-dry 1 ND Bromobenzene 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,3,5-Trimethylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 2-Chlorotoluene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM ND 4-Chlorotoluene 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM tert-Butylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2,3-Trichloropropane ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2,4-Trichlorobenzene ND 0.0371 4/16/2013 4:09:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 4-Isopropyltoluene ND 0.0148 1 4/16/2013 4:09:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0148 1 4/16/2013 4:09:00 PM mg/Kg-dry ND 0.0148 4/16/2013 4:09:00 PM 1,4-Dichlorobenzene mg/Kg-dry 1 ND n-Butylbenzene 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2-Dichlorobenzene ND 0.0148 1 4/16/2013 4:09:00 PM mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2,4-Trimethylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM Hexachlorobutadiene ND 0.0741 mg/Kg-dry 4/16/2013 4:09:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-006 **Matrix:** Soil

Client Sample ID: GP-28-14

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	36 Analyst: EM
Naphthalene	ND	0.0222		mg/Kg-dry	1	4/16/2013 4:09:00 PM
1,2,3-Trichlorobenzene	ND	0.0148		mg/Kg-dry	1	4/16/2013 4:09:00 PM
Surr: Dibromofluoromethane	97.4	67.6-119		%REC	1	4/16/2013 4:09:00 PM
Surr: Toluene-d8	95.8	67-139		%REC	1	4/16/2013 4:09:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.0	63.1-141		%REC	1	4/16/2013 4:09:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R	3181 Analyst: JS
Percent Moisture	15.8			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 1:00:00 PM

Project: Former Pace

Lab ID: 1304102-007 **Matrix:** Soil

Client Sample ID: GP-28-22

Result	RL	Qual	Units	DF	Date Analyzed
I-Dx/Dx Ext.			Batch	n ID: 44	33 Analyst: BR
ND	22.0		mg/Kg-dry	1	4/15/2013 9:53:00 PM
ND	55.1		mg/Kg-dry	1	4/15/2013 9:53:00 PM
111	50-150		%REC	1	4/15/2013 9:53:00 PM
115	50-150		%REC	1	4/15/2013 9:53:00 PM
			Batch	3178 Analyst: EM	
ND	2.81		mg/Kg-dry	1	4/16/2013 4:38:00 PM
104	65-135		%REC	1	4/16/2013 4:38:00 PM
101	65-135		%REC	1	4/16/2013 4:38:00 PM
Volatile Organic Compounds by EPA Method 8260			Batch	36 Analyst: EM	
ND	0.0337		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0337		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.00112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0506		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0337		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
	ND ND 104 101 FEPA Method ND	ND 22.0 ND 55.1 111 50-150 115 50-150 115 50-150 ND 2.81 104 65-135 101 65-135 101 65-135 101 0.0337 ND 0.0337 ND 0.0337 ND 0.0506 ND 0.0281 ND 0.0281 ND 0.0281 ND 0.0112 ND 0.0112 ND 0.0281 ND 0.0112 ND 0.0281 ND 0.0112 ND 0.0281 ND 0.0112 ND 0.01109 ND 0.0112	ND 22.0 ND 55.1 111 50-150 115 50-150 115 50-150 ND 2.81 104 65-135 101 65-135 101 65-135 I EPA Method 8260 ND 0.0337 ND 0.0337 ND 0.00112 ND 0.0281 ND 0.0281 ND 0.0112 ND 0.0112 ND 0.0281 ND 0.0112 ND 0.0281 ND 0.0112 ND 0.0169 ND 0.0169 ND 0.0110	ND 22.0 mg/Kg-dry ND 55.1 mg/Kg-dry 111 50-150 %REC 115 50-150 %REC ND 2.81 mg/Kg-dry 104 65-135 %REC 101 65-135 %REC MEC MEC	ND 22.0 mg/Kg-dry 1 ND 55.1 mg/Kg-dry 1 111 50-150 %REC 1 115 50-150 %REC 1 104 65-135 %REC 1 101 65-135 %REC 1 101 65-135 %REC 1 101 05-135 %REC 1 102 mg/Kg-dry 1 103 mg/Kg-dry 1 103 mg/Kg-dry 1 104 65-135 %REC 1 105 mg/Kg-dry 1 105 mg/Kg-dry

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 1:00:00 PM

Project: Former Pace

Lab ID: 1304102-007 **Matrix:** Soil

Client Sample ID: GP-28-22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	by EPA Method	<u>8260</u>		Batch	n ID: 4436	Analyst: EM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	4/16/2013 4:38:00 PM
cis-1,3-Dichloropropene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Toluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
trans-1,3-Dichloropropylene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,1,2-Trichloroethane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,3-Dichloropropane	ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Tetrachloroethene (PCE)	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Dibromochloromethane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2-Dibromoethane (EDB)	ND	0.00281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Chlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Ethylbenzene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
m,p-Xylene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
o-Xylene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Styrene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Isopropylbenzene	ND	0.0450		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Bromoform	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
n-Propylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Bromobenzene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,3,5-Trimethylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
2-Chlorotoluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
4-Chlorotoluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
tert-Butylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,3-Trichloropropane	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,4-Trichlorobenzene	ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
sec-Butylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
4-Isopropyltoluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,3-Dichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,4-Dichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
n-Butylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2-Dichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,4-Trimethylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Hexachlorobutadiene	ND	0.0562		mg/Kg-dry	1	4/16/2013 4:38:00 PM
				5 -5 7		

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 1:00:00 PM

Project: Former Pace

Lab ID: 1304102-007 **Matrix:** Soil

Client Sample ID: GP-28-22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	136 Analyst: EM
Naphthalene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,3-Trichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Surr: Dibromofluoromethane	96.0	67.6-119		%REC	1	4/16/2013 4:38:00 PM
Surr: Toluene-d8	95.4	67-139		%REC	1	4/16/2013 4:38:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.2	63.1-141		%REC	1	4/16/2013 4:38:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R	8181 Analyst: JS
Percent Moisture	19.2			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-008 **Matrix:** Soil

Client Sample ID: GP-32-20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 443	33 Analyst: BR
Diesel (Fuel Oil)	ND	19.4		mg/Kg-dry	1	4/15/2013 10:21:00 PM
Heavy Oil	ND	48.5		mg/Kg-dry	1	4/15/2013 10:21:00 PM
Surr: 2-Fluorobiphenyl	117	50-150		%REC	1	4/15/2013 10:21:00 PM
Surr: o-Terphenyl	121	50-150		%REC	1	4/15/2013 10:21:00 PM
Gasoline by NWTPH-Gx		Ва			n ID: R8	178 Analyst: EM
Gasoline	ND	4.20		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Surr: 1,2-Dichloroethane-d4	106	65-135		%REC	1	4/16/2013 5:07:00 PM
Surr: Fluorobenzene	99.5	65-135		%REC	1	4/16/2013 5:07:00 PM
Volatile Organic Compounds by EPA Method 8260					n ID: 443	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0504		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Chloromethane	ND	0.0504		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Vinyl chloride	ND	0.00168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Bromomethane	ND	0.0755		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0420		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Chloroethane	ND	0.0504		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,1-Dichloroethene	ND	0.0420		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Methylene chloride	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
trans-1,2-Dichloroethene	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0420		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,1-Dichloroethane	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
2,2-Dichloropropane	ND	0.0420		mg/Kg-dry	1	4/16/2013 5:07:00 PM
cis-1,2-Dichloroethene	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Chloroform	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,1-Dichloropropene	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Carbon tetrachloride	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,2-Dichloroethane (EDC)	ND	0.0252		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Benzene	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Trichloroethene (TCE)	ND	0.0252		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,2-Dichloropropane	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Bromodichloromethane	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM

- 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



WO#: 1304102 Date Reported: 4/18/2013

PES Environmental, Inc. Collection Date: 4/10/2013

RL

Qual

Units

DF

Project: Former Pace

Lab ID: 1304102-008 Matrix: Soil

Result

Client Sample ID: GP-32-20

Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260 Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0336 4/16/2013 5:07:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0168 1 4/16/2013 5:07:00 PM Toluene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 0.0252 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,1,2-Trichloroethane ND 0.0252 4/16/2013 5:07:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0420 mg/Kg-dry 1 4/16/2013 5:07:00 PM Tetrachloroethene (PCE) ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM Dibromochloromethane ND 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2-Dibromoethane (EDB) ND 0.00420 mg/Kg-dry 1 4/16/2013 5:07:00 PM Chlorobenzene ND 4/16/2013 5:07:00 PM 0.0168 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 5:07:00 PM ND 0.0252 mg/Kg-dry 1 Ethylbenzene ND 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM m,p-Xylene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM o-Xylene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM Styrene ND 0.0168 1 4/16/2013 5:07:00 PM mg/Kg-dry Isopropylbenzene ND 0.0671 mg/Kg-dry 1 4/16/2013 5:07:00 PM Bromoform ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,1,2,2-Tetrachloroethane ND 0.0168 4/16/2013 5:07:00 PM mg/Kg-dry 1 ND 4/16/2013 5:07:00 PM n-Propylbenzene 0.0168 mg/Kg-dry 1 ND Bromobenzene 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,3,5-Trimethylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 2-Chlorotoluene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM ND 4-Chlorotoluene 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM tert-Butylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2,3-Trichloropropane ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2,4-Trichlorobenzene ND 0.0420 4/16/2013 5:07:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 4-Isopropyltoluene ND 0.0168 1 4/16/2013 5:07:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0168 1 4/16/2013 5:07:00 PM mg/Kg-dry ND 0.0168 4/16/2013 5:07:00 PM 1,4-Dichlorobenzene mg/Kg-dry 1 ND n-Butylbenzene 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2-Dichlorobenzene ND 0.0168 1 mg/Kg-dry 4/16/2013 5:07:00 PM 1,2-Dibromo-3-chloropropane ND 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2,4-Trimethylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM Hexachlorobutadiene ND 0.0839 mg/Kg-dry 4/16/2013 5:07:00 PM

- В Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
- Reporting Limit

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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-008 **Matrix:** Soil

Client Sample ID: GP-32-20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	Analyst: EM
Naphthalene	ND	0.0252		mg/Kg-dry	1	4/16/2013 5:07:00 PM
1,2,3-Trichlorobenzene	ND	0.0168		mg/Kg-dry	1	4/16/2013 5:07:00 PM
Surr: Dibromofluoromethane	97.8	67.6-119		%REC	1	4/16/2013 5:07:00 PM
Surr: Toluene-d8	96.4	67-139		%REC	1	4/16/2013 5:07:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.9	63.1-141		%REC	1	4/16/2013 5:07:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R	8181 Analyst: JS
Percent Moisture	14.6			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:20:00 AM

Project: Former Pace

Lab ID: 1304102-010 **Matrix:** Soil

Client Sample ID: GP-27-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed		
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.					n ID: 44	33 Analyst: BR		
Diesel (Fuel Oil)	ND	18.0		mg/Kg-dry	1	4/15/2013 10:49:00 PM		
Heavy Oil	ND	44.9		mg/Kg-dry	1	4/15/2013 10:49:00 PM		
Surr: 2-Fluorobiphenyl	117	50-150		%REC	1	4/15/2013 10:49:00 PM		
Surr: o-Terphenyl	120	50-150		%REC	1	4/15/2013 10:49:00 PM		
Gasoline by NWTPH-Gx				Batch	ı ID: R8): R8178 Analyst: EM		
Gasoline	ND	4.81		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Surr: 1,2-Dichloroethane-d4	104	65-135		%REC	1	4/16/2013 5:36:00 PM		
Surr: Fluorobenzene	100	65-135		%REC	1	4/16/2013 5:36:00 PM		
Volatile Organic Compounds by EPA Method 8260					n ID: 44	36 Analyst: EM		
Dichlorodifluoromethane (CFC-12)	ND	0.0577		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Chloromethane	ND	0.0577		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Vinyl chloride	ND	0.00192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Bromomethane	ND	0.0865		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Trichlorofluoromethane (CFC-11)	ND	0.0481		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Chloroethane	ND	0.0577		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
1,1-Dichloroethene	ND	0.0481		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Methylene chloride	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
trans-1,2-Dichloroethene	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Methyl tert-butyl ether (MTBE)	ND	0.0481		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
1,1-Dichloroethane	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
2,2-Dichloropropane	ND	0.0481		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
cis-1,2-Dichloroethene	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Chloroform	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
1,1,1-Trichloroethane (TCA)	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
1,1-Dichloropropene	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Carbon tetrachloride	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
1,2-Dichloroethane (EDC)	ND	0.0288		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Benzene	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Trichloroethene (TCE)	ND	0.0288		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
1,2-Dichloropropane	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		
Bromodichloromethane	ND	0.0192		mg/Kg-dry	1	4/16/2013 5:36:00 PM		

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:20:00 AM

Project: Former Pace

Lab ID: 1304102-010 **Matrix**: Soil

Client Sample ID: GP-27-5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0385 4/16/2013 5:36:00 PM mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM Toluene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 0.0288 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,1,2-Trichloroethane ND 0.0288 4/16/2013 5:36:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0481 mg/Kg-dry 1 4/16/2013 5:36:00 PM Tetrachloroethene (PCE) ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM Dibromochloromethane ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2-Dibromoethane (EDB) ND 0.00481 mg/Kg-dry 1 4/16/2013 5:36:00 PM Chlorobenzene ND 4/16/2013 5:36:00 PM 0.0192 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 5:36:00 PM ND 0.0288 mg/Kg-dry 1 Ethylbenzene ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM m,p-Xylene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM o-Xylene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM ND 0.0192 1 4/16/2013 5:36:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0769 mg/Kg-dry 1 4/16/2013 5:36:00 PM Bromoform ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,1,2,2-Tetrachloroethane ND 0.0192 4/16/2013 5:36:00 PM mg/Kg-dry 1 ND 4/16/2013 5:36:00 PM n-Propylbenzene 0.0192 mg/Kg-dry 1 ND Bromobenzene 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,3,5-Trimethylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 2-Chlorotoluene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM ND 4-Chlorotoluene 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM tert-Butylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2,3-Trichloropropane ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2,4-Trichlorobenzene ND 0.0481 4/16/2013 5:36:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 4-Isopropyltoluene ND 0.0192 1 4/16/2013 5:36:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0192 1 4/16/2013 5:36:00 PM mg/Kg-dry ND 4/16/2013 5:36:00 PM 1,4-Dichlorobenzene 0.0192 mg/Kg-dry 1 ND n-Butylbenzene 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2-Dichlorobenzene ND 1 0.0192 mg/Kg-dry 4/16/2013 5:36:00 PM 1,2-Dibromo-3-chloropropane ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2,4-Trimethylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM Hexachlorobutadiene ND 0.0961 mg/Kg-dry 4/16/2013 5:36:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:20:00 AM

Project: Former Pace

Lab ID: 1304102-010 **Matrix:** Soil

Client Sample ID: GP-27-5

Analyses Result RL Qual Units DF **Date Analyzed Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Naphthalene 0.0692 0.0288 4/16/2013 5:36:00 PM mg/Kg-dry 1 1,2,3-Trichlorobenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 96.8 Surr: Dibromofluoromethane 67.6-119 %REC 1 4/16/2013 5:36:00 PM Surr: Toluene-d8 97.1 67-139 %REC 4/16/2013 5:36:00 PM Surr: 1-Bromo-4-fluorobenzene %REC 4/16/2013 5:36:00 PM 98.7 63.1-141 1 Batch ID: R8181 Analyst: JS Sample Moisture (Percent Moisture) Percent Moisture 19.6 wt% 4/16/2013 2:19:23 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



WO#: 1304102 Date Reported: 4/18/2013

Collection Date: 4/11/2013 10:50:00 AM Client: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304102-011 Matrix: Soil

Client Sample ID: GP-27-14.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 44	.33 Analyst: BR
Diesel (Fuel Oil)	ND	20.2		mg/Kg-dry	1	4/15/2013 11:17:00 PM
Heavy Oil	78.7	50.5		mg/Kg-dry	1	4/15/2013 11:17:00 PM
Surr: 2-Fluorobiphenyl	115	50-150		%REC	1	4/15/2013 11:17:00 PM
Surr: o-Terphenyl	117	50-150		%REC	1	4/15/2013 11:17:00 PM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	4.99		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Surr: 1,2-Dichloroethane-d4	102	65-135		%REC	1	4/16/2013 6:05:00 PM
Surr: Fluorobenzene	102	65-135		%REC	1	4/16/2013 6:05:00 PM
Volatile Organic Compounds by	/ EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0599		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Chloromethane	ND	0.0599		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Vinyl chloride	ND	0.00200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Bromomethane	ND	0.0899		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0499		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Chloroethane	ND	0.0599		mg/Kg-dry	1	4/16/2013 6:05:00 PM
1,1-Dichloroethene	ND	0.0499		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Methylene chloride	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0499		mg/Kg-dry	1	4/16/2013 6:05:00 PM
1,1-Dichloroethane	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
2,2-Dichloropropane	ND	0.0499		mg/Kg-dry	1	4/16/2013 6:05:00 PM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Chloroform	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
1,1-Dichloropropene	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Carbon tetrachloride	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
1,2-Dichloroethane (EDC)	ND	0.0300		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Benzene	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Trichloroethene (TCE)	ND	0.0300		mg/Kg-dry	1	4/16/2013 6:05:00 PM
1,2-Dichloropropane	ND	0.0200		mg/Kg-dry	1	4/16/2013 6:05:00 PM
Bromodichloromethane	ND	0.0200		mg/Kg-dry	1	4/16/2013 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
- Н Holding times for preparation or analysis exceeded
- ND Not detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-011 **Matrix**: Soil

Client Sample ID: GP-27-14.5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 6:05:00 PM 0.0399 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Toluene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 0.0300 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,1,2-Trichloroethane ND 0.0300 4/16/2013 6:05:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0499 mg/Kg-dry 1 4/16/2013 6:05:00 PM Tetrachloroethene (PCE) ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Dibromochloromethane ND 0.0300 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2-Dibromoethane (EDB) ND 0.00499 mg/Kg-dry 1 4/16/2013 6:05:00 PM Chlorobenzene ND 4/16/2013 6:05:00 PM 0.0200 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 6:05:00 PM ND 0.0300 mg/Kg-dry 1 Ethylbenzene ND 0.0300 mg/Kg-dry 1 4/16/2013 6:05:00 PM m,p-Xylene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM o-Xylene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 0.0200 Styrene ND 1 4/16/2013 6:05:00 PM mg/Kg-dry Isopropylbenzene ND 0.0799 mg/Kg-dry 1 4/16/2013 6:05:00 PM Bromoform ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,1,2,2-Tetrachloroethane ND 0.0200 4/16/2013 6:05:00 PM mg/Kg-dry 1 ND 4/16/2013 6:05:00 PM n-Propylbenzene 0.0200 mg/Kg-dry 1 ND 4/16/2013 6:05:00 PM Bromobenzene 0.0300 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 2-Chlorotoluene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM ND 4-Chlorotoluene 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM tert-Butylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2,3-Trichloropropane ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2,4-Trichlorobenzene ND 0.0499 4/16/2013 6:05:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 4-Isopropyltoluene ND 0.0200 1 4/16/2013 6:05:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0200 1 4/16/2013 6:05:00 PM mg/Kg-dry ND 4/16/2013 6:05:00 PM 1,4-Dichlorobenzene 0.0200 mg/Kg-dry 1 ND n-Butylbenzene 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 6:05:00 PM 0.0200 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0300 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2,4-Trimethylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Hexachlorobutadiene ND 0.0998 mg/Kg-dry 4/16/2013 6:05:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-011 **Matrix:** Soil

Client Sample ID: GP-27-14.5

Analyses Result RL Qual Units DF **Date Analyzed Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Naphthalene ND 0.0300 4/16/2013 6:05:00 PM mg/Kg-dry 1 1,2,3-Trichlorobenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 95.3 Surr: Dibromofluoromethane 67.6-119 %REC 1 4/16/2013 6:05:00 PM Surr: Toluene-d8 94.4 67-139 %REC 4/16/2013 6:05:00 PM Surr: 1-Bromo-4-fluorobenzene %REC 4/16/2013 6:05:00 PM 97.7 63.1-141 1 Batch ID: R8181 Analyst: JS **Sample Moisture (Percent Moisture)** Percent Moisture 17.7 wt% 4/16/2013 2:19:23 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



WO#: 1304102 Date Reported: 4/18/2013

Collection Date: 4/11/2013 11:20:00 AM Client: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304102-012 Matrix: Soil

Client Sample ID: GP-26-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 44	33 Analyst: BR
Diesel (Fuel Oil)	ND	21.7		mg/Kg-dry	1	4/16/2013 12:41:00 AM
Heavy Oil	ND	54.2		mg/Kg-dry	1	4/16/2013 12:41:00 AM
Surr: 2-Fluorobiphenyl	112	50-150		%REC	1	4/16/2013 12:41:00 AM
Surr: o-Terphenyl	114	50-150		%REC	1	4/16/2013 12:41:00 AM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	3.82		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Surr: 1,2-Dichloroethane-d4	101	65-135		%REC	1	4/16/2013 6:34:00 PM
Surr: Fluorobenzene	100	65-135		%REC	1	4/16/2013 6:34:00 PM
Volatile Organic Compounds by	/ EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0458		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Chloromethane	ND	0.0458		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Vinyl chloride	ND	0.00153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Bromomethane	ND	0.0687		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0382		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Chloroethane	ND	0.0458		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,1-Dichloroethene	ND	0.0382		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Methylene chloride	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
trans-1,2-Dichloroethene	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0382		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,1-Dichloroethane	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
2,2-Dichloropropane	ND	0.0382		mg/Kg-dry	1	4/16/2013 6:34:00 PM
cis-1,2-Dichloroethene	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Chloroform	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,1-Dichloropropene	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Carbon tetrachloride	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,2-Dichloroethane (EDC)	ND	0.0229		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Benzene	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Trichloroethene (TCE)	ND	0.0229		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,2-Dichloropropane	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Bromodichloromethane	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 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
- Н Holding times for preparation or analysis exceeded
- ND Not detected at the Reporting Limit
 - Spike recovery outside accepted recovery limits



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 11:20:00 AM

Project: Former Pace

Lab ID: 1304102-012 **Matrix:** Soil

Client Sample ID: GP-26-2

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0306 4/16/2013 6:34:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0153 1 4/16/2013 6:34:00 PM Toluene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM trans-1,3-Dichloropropylene ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,1,2-Trichloroethane ND 0.0229 4/16/2013 6:34:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0382 mg/Kg-dry 1 4/16/2013 6:34:00 PM Tetrachloroethene (PCE) ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM Dibromochloromethane ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2-Dibromoethane (EDB) ND 0.00382 mg/Kg-dry 1 4/16/2013 6:34:00 PM Chlorobenzene ND 4/16/2013 6:34:00 PM 0.0153 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 6:34:00 PM ND 0.0229 mg/Kg-dry 1 Ethylbenzene ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM m,p-Xylene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM o-Xylene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM Styrene ND 0.0153 1 4/16/2013 6:34:00 PM mg/Kg-dry Isopropylbenzene ND 0.0611 mg/Kg-dry 1 4/16/2013 6:34:00 PM Bromoform ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,1,2,2-Tetrachloroethane ND 0.0153 4/16/2013 6:34:00 PM mg/Kg-dry 1 ND 4/16/2013 6:34:00 PM n-Propylbenzene 0.0153 mg/Kg-dry 1 ND Bromobenzene 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,3,5-Trimethylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 2-Chlorotoluene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM ND 4-Chlorotoluene 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM tert-Butylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2,3-Trichloropropane ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2,4-Trichlorobenzene ND 0.0382 4/16/2013 6:34:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 4-Isopropyltoluene ND 0.0153 1 4/16/2013 6:34:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0153 1 4/16/2013 6:34:00 PM mg/Kg-dry ND 4/16/2013 6:34:00 PM 1,4-Dichlorobenzene 0.0153 mg/Kg-dry 1 ND n-Butylbenzene 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2-Dichlorobenzene ND 1 0.0153 mg/Kg-dry 4/16/2013 6:34:00 PM 1,2-Dibromo-3-chloropropane ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2,4-Trimethylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM Hexachlorobutadiene ND 0.0764 mg/Kg-dry 4/16/2013 6:34:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 11:20:00 AM

Project: Former Pace

Lab ID: 1304102-012 **Matrix:** Soil

Client Sample ID: GP-26-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	36 Analyst: EM
Naphthalene	ND	0.0229		mg/Kg-dry	1	4/16/2013 6:34:00 PM
1,2,3-Trichlorobenzene	ND	0.0153		mg/Kg-dry	1	4/16/2013 6:34:00 PM
Surr: Dibromofluoromethane	96.1	67.6-119		%REC	1	4/16/2013 6:34:00 PM
Surr: Toluene-d8	96.2	67-139		%REC	1	4/16/2013 6:34:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.7	63.1-141		%REC	1	4/16/2013 6:34:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R8	Analyst: JS
Percent Moisture	14.9			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 11:30:00 AM

Project: Former Pace

Lab ID: 1304102-013 **Matrix:** Soil

Client Sample ID: GP-26-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 44	33 Analyst: BR
Diesel (Fuel Oil)	ND	23.5		mg/Kg-dry	1	4/16/2013 1:37:00 AM
Heavy Oil	ND	58.7		mg/Kg-dry	1	4/16/2013 1:37:00 AM
Surr: 2-Fluorobiphenyl	115	50-150		%REC	1	4/16/2013 1:37:00 AM
Surr: o-Terphenyl	118	50-150		%REC	1	4/16/2013 1:37:00 AM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	4.61		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Surr: 1,2-Dichloroethane-d4	96.9	65-135		%REC	1	4/16/2013 7:07:00 PM
Surr: Fluorobenzene	101	65-135		%REC	1	4/16/2013 7:07:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0553		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Chloromethane	ND	0.0553		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Vinyl chloride	ND	0.00184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Bromomethane	ND	0.0830		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0461		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Chloroethane	ND	0.0553		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,1-Dichloroethene	ND	0.0461		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Methylene chloride	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
trans-1,2-Dichloroethene	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0461		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,1-Dichloroethane	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
2,2-Dichloropropane	ND	0.0461		mg/Kg-dry	1	4/16/2013 7:07:00 PM
cis-1,2-Dichloroethene	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Chloroform	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,1-Dichloropropene	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Carbon tetrachloride	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,2-Dichloroethane (EDC)	ND	0.0277		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Benzene	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Trichloroethene (TCE)	ND	0.0277		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,2-Dichloropropane	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Bromodichloromethane	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM

- 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



PES Environmental, Inc.

Analytical Report

Collection Date: 4/11/2013 11:30:00 AM

WO#: **1304102**Date Reported: **4/18/2013**

Project: Former Pace

Lab ID: 1304102-013 **Matrix:** Soil

Client Sample ID: GP-26-6

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0369 4/16/2013 7:07:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0184 1 4/16/2013 7:07:00 PM Toluene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM trans-1,3-Dichloropropylene ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,1,2-Trichloroethane ND 0.0277 4/16/2013 7:07:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0461 mg/Kg-dry 1 4/16/2013 7:07:00 PM Tetrachloroethene (PCE) ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM Dibromochloromethane ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2-Dibromoethane (EDB) ND 0.00461 mg/Kg-dry 1 4/16/2013 7:07:00 PM Chlorobenzene ND 4/16/2013 7:07:00 PM 0.0184 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 7:07:00 PM ND 0.0277 mg/Kg-dry 1 Ethylbenzene ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM m,p-Xylene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM o-Xylene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM Styrene ND 0.0184 1 4/16/2013 7:07:00 PM mg/Kg-dry Isopropylbenzene ND 0.0738 mg/Kg-dry 1 4/16/2013 7:07:00 PM Bromoform ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,1,2,2-Tetrachloroethane ND 0.0184 4/16/2013 7:07:00 PM mg/Kg-dry 1 ND 4/16/2013 7:07:00 PM n-Propylbenzene 0.0184 mg/Kg-dry 1 ND Bromobenzene 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,3,5-Trimethylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 2-Chlorotoluene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM ND 4/16/2013 7:07:00 PM 4-Chlorotoluene 0.0184 mg/Kg-dry 1 tert-Butylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2,3-Trichloropropane ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2,4-Trichlorobenzene ND 0.0461 4/16/2013 7:07:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 4-Isopropyltoluene ND 0.0184 1 4/16/2013 7:07:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0184 1 4/16/2013 7:07:00 PM mg/Kg-dry ND 0.0184 4/16/2013 7:07:00 PM 1,4-Dichlorobenzene mg/Kg-dry 1 ND n-Butylbenzene 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2-Dichlorobenzene ND 0.0184 1 mg/Kg-dry 4/16/2013 7:07:00 PM 1,2-Dibromo-3-chloropropane ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2,4-Trimethylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM Hexachlorobutadiene ND 0.0922 mg/Kg-dry 4/16/2013 7:07:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 11:30:00 AM

Project: Former Pace

Lab ID: 1304102-013 **Matrix:** Soil

Client Sample ID: GP-26-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Naphthalene	ND	0.0277		mg/Kg-dry	1	4/16/2013 7:07:00 PM
1,2,3-Trichlorobenzene	ND	0.0184		mg/Kg-dry	1	4/16/2013 7:07:00 PM
Surr: Dibromofluoromethane	96.9	67.6-119		%REC	1	4/16/2013 7:07:00 PM
Surr: Toluene-d8	94.9	67-139		%REC	1	4/16/2013 7:07:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.0	63.1-141		%REC	1	4/16/2013 7:07:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R8	3181 Analyst: JS
Percent Moisture	30.3			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:10:00 PM

Project: Former Pace

Lab ID: 1304102-015 **Matrix:** Soil

Client Sample ID: GP-29-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPI	H-Dx/Dx Ext.			Batch	n ID: 44	.33 Analyst: BR
Diesel (Fuel Oil)	ND	19.9		mg/Kg-dry	1	4/16/2013 2:05:00 AM
Heavy Oil	ND	49.8		mg/Kg-dry	1	4/16/2013 2:05:00 AM
Surr: 2-Fluorobiphenyl	114	50-150		%REC	1	4/16/2013 2:05:00 AM
Surr: o-Terphenyl	119	50-150		%REC	1	4/16/2013 2:05:00 AM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	2.92		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Surr: 1,2-Dichloroethane-d4	101	65-135		%REC	1	4/16/2013 7:36:00 PM
Surr: Fluorobenzene	100	65-135		%REC	1	4/16/2013 7:36:00 PM
Volatile Organic Compounds by	/ EPA Method	<u>8260</u>		Batch	n ID: 44	.36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0350		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Chloromethane	ND	0.0350		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Vinyl chloride	ND	0.00117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Bromomethane	ND	0.0525		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0292		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Chloroethane	ND	0.0350		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,1-Dichloroethene	ND	0.0292		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Methylene chloride	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
trans-1,2-Dichloroethene	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0292		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,1-Dichloroethane	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
2,2-Dichloropropane	ND	0.0292		mg/Kg-dry	1	4/16/2013 7:36:00 PM
cis-1,2-Dichloroethene	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Chloroform	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,1-Dichloropropene	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Carbon tetrachloride	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,2-Dichloroethane (EDC)	ND	0.0175		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Benzene	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Trichloroethene (TCE)	ND	0.0175		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,2-Dichloropropane	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Bromodichloromethane	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:10:00 PM

Project: Former Pace

Lab ID: 1304102-015 **Matrix:** Soil

Client Sample ID: GP-29-3

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0233 4/16/2013 7:36:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0117 1 4/16/2013 7:36:00 PM Toluene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM trans-1,3-Dichloropropylene ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,1,2-Trichloroethane ND 0.0175 4/16/2013 7:36:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0292 mg/Kg-dry 1 4/16/2013 7:36:00 PM Tetrachloroethene (PCE) ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM Dibromochloromethane ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2-Dibromoethane (EDB) ND 0.00292 mg/Kg-dry 1 4/16/2013 7:36:00 PM Chlorobenzene ND 4/16/2013 7:36:00 PM 0.0117 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 7:36:00 PM ND 0.0175 mg/Kg-dry 1 Ethylbenzene ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM m,p-Xylene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM o-Xylene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM Styrene ND 1 4/16/2013 7:36:00 PM 0.0117 mg/Kg-dry Isopropylbenzene ND 0.0467 mg/Kg-dry 1 4/16/2013 7:36:00 PM Bromoform ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,1,2,2-Tetrachloroethane ND 0.0117 4/16/2013 7:36:00 PM mg/Kg-dry 1 ND 4/16/2013 7:36:00 PM n-Propylbenzene 0.0117 mg/Kg-dry 1 ND Bromobenzene 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,3,5-Trimethylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 2-Chlorotoluene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM ND 4-Chlorotoluene 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM tert-Butylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2,3-Trichloropropane ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2,4-Trichlorobenzene ND 0.0292 4/16/2013 7:36:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 4-Isopropyltoluene ND 0.0117 1 4/16/2013 7:36:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0117 1 4/16/2013 7:36:00 PM mg/Kg-dry ND 4/16/2013 7:36:00 PM 1,4-Dichlorobenzene 0.0117 mg/Kg-dry 1 ND n-Butylbenzene 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 7:36:00 PM 0.0117 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2,4-Trimethylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM Hexachlorobutadiene ND 0.0584 mg/Kg-dry 4/16/2013 7:36:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:10:00 PM

Project: Former Pace

Lab ID: 1304102-015 **Matrix:** Soil

Client Sample ID: GP-29-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	.36 Analyst: EM
Naphthalene	ND	0.0175		mg/Kg-dry	1	4/16/2013 7:36:00 PM
1,2,3-Trichlorobenzene	ND	0.0117		mg/Kg-dry	1	4/16/2013 7:36:00 PM
Surr: Dibromofluoromethane	96.1	67.6-119		%REC	1	4/16/2013 7:36:00 PM
Surr: Toluene-d8	95.7	67-139		%REC	1	4/16/2013 7:36:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.6	63.1-141		%REC	1	4/16/2013 7:36:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R8	3181 Analyst: JS
Percent Moisture	8.58			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:30:00 PM

Project: Former Pace

Lab ID: 1304102-016 **Matrix:** Soil

Client Sample ID: GP-29-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH	I-Dx/Dx Ext.			Batch	n ID: 44	33 Analyst: BR
Diesel (Fuel Oil)	ND	19.5		mg/Kg-dry	1	4/16/2013 2:32:00 AM
Heavy Oil	ND	48.7		mg/Kg-dry	1	4/16/2013 2:32:00 AM
Surr: 2-Fluorobiphenyl	114	50-150		%REC	1	4/16/2013 2:32:00 AM
Surr: o-Terphenyl	119	50-150		%REC	1	4/16/2013 2:32:00 AM
Gasoline by NWTPH-Gx				Batch	ı ID: R8	3178 Analyst: EM
Gasoline	ND	3.95		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Surr: 1,2-Dichloroethane-d4	109	65-135		%REC	1	4/16/2013 8:05:00 PM
Surr: Fluorobenzene	101	65-135		%REC	1	4/16/2013 8:05:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	n ID: 44	36 Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0474		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Chloromethane	ND	0.0474		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Vinyl chloride	ND	0.00158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Bromomethane	ND	0.0711		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0395		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Chloroethane	ND	0.0474		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,1-Dichloroethene	ND	0.0395		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Methylene chloride	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
trans-1,2-Dichloroethene	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0395		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,1-Dichloroethane	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
2,2-Dichloropropane	ND	0.0395		mg/Kg-dry	1	4/16/2013 8:05:00 PM
cis-1,2-Dichloroethene	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Chloroform	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,1-Dichloropropene	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Carbon tetrachloride	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,2-Dichloroethane (EDC)	ND	0.0237		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Benzene	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Trichloroethene (TCE)	ND	0.0237		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,2-Dichloropropane	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Bromodichloromethane	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:30:00 PM

Project: Former Pace

Lab ID: 1304102-016 **Matrix**: Soil

Client Sample ID: GP-29-5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 8:05:00 PM 0.0316 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Toluene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM trans-1,3-Dichloropropylene ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,1,2-Trichloroethane ND 0.0237 4/16/2013 8:05:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0395 mg/Kg-dry 1 4/16/2013 8:05:00 PM Tetrachloroethene (PCE) ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Dibromochloromethane ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2-Dibromoethane (EDB) ND 0.00395 mg/Kg-dry 1 4/16/2013 8:05:00 PM Chlorobenzene ND 4/16/2013 8:05:00 PM 0.0158 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 8:05:00 PM ND 0.0237 mg/Kg-dry 1 Ethylbenzene ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM m,p-Xylene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM o-Xylene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Styrene ND 0.0158 1 4/16/2013 8:05:00 PM mg/Kg-dry Isopropylbenzene ND 0.0632 mg/Kg-dry 1 4/16/2013 8:05:00 PM Bromoform ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,1,2,2-Tetrachloroethane ND 0.0158 4/16/2013 8:05:00 PM mg/Kg-dry 1 ND 4/16/2013 8:05:00 PM n-Propylbenzene 0.0158 mg/Kg-dry 1 ND Bromobenzene 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,3,5-Trimethylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 2-Chlorotoluene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM ND 4-Chlorotoluene 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM tert-Butylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2,3-Trichloropropane ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2,4-Trichlorobenzene ND 0.0395 4/16/2013 8:05:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 4-Isopropyltoluene ND 0.0158 1 4/16/2013 8:05:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0158 1 4/16/2013 8:05:00 PM mg/Kg-dry ND 4/16/2013 8:05:00 PM 1,4-Dichlorobenzene 0.0158 mg/Kg-dry 1 ND n-Butylbenzene 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 8:05:00 PM 0.0158 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2,4-Trimethylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Hexachlorobutadiene ND 0.0790 mg/Kg-dry 4/16/2013 8:05:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:30:00 PM

Project: Former Pace

Lab ID: 1304102-016 **Matrix:** Soil

Client Sample ID: GP-29-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds b	y EPA Method	8260		Batch	n ID: 44	36 Analyst: EM
Naphthalene	ND	0.0237		mg/Kg-dry	1	4/16/2013 8:05:00 PM
1,2,3-Trichlorobenzene	ND	0.0158		mg/Kg-dry	1	4/16/2013 8:05:00 PM
Surr: Dibromofluoromethane	99.3	67.6-119		%REC	1	4/16/2013 8:05:00 PM
Surr: Toluene-d8	97.0	67-139		%REC	1	4/16/2013 8:05:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.8	63.1-141		%REC	1	4/16/2013 8:05:00 PM
Sample Moisture (Percent Mois	sture)			Batch	ı ID: R8	3181 Analyst: JS
Percent Moisture	16.1			wt%	1	4/16/2013 2:19:23 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 4:30:00 PM

Project: Former Pace

Lab ID: 1304102-018 **Matrix:** Soil

Client Sample ID: Soil Comp

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch	n ID: 44	438 Analyst: MC
Arsenic	3.62	0.0864		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Barium	49.6	0.432		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Cadmium	ND	0.173		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Chromium	34.6	0.0864		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Lead	6.86	0.173		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Selenium	ND	0.432		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Silver	ND	0.0864		mg/Kg-dry	1	4/16/2013 7:06:43 AM
Mercury by EPA Method 7471				Batch	1D: 44	143 Analyst: SG
Mercury	ND	0.254		mg/Kg-dry	1	4/16/2013 2:34:54 PM
Sample Moisture (Percent Moisture)	1			Batch	ı ID: R	8181 Analyst: JS
Percent Moisture	8.89			wt%	1	4/16/2013 2:19:23 PM

Qualifiers: B Analyte detected in the associated Method Blank

E Value above quantitation range

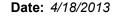
J Analyte detected below quantitation limits

RL Reporting Limit

D Dilution was required

H Holding times for preparation or analysis exceeded

ND Not detected at the Reporting Limit





QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Total Metals by EPA Method 6020

Project:	Former Pace					ı otal iv	letals by EPA Method (6020
Sample ID: MB-4	438 SampType: MBL	K		Units: mg/Kg		Prep Date: 4/15/2013	RunNo: 8154	
Client ID: MBL	KS Batch ID: 4438					Analysis Date: 4/16/2013	SeqNo: 162599	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Va	al %RPD RPDLimit (Qual
Arsenic	ND	0.100						

Alsenic	ND	0.100
Barium	ND	0.500
Cadmium	ND	0.200
Chromium	ND	0.100
Lead	ND	0.200
Selenium	ND	0.500
Silver	ND	0.100

Sample ID: LCS-4438	SampType: LCS			Units: mg/Kg		Prep Date: 4/15/2013			RunNo: 815		
Client ID: LCSS	Batch ID: 4438					Analysis Da	te: 4/16/20	13	SeqNo: 162	600	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	116	0.100	102.0	0	114	83.4	116				
Barium	891	0.500	795.0	0	112	84.1	116				
Cadmium	86.6	0.200	86.30	0	100	81.2	116				
Chromium	217	0.100	208.0	0	105	86.5	118				
Lead	73.4	0.200	71.80	0	102	84.3	116				
Selenium	192	0.500	165.0	0	116	78.8	121				
Silver	34.8	0.100	31.30	0	111	79.9	120				

Sample ID: 1304108-001ADUP	SampType: DUP			Units: mg/	Kg-dry	Prep Da	te: 4/15/20	13	RunNo: 815	54	
Client ID: BATCH	Batch ID: 4438					Analysis Da	te: 4/16/20	13	SeqNo: 162	2602	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	27.0	0.0892						31.52	15.3	30	
Barium	122	0.446						104.5	15.6	30	
Cadmium	0.212	0.178						0.1812	15.6	30	
Chromium	45.0	0.0892						39.68	12.5	30	

Analyte detected in the associated Method Blank Qualifiers:

Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

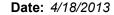
Dilution was required D

Analyte detected below quantitation limits

Reporting Limit

Е Value above quantitation range

ND Not detected at the Reporting Limit





CLIENT: PES Environmental, Inc.

Project: Former Pace

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: 1304108-001ADUP	SampType: DUP			Units: mg/K	g-dry	Prep Dat	e: 4/15/20	13	RunNo: 815	54	
Client ID: BATCH	Batch ID: 4438					Analysis Dat	e: 4/16/20	13	SeqNo: 162	2602	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	34.8	0.178						32.80	6.07	30	
Selenium	ND	0.446						0	0	30	R
Silver	0.137	0.0892						0.1108	21.3	30	

Sample ID: 1304108-001AMS	SampType: MS			Units: mg/	Kg-dry	Prep Da	ite: 4/15/20	13	RunNo: 81	54	
Client ID: BATCH	Batch ID: 4438					Analysis Da	te: 4/16/20	13	SeqNo: 162	2604	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	81.3	0.0921	46.04	31.52	108	75	125				
Barium	153	0.460	46.04	104.5	105	75	125				
Cadmium	2.57	0.184	2.302	0.1812	104	75	125				
Chromium	81.0	0.0921	46.04	39.68	89.7	75	125				
Lead	56.3	0.184	23.02	32.80	102	75	125				
Selenium	5.66	0.460	4.604	0.07911	121	75	125				
Silver	12.9	0.0921	11.51	0.1108	111	75	125				

Sample ID: 1304108-001AMSD	SampType: MSD			Units: mg/	/Kg-dry	Prep Da	oate: 4/15/2013		RunNo: 8154		
Client ID: BATCH	Batch ID: 4438					Analysis Da	te: 4/16/20	13	SeqNo: 162	2605	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	79.0	0.0906	45.31	31.52	105	75	125	81.28	2.83	30	
Barium	143	0.453	45.31	104.5	85.5	75	125	152.8	6.46	30	
Cadmium	2.71	0.181	2.265	0.1812	112	75	125	2.569	5.22	30	
Chromium	90.9	0.0906	45.31	39.68	113	75	125	80.97	11.5	30	
Lead	58.7	0.181	22.65	32.80	114	75	125	56.35	4.11	30	
Selenium	5.45	0.453	4.531	0.07911	118	75	125	5.664	3.91	30	
Silver	12.9	0.0906	11.33	0.1108	113	75	125	12.93	0.556	30	

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit



Date: 4/18/2013

Work Order: 1304102

CLIENT: PES Environmental, Inc.

Project: Former Pace

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

Date: 4/18/2013



Work Order: 1304102

CLIENT: PES Environmental, Inc. **QC SUMMARY REPORT**

Mercury by FPA Method 7471

Project:	Former Pace							IVI	ercury by EPA Method	1 /4/1
Sample ID:	MB-4443	SampType: MBLK			Units: mg/Kg	9	Prep Date:	4/16/2013	RunNo: 8165	
Client ID:	MBLKS	Batch ID: 4443					Analysis Date:	4/16/2013	SeqNo: 162718	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit RPD Ref V	al %RPD RPDLimit	Qual
Mercury		ND	0.250							
Sample ID:	LCS-4443	SampType: LCS			Units: mg/Kg	9	Prep Date:	4/16/2013	RunNo: 8165	
Client ID:	LCSS	Batch ID: 4443					Analysis Date:	4/16/2013	SeqNo: 162719	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit RPD Ref V	al %RPD RPDLimit	Qual
Mercury		0.583	0.250	0.5000	0	117	80	120		
Sample ID:	1304084-001BMS	SampType: MS			Units: mg/Kg	g-dry	Prep Date:	4/16/2013	RunNo: 8165	
Client ID:	BATCH	Batch ID: 4443					Analysis Date:	4/16/2013	SeqNo: 162721	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit RPD Ref V	al %RPD RPDLimit	Qual
Mercury		0.763	0.307	0.6137	0.1893	93.6	70	130		
Sample ID:	1304084-001BMSD	SampType: MSD			Units: mg/Kg	g-dry	Prep Date:	4/16/2013	RunNo: 8165	
Client ID:	BATCH	Batch ID: 4443					Analysis Date:	4/16/2013	SeqNo: 162722	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit RPD Ref V	al %RPD RPDLimit	Qual
Mercury		0.733	0.301	0.6029	0.1893	90.2	70	130 0.76	34 4.05 20	
Sample ID:	1304084-002BDUP	SampType: DUP			Units: mg/Kg	g-dry	Prep Date:	4/16/2013	RunNo: 8165	
Client ID:	BATCH	Batch ID: 4443					Analysis Date:	4/16/2013	SeqNo: 162724	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit RPD Ref V	al %RPD RPDLimit	Qual
Mercury		ND	0.309						0 0 20	

Analyte detected in the associated Method Blank Qualifiers:

Holding times for preparation or analysis exceeded

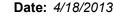
R RPD outside accepted recovery limits

Dilution was required D

Analyte detected below quantitation limits

RL Reporting Limit Ε Value above quantitation range

ND Not detected at the Reporting Limit





QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext

Project: Former Page	JE										
Sample ID: 1304102-001BDUP	SampType: DUP			Units: mg/Kg	-dry	Prep Date	e: 4/15/2013	3	RunNo: 818	35	
Client ID: GP-31-5	Batch ID: 4433					Analysis Date	e: 4/15/201 3	3	SeqNo: 163	084	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	18.4						0	0	30	
Heavy Oil	ND	46.1						0	0	30	
Surr: 2-Fluorobiphenyl	21.6		18.43		117	50	150		0		
Surr: o-Terphenyl	22.1		18.43		120	50	150		0		
Sample ID: LCS-4433	SampType: LCS			Units: mg/Kg		Prep Date	e: 4/15/201 3	3	RunNo: 818	35	
Client ID: LCSS	Batch ID: 4433					Analysis Date	e: 4/15/201 3	3	SeqNo: 163	095	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	588	20.0	500.0	0	118	65	135				
Surr: 2-Fluorobiphenyl	24.5		20.00		122	50	150				
Surr: o-Terphenyl	24.8		20.00		124	50	150				
Sample ID: MB-4433	SampType: MBLK			Units: mg/Kg		Prep Date	e: 4/15/2013	3	RunNo: 818	35	
Client ID: MBLKS	Batch ID: 4433					Analysis Date	e: 4/15/201 3	3	SeqNo: 163	096	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	22.4		20.00		112	50	150				
Surr: o-Terphenyl	23.0		20.00		115	50	150				

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

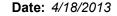
D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit





QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Gasoline by NWTPH-Gx

Project: Former Page	ce								Gasoline	by NWT	PH-G
Sample ID: LCS-R8178 Client ID: LCSS	SampType: LCS Batch ID: R8178			Units: mg/K	g	Prep Date	e: 4/15/20		RunNo: 817 SeqNo: 162		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	25.3	5.00	25.00	0	101	65	135				
Surr: 1,2-Dichloroethane-d4	0.502		0.5000		100	65	135				
Surr: Fluorobenzene	0.499		0.5000		99.8	65	135				
Sample ID: MB-R8178	SampType: MBLK			Units: mg/K	g	Prep Date	e: 4/15/20	13	RunNo: 817	 78	
Client ID: MBLKS	Batch ID: R8178					Analysis Date	e: 4/16/2 0	13	SeqNo: 162	2941	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.478		0.5000		95.6	65	135				
Surr: Fluorobenzene	0.488		0.5000		97.6	65	135				
Sample ID: 1304102-005ADUP	SampType: DUP			Units: mg/K	g-dry	Prep Date	e: 4/15/20	13	RunNo: 817	 78	
Client ID: GP-28-3	Batch ID: R8178					Analysis Date	e: 4/16/20	13	SeqNo: 162	2953	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	3.89						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.372		0.3892		95.7	65	135		0		
Surr: Fluorobenzene	0.387		0.3892		99.4	65	135		0		

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

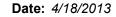
D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1304102-005ADUP	SampType: DUP			Units: mg/l	Kg-dry	Prep Da	te: 4/15/20	13	RunNo: 817	76	
Client ID: GP-28-3	Batch ID: 4436					Analysis Da	te: 4/16/20	13	SeqNo: 162	2889	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0467						0	0	30	
Chloromethane	ND	0.0467						0	0	30	
Vinyl chloride	ND	0.00156						0	0	30	
Bromomethane	ND	0.0700						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0389						0	0	30	
Chloroethane	ND	0.0467						0	0	30	
1,1-Dichloroethene	ND	0.0389						0	0	30	
Methylene chloride	ND	0.0156						0	0	30	
trans-1,2-Dichloroethene	ND	0.0156						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0389						0	0	30	
1,1-Dichloroethane	ND	0.0156						0	0	30	
2,2-Dichloropropane	ND	0.0389						0	0	30	
cis-1,2-Dichloroethene	ND	0.0156						0	0	30	
Chloroform	ND	0.0156						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0156						0	0	30	
1,1-Dichloropropene	ND	0.0156						0	0	30	
Carbon tetrachloride	ND	0.0156						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0233						0	0	30	
Benzene	ND	0.0156						0	0	30	
Trichloroethene (TCE)	ND	0.0233						0	0	30	
1,2-Dichloropropane	ND	0.0156						0	0	30	
Bromodichloromethane	ND	0.0156						0	0	30	
Dibromomethane	ND	0.0311						0	0	30	
cis-1,3-Dichloropropene	ND	0.0156						0	0	30	
Toluene	ND	0.0156						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0233						0	0	30	
1,1,2-Trichloroethane	ND	0.0233						0	0	30	
1,3-Dichloropropane	ND	0.0389						0	0	30	
Tetrachloroethene (PCE)	ND	0.0156						0	0	30	

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

Date: 4/18/2013



Work Order: 1304102

Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1304102-005ADUP	SampType: DUP			Units: mg/K	g-dry	Prep Dat	e: 4/15/2 0	13	RunNo: 817	76	
Client ID: GP-28-3	Batch ID: 4436					Analysis Dat	e: 4/16/2 0	13	SeqNo: 162	2889	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0233						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00389						0	0	30	
Chlorobenzene	ND	0.0156						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0233						0	0	30	
Ethylbenzene	ND	0.0233						0	0	30	
m,p-Xylene	ND	0.0156						0	0	30	
o-Xylene	ND	0.0156						0	0	30	
Styrene	ND	0.0156						0	0	30	
Isopropylbenzene	ND	0.0623						0	0	30	
Bromoform	ND	0.0156						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0156						0	0	30	
n-Propylbenzene	ND	0.0156						0	0	30	
Bromobenzene	ND	0.0233						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0156						0	0	30	
2-Chlorotoluene	ND	0.0156						0	0	30	
4-Chlorotoluene	ND	0.0156						0	0	30	
tert-Butylbenzene	ND	0.0156						0	0	30	
1,2,3-Trichloropropane	ND	0.0156						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0389						0	0	30	
sec-Butylbenzene	ND	0.0156						0	0	30	
4-Isopropyltoluene	ND	0.0156						0	0	30	
1,3-Dichlorobenzene	ND	0.0156						0	0	30	
1,4-Dichlorobenzene	ND	0.0156						0	0	30	
n-Butylbenzene	ND	0.0156						0	0	30	
1,2-Dichlorobenzene	ND	0.0156						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0233						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0156						0	0	30	
Hexachlorobutadiene	ND	0.0778						0	0	30	
Naphthalene	ND	0.0233						0	0	30	

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

Date: 4/18/2013



Work Order: 1304102

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Volatile Organic Compounds by EPA Method 8260

Project: Former Pace	е					voiatile	Organi	ic Compoui	ias by EP	A Wethod	ו סבס נ
Sample ID: 1304102-005ADUP	SampType: D	UP		Units: mg/	Kg-dry	Prep Date	e: 4/15/20	13	RunNo: 817	76	
Client ID: GP-28-3	Batch ID: 4	436				Analysis Date	e: 4/16/20	13	SeqNo: 162	2889	
Analyte	Res	ult RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	N	ND 0.0156						0	0	30	
Surr: Dibromofluoromethane	1.	90	1.946		97.5	67.6	119		0		
Surr: Toluene-d8	1.	88	1.946		96.8	67	139		0		
Surr: 1-Bromo-4-fluorobenzene	1.5	92	1.946		98.4	63.1	141		0		
Sample ID: 1304094-001AMS	SampType: M	IS		Units: mg/	Kg-dry	Prep Date	e: 4/15/20	13	RunNo: 817	 76	
Client ID: BATCH	Batch ID: 4	436				Analysis Date	e: 4/16/20	13	SeqNo: 162	2894	
Analyte	Res	ult RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.	51 0.0921	1.536	0	98.0	43.5	121				
Chloromethane	1.	43 0.0921	1.536	0	93.3	45	130				
Vinyl chloride	1.	64 0.00307	1.536	0	106	51.2	146				
Bromomethane	1.	75 0.138	1.536	0	114	21.3	120				
Trichlorofluoromethane (CFC-11)	1.	63 0.0768	1.536	0	106	35	131				
Chloroethane	1.	73 0.0921	1.536	0	113	43.8	117				
1,1-Dichloroethene	1.	61 0.0768	1.536	0	105	61.9	141				
Methylene chloride	1.	45 0.0307	1.536	0	94.4	54.7	142				
trans-1,2-Dichloroethene	1.	55 0.0307	1.536	0	101	52	136				
Methyl tert-butyl ether (MTBE)	1.	53 0.0768	1.536	0	99.8	54.4	132				
1,1-Dichloroethane	1.	57 0.0307	1.536	0	102	51.8	141				
2,2-Dichloropropane	1.	39 0.0768	1.536	0	90.3	36	123				
cis-1,2-Dichloroethene	1.	56 0.0307	1.536	0	102	58.6	136				

Qualifiers: B Analyte detected in the associated Method Blank

Chloroform

Benzene

1,1,1-Trichloroethane (TCA)

1,2-Dichloroethane (EDC)

1,1-Dichloropropene

Carbon tetrachloride

H Holding times for preparation or analysis exceeded

1.54

1.57

1.58

1.55

1.56

1.59

0.0307

0.0307

0.0307

0.0307

0.0461

0.0307

R RPD outside accepted recovery limits

D Dilution was required

1.536

1.536

1.536

1.536

1.536

1.536

Analyte detected below quantitation limits

0

0

0

0

0

100

102

103

101

101

103

53.2

58.3

55.1

53.3

51.3

63.5

RL Reporting Limit

E Value above quantitation range

129

145

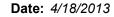
138

144

139

133

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1304094-001AMS	SampType: MS			Units: mg/k	(g-dry	Prep Da	te: 4/15/20	13	RunNo: 817	76	
Client ID: BATCH	Batch ID: 4436					Analysis Da	te: 4/16/20	13	SeqNo: 162	2894	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	1.58	0.0461	1.536	0	103	68.6	132				
1,2-Dichloropropane	1.56	0.0307	1.536	0	102	59	136				
Bromodichloromethane	1.53	0.0307	1.536	0	99.9	50.7	141				
Dibromomethane	1.56	0.0614	1.536	0	102	50.6	137				
cis-1,3-Dichloropropene	1.50	0.0307	1.536	0	97.7	50.4	138				
Toluene	1.58	0.0307	1.536	0	103	67.8	129				
trans-1,3-Dichloropropylene	1.50	0.0461	1.536	0	97.8	44.1	147				
1,1,2-Trichloroethane	1.50	0.0461	1.536	0	97.5	51.6	137				
1,3-Dichloropropane	1.53	0.0768	1.536	0	99.9	53.1	134				
Tetrachloroethene (PCE)	2.19	0.0307	1.536	0	142	35.6	158				
Dibromochloromethane	1.54	0.0461	1.536	0	100	55.3	140				
1,2-Dibromoethane (EDB)	1.53	0.00768	1.536	0	99.8	50.4	136				
Chlorobenzene	1.56	0.0307	1.536	0	102	60	133				
1,1,1,2-Tetrachloroethane	1.57	0.0461	1.536	0	102	53.1	142				
Ethylbenzene	1.58	0.0461	1.536	0	103	54.5	134				
m,p-Xylene	3.23	0.0307	3.071	0	105	53.1	132				
o-Xylene	1.59	0.0307	1.536	0	103	53.3	139				
Styrene	1.57	0.0307	1.536	0	102	51.1	132				
Isopropylbenzene	1.60	0.123	1.536	0	104	58.9	138				
Bromoform	1.47	0.0307	1.536	0	95.5	57.9	130				
1,1,2,2-Tetrachloroethane	1.51	0.0307	1.536	0	98.4	51.9	131				
n-Propylbenzene	1.60	0.0307	1.536	0	104	53.6	140				
Bromobenzene	1.53	0.0461	1.536	0	99.8	54.2	140				
1,3,5-Trimethylbenzene	1.56	0.0307	1.536	0	102	51.8	136				
2-Chlorotoluene	1.57	0.0307	1.536	0	102	51.6	136				
4-Chlorotoluene	1.57	0.0307	1.536	0	103	50.1	139				
tert-Butylbenzene	1.43	0.0307	1.536	0	93.2	50.5	135				
1,2,3-Trichloropropane	1.55	0.0307	1.536	0	101	50.5	131				
1,2,4-Trichlorobenzene	1.50	0.0768	1.536	0	97.6	50.8	130				

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

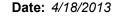
D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Project: Former Pac	<u> </u>							-			
Sample ID: 1304094-001AMS	SampType: M	S		Units: mg/Kg-	dry-	Prep Dat	e: 4/15/20	13	RunNo: 817	76	
Client ID: BATCH	Batch ID: 44	136				Analysis Dat	e: 4/16/20	13	SeqNo: 162	2894	
Analyte	Resu	ılt RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	1.5	0.0307	1.536	0	103	52.6	141				
4-Isopropyltoluene	1.5	0.0307	1.536	0	102	52.9	134				
1,3-Dichlorobenzene	1.5	0.0307	1.536	0	101	52.6	131				
1,4-Dichlorobenzene	1.5	0.0307	1.536	0	101	52.9	129				
n-Butylbenzene	1.5	0.0307	1.536	0	101	52.6	130				
1,2-Dichlorobenzene	1.5	0.0307	1.536	0	102	55.8	129				
1,2-Dibromo-3-chloropropane	1.5	0.0461	1.536	0	98.1	40.5	131				
1,2,4-Trimethylbenzene	1.5	0.0307	1.536	0	102	50.6	137				
Hexachlorobutadiene	0.70	0.154	1.536	0	45.6	40.6	158				
Naphthalene	1.4	18 0.0461	1.536	0	96.2	52.3	124				
1,2,3-Trichlorobenzene	1.4	17 0.0307	1.536	0	95.4	54.4	124				
Surr: Dibromofluoromethane	3.7	77	3.839		98.2	67.6	119				
Surr: Toluene-d8	3.7	79	3.839		98.8	67	139				
Surr: 1-Bromo-4-fluorobenzene	3.8	34	3.839		99.9	63.1	141				
Sample ID: ICV-4436	SampType: IC	V		Units: mg/Kg		Prep Dat	e: 4/15/20	13	RunNo: 817	76	
Client ID: ICV	Batch ID: 44	136				Analysis Dat	e: 4/16/20	13	SeqNo: 162	2902	
Analyte	Resu	ılt RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobutadiene	14	.9 0.100	20.00	0	74.6	70	130				
Surr: Dibromofluoromethane	50	.5	50.00		101	67.6	119				
Surr: Toluene-d8	50	.0	50.00		100	67	139				
Surr: 1-Bromo-4-fluorobenzene	50	.3	50.00		101	63.1	141				

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

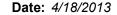
D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-4436	SampType: LCS			Units: mg/Kg		Prep Da	te: 4/15/20	13	RunNo: 817	76	
Client ID: LCSS	Batch ID: 4436					Analysis Dat	te: 4/16/20	13	SeqNo: 162	2903	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.954	0.0600	1.000	0	95.4	37.7	136				
Chloromethane	0.968	0.0600	1.000	0	96.8	38.8	132				
Vinyl chloride	1.03	0.00200	1.000	0	103	56.1	130				
Bromomethane	1.06	0.0900	1.000	0	106	48.6	147				
Trichlorofluoromethane (CFC-11)	1.01	0.0500	1.000	0	101	60.3	132				
Chloroethane	1.04	0.0600	1.000	0	104	55.7	135				
1,1-Dichloroethene	1.00	0.0500	1.000	0	100	64.6	134				
Methylene chloride	0.898	0.0200	1.000	0	89.8	60.6	140				
trans-1,2-Dichloroethene	0.980	0.0200	1.000	0	98.0	68.7	127				
Methyl tert-butyl ether (MTBE)	0.979	0.0500	1.000	0	97.9	73.4	128				
1,1-Dichloroethane	1.00	0.0200	1.000	0	100	65.5	132				
2,2-Dichloropropane	0.850	0.0500	1.000	0	85.0	28.1	149				
cis-1,2-Dichloroethene	0.988	0.0200	1.000	0	98.8	71.6	123				
Chloroform	0.998	0.0200	1.000	0	99.8	67.5	129				
1,1,1-Trichloroethane (TCA)	1.00	0.0200	1.000	0	100	74.4	130				
1,1-Dichloropropene	1.01	0.0200	1.000	0	101	72.7	131				
Carbon tetrachloride	1.01	0.0200	1.000	0	101	67.9	126				
1,2-Dichloroethane (EDC)	1.01	0.0300	1.000	0	101	68.7	133				
Benzene	1.01	0.0200	1.000	0	101	74.6	124				
Trichloroethene (TCE)	0.998	0.0300	1.000	0	99.8	67.4	133				
1,2-Dichloropropane	1.01	0.0200	1.000	0	101	72.7	133				
Bromodichloromethane	0.968	0.0200	1.000	0	96.8	76.1	136				
Dibromomethane	0.994	0.0400	1.000	0	99.4	70	130				
cis-1,3-Dichloropropene	0.962	0.0200	1.000	0	96.2	59.1	143				
Toluene	1.02	0.0200	1.000	0	102	79.9	118				
trans-1,3-Dichloropropylene	0.963	0.0300	1.000	0	96.3	49.2	149				
1,1,2-Trichloroethane	0.972	0.0300	1.000	0	97.2	74.5	129				
1,3-Dichloropropane	0.986	0.0500	1.000	0	98.6	70	130				
Tetrachloroethene (PCE)	1.19	0.0200	1.000	0	119	52.7	150				

Analyte detected in the associated Method Blank Qualifiers:

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

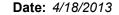
Dilution was required D

Analyte detected below quantitation limits

RL Reporting Limit

Value above quantitation range Ε

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-4436	SampType: LCS			Units: mg/Kg		Prep Da	te: 4/15/20	13	RunNo: 817	76	
Client ID: LCSS	Batch ID: 4436					Analysis Da	te: 4/16/20	13	SeqNo: 162	2903	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	0.986	0.0300	1.000	0	98.6	70.6	144				
1,2-Dibromoethane (EDB)	0.973	0.00500	1.000	0	97.3	70	130				
Chlorobenzene	0.993	0.0200	1.000	0	99.3	76.1	123				
1,1,1,2-Tetrachloroethane	0.980	0.0300	1.000	0	98.0	74.8	131				
Ethylbenzene	1.00	0.0300	1.000	0	100	74	129				
m,p-Xylene	2.02	0.0200	2.000	0	101	79.8	128				
o-Xylene	1.00	0.0200	1.000	0	100	77.3	128				
Styrene	0.991	0.0200	1.000	0	99.1	76.8	130				
Isopropylbenzene	1.01	0.0800	1.000	0	101	70	130				
Bromoform	0.939	0.0200	1.000	0	93.9	67	154				
1,1,2,2-Tetrachloroethane	0.952	0.0200	1.000	0	95.2	60	130				
n-Propylbenzene	1.00	0.0200	1.000	0	100	78	130				
Bromobenzene	0.974	0.0300	1.000	0	97.4	49.2	144				
1,3,5-Trimethylbenzene	0.994	0.0200	1.000	0	99.4	74.6	123				
2-Chlorotoluene	0.983	0.0200	1.000	0	98.3	76.7	129				
4-Chlorotoluene	0.994	0.0200	1.000	0	99.4	77.5	125				
tert-Butylbenzene	0.957	0.0200	1.000	0	95.7	66.2	130				
1,2,3-Trichloropropane	0.964	0.0200	1.000	0	96.4	67.9	136				
1,2,4-Trichlorobenzene	0.940	0.0500	1.000	0	94.0	65.6	137				
sec-Butylbenzene	0.990	0.0200	1.000	0	99.0	75.6	133				
4-Isopropyltoluene	1.01	0.0200	1.000	0	101	76.8	131				
1,3-Dichlorobenzene	0.975	0.0200	1.000	0	97.5	72.8	128				
1,4-Dichlorobenzene	0.983	0.0200	1.000	0	98.2	72.6	126				
n-Butylbenzene	0.982	0.0200	1.000	0	98.2	65.3	136				
1,2-Dichlorobenzene	0.986	0.0200	1.000	0	98.6	72.8	126				
1,2-Dibromo-3-chloropropane	0.986	0.0300	1.000	0	98.6	60.3	130				
1,2,4-Trimethylbenzene	0.992	0.0200	1.000	0	99.2	77.5	129				
Hexachlorobutadiene	0.332	0.100	1.000	0	33.2	42	151				S
Naphthalene	0.906	0.0300	1.000	0	90.6	64	130				

Qualifiers: B Analyte

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

Date: 4/18/2013



Work Order: 1304102

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-4436	SampType: LCS			Units: mg/Kg		Prep Dat	e: 4/15/2013	RunNo: 817	' 6	
Client ID: LCSS	Batch ID: 4436					Analysis Dat	e: 4/16/2013	SeqNo: 162	2903	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	0.925	0.0200	1.000	0	92.5	62.1	140			
Surr: Dibromofluoromethane	2.53		2.500		101	67.6	119			
Surr: Toluene-d8	2.51		2.500		100	67	139			
Surr: 1-Bromo-4-fluorobenzene NOTES:	2.53		2.500		101	63.1	141			

NOTES:

Project:

S - Outlying spike recovery observed for Hexachlorobutadiene. The second source initial calibration verification (ICV) was within range.

Sample ID: MB-4436	SampType: MBLK			Units: mg/Kg		Prep Da	te: 4/15/2	013	RunNo: 817	76	
Client ID: MBLKS	Batch ID: 4436					Analysis Da	te: 4/16/2	013	SeqNo: 162	2906	
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									

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

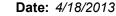
D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

Value above quantitation range

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: MB-4436	SampType: MBLK			Units: mg/Kg		Prep Da	te: 4/15/20	13	RunNo: 817	' 6	
Client ID: MBLKS	Batch ID: 4436					Analysis Da	te: 4/16/20	13	SeqNo: 162	2906	
Analyte	Result	RL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
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									

Qualifiers: B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

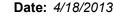
D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit





Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: MB-4436	SampType: MBLK			Units: mg/Kg		Prep Dat	e: 4/15/2 0)13	RunNo: 817	76	
Client ID: MBLKS	Batch ID: 4436					Analysis Dat	e: 4/16/2 0)13	SeqNo: 162	2906	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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: Dibromofluoromethane	2.51		2.500		100	67.6	119				
Surr: Toluene-d8	2.52		2.500		101	67	139				
Surr: 1-Bromo-4-fluorobenzene	2.54		2.500		102	63.1	141				

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit



Sample Log-In Check List

	t Name: PES ed by: Clare Griggs	Work Order Number: Date Received:		1:11:00 PM
Cha	nin 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		
<u>Log</u>	ı In			
<u>LUg</u>		🗖	\Box	\square
4.	Coolers are present?	Yes 🗹	No 🗌	NA 🗌
5.	Was an attempt made to cool the samples?	Yes 🗸	No 🗌	NA \square
6.	Were all coolers received at a temperature of >0° C to 10.0°C	Yes 🔽	No 🗌	NA \square
7.	Sample(s) in proper container(s)?	Yes 🗸	No 🗌	
	Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌	
9.	Are samples properly preserved?	Yes 🗹	No \square	
10.	Was preservative added to bottles?	Yes	No 🗸	NA \square
44	Is there headspace present in VOA vials?	Yes	No 🗹	NA 🗆
	Did all sample containers arrive in good condition?(unbroken)	Yes 🗹	No \square	NA L
	Does paperwork match bottle labels?	Yes 🗹	No \square	
10.	,			
14.	Are matrices correctly identified on Chain of Custody?	Yes 🗹	No \square	
15.	Is it clear what analyses were requested?	Yes 🗹	No 🗌	
16.	Were all holding times able to be met?	Yes 🗹	No 🗌	
Spe	ecial Handling (if applicable)			
_	Was client notified of all discrepancies with this order?	Yes	No 🗆	NA 🗹
	Person Notified: Date By Whom: Via:	'	ne	☐ In Person
	Regarding:			
	Client Instructions:			

18. Additional remarks/Disrepancies

Sample 016 was labeled GP-29-5 on the COC and GP-29-7.5 on the sample label, based on the sample time it is the same sample and will be using the COC version of the sample name in Omega.

Item Information

Item #	Temp °C	Condition
Cooler 1	4.1	Good
Cooler 2	2.4	Good
Tmp Blk 1	4.7	Good
Tmp Blk 2	1.2	Good

MEMORANDUM

TO: Project File DATE: April 22, 2013

FROM: Jerry Harris

SUBJECT: Laboratory Data Validation Review

PROJECT: Former Pace Facility Kirkland, WA

PROJECT #: 1006.008.02.002

TASK: April 10 and 11, 2013 Soil Samples

LAB: Fremont Analytical Service Request No. 1304102

Soil sampling was conducted at the former Pace facility in Kirkland, Washington on April 10 and 11, 2013. Seventeen (17) primary soil samples were collected from the site. In addition to the 17 primary samples, blind field duplicate GP-32-20 was collected with primary sample GP-28-14. A trip blank was also prepared by the laboratory and traveled with the samples; however, a trip blank analysis was not required for this project.

Sixteen primary samples and the blind field duplicate were analyzed for total petroleum hydrocarbons (TPH) as diesel (fuel oil) and heavy oil (HO) by the Northwest TPH-Dx method using a silica gel cleanup, TPH as gasoline by the NWTPH-Gx method, and volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260. One primary sample was analyzed for total metals (arsenic, barium, cadmium, chromium, lead, selenium and silver) by USEPA Method 6020. This sample was also analyzed for total mercury by USEPA Method 7471. The TPH-Dx analyses were performed in one analysis group (ID 4433); the TPH-Gx analyses were performed in one analysis group (ID 8178); and the VOC analyses were performed in one primary analysis group (ID 4436). Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1304102.

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) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (USEPA, 2004).

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 sample log-in checklist reported that the samples were received in good condition. The laboratory received the samples in two coolers at cooler temperatures of 4.1 and 2.4 degrees centigrade (°C). Temperature blanks were also included in each cooler and the blank temperatures were 4.7 and 1.2°C, respectively. The cooler temperatures and the cooler #1 blank temperature were within the USEPA recommended temperature range of $4^{\circ} \pm 2^{\circ}$ C. The temperature of the blank in the second cooler was below the lower limit of the recommended range but above freezing. The sample log-in checklist indicated that the samples were properly cooled during shipment and no potential issues were identified (i.e. frozen samples, cracked or broken sample containers, etc.) to suggest that the low blank temperature of cooler #2 adversely impacted the samples. Based upon the information provided by the laboratory and the cooler temperatures, the low blank temperature from cooler #2 is not considered sufficient cause to warrant qualification of the data. 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 6020

The analyses for total metals were performed within the recommended 180 day holding time limit for soil samples. No data were qualified based upon holding times.

USEPA Method 7471

The analyses for total mercury were performed within the recommended 180 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. However, the laboratory did report the ICV results for hexachlorobutadiene due to an LCS exceedance for this compound. The ICV recovery for this compound was within the control limits.

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 6020

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 7471

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 blank analyses were required for this sampling event.

Field Duplicate Analyses

NWTPH-Dx

The laboratory prepared one blind field duplicate soil sample (ID GP-32-20) for analysis group 4433 from project sample GP-28-14. 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 (ID GP-32-20) for analysis group 8178 from project sample GP-28-14. 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 (ID GP-32-20) for analysis group 4436 from project sample GP-28-14. 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.

USEPA Method 6020

A blind field duplicate analysis was not required for this method. No data qualifications were warranted.

USEPA Method 7471

A blind field duplicate analysis was not required for this method. No data qualifications were warranted.

Laboratory Duplicate Analyses

NWTPH-Dx

The laboratory prepared one duplicate soil sample for analysis group 4433 from project sample GP-31-5. 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 8178 from project sample GP-28-3. 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 4436 from project sample GP-28-3. 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.

USEPA Method 6020

One batch (non-project) laboratory duplicate was prepared and analyzed with the single analysis group. This meets the required duplicate frequency for the analytical method. The duplicate RPDs were within the laboratory control limits. No data qualifications were warranted.

USEPA Method 7471

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.

Surrogate Recoveries

NWTPH-Dx

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

USEPA Method 6020

Surrogates are not required for this method. No data qualifications were warranted.

USEPA Method 7471

Surrogates are not required for this method. 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 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 LCS was prepared and analyzed for the single analytical batch. The LCS %Rs for all target analytes were within the laboratory control limits except for hexachlorobutadiene. The %R for this compound was below the lower control limit, indicating a potential low bias in sample results for hexachlorobutadiene. Because of the low %R for this compound, the laboratory reported ICV results for this compound. The ICV results indicated that the instrument was in control during the analyses. Based upon the LCS and ICV results, all hexachlorobutadiene results reported for the project samples are qualified as estimated and assigned a J flag. The laboratory report pages showing the qualifications are attached. No other qualifications were warranted.

USEPA Method 6020

One 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 7471

One LCS was prepared and analyzed for the single analytical batch. The LCS %R for the target analyte was 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-Dx 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 were within the laboratory control limits for all target analytes. No qualifications were warranted.

USEPA Method 6020

One batch (non-project) soil MS was prepared and analyzed with the single analysis group. This meets the required MS frequency for the analytical method. The MS %Rs were within the laboratory control limits. In addition, a batch MS duplicate was prepared and analyzed. The MS duplicate %Rs and MS-MS duplicate RPDs were within the control limits. No data qualifications were warranted.

USEPA Method 7471

One batch (non-project) soil MS was prepared and analyzed with the single analysis group. This meets the required MS frequency for the analytical method. The MS %R was within the laboratory control limits. In addition, a batch MS duplicate was prepared and analyzed. The MS

duplicate %R and MS-MS duplicate RPD were within the control limits. No data 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

All hexachlorobutadiene results reported for the project samples are qualified as estimated and assigned a J flag due to an LCS %R exceedance for this compound. The laboratory report pages showing the qualifications are attached. No other data were qualified. All data, including the qualified data, are judged to be acceptable for their intended use.



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:30:00 AM

Project: Former Pace

Lab ID: 1304102-001 **Matrix**: Soil

Client Sample ID: GP-31-5

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 11:50:00 AM 0.0359 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM Toluene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 0.0269 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,1,2-Trichloroethane ND 0.0269 4/16/2013 11:50:00 AM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0449 mg/Kg-dry 1 4/16/2013 11:50:00 AM Tetrachloroethene (PCE) ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM Dibromochloromethane ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2-Dibromoethane (EDB) ND 0.00449 mg/Kg-dry 1 4/16/2013 11:50:00 AM Chlorobenzene ND 4/16/2013 11:50:00 AM 0.0179 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 11:50:00 AM ND 0.0269 mg/Kg-dry 1 Ethylbenzene ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM m,p-Xylene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM o-Xylene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM ND 0.0179 1 4/16/2013 11:50:00 AM Styrene mg/Kg-dry Isopropylbenzene ND 0.0718 mg/Kg-dry 1 4/16/2013 11:50:00 AM Bromoform ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,1,2,2-Tetrachloroethane ND 0.0179 4/16/2013 11:50:00 AM mg/Kg-dry 1 ND 4/16/2013 11:50:00 AM n-Propylbenzene 0.0179 mg/Kg-dry 1 Bromobenzene ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,3,5-Trimethylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 2-Chlorotoluene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM ND 4-Chlorotoluene 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM tert-Butylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2,3-Trichloropropane ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2,4-Trichlorobenzene ND 4/16/2013 11:50:00 AM 0.0449 mg/Kg-dry 1 sec-Butylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 4-Isopropyltoluene ND 0.0179 1 4/16/2013 11:50:00 AM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0179 1 4/16/2013 11:50:00 AM mg/Kg-dry ND 4/16/2013 11:50:00 AM 1,4-Dichlorobenzene 0.0179 mg/Kg-dry 1 ND n-Butylbenzene 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2-Dichlorobenzene ND 1 4/16/2013 11:50:00 AM 0.0179 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0269 mg/Kg-dry 1 4/16/2013 11:50:00 AM 1,2,4-Trimethylbenzene ND 0.0179 mg/Kg-dry 1 4/16/2013 11:50:00 AM Hexachlorobutadiene ND 0.0897 mg/Kg-dry 4/16/2013 11:50:00 AM

- 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



WO#: 1304102

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 9:50:00 AM

Project: Former Pace

Lab ID: 1304102-002 **Matrix**: Soil

Client Sample ID: GP-31-9

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM ND 4/16/2013 12:18:00 PM Dibromomethane 0.0299 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Toluene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM trans-1,3-Dichloropropylene ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,1,2-Trichloroethane ND 0.0224 4/16/2013 12:18:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0374 mg/Kg-dry 1 4/16/2013 12:18:00 PM Tetrachloroethene (PCE) ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Dibromochloromethane ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2-Dibromoethane (EDB) ND 0.00374 mg/Kg-dry 1 4/16/2013 12:18:00 PM Chlorobenzene ND 4/16/2013 12:18:00 PM 0.0150 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 12:18:00 PM ND 0.0224 mg/Kg-dry 1 Ethylbenzene ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM m,p-Xylene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM o-Xylene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 0.0150 ND 1 4/16/2013 12:18:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0598 mg/Kg-dry 1 4/16/2013 12:18:00 PM Bromoform ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,1,2,2-Tetrachloroethane ND 0.0150 4/16/2013 12:18:00 PM mg/Kg-dry 1 ND 4/16/2013 12:18:00 PM n-Propylbenzene 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Bromobenzene ND 0.0224 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 2-Chlorotoluene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM ND 4/16/2013 12:18:00 PM 4-Chlorotoluene 0.0150 mg/Kg-dry 1 tert-Butylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2,3-Trichloropropane ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2,4-Trichlorobenzene ND 4/16/2013 12:18:00 PM 0.0374 mg/Kg-dry 1 sec-Butylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 4-Isopropyltoluene ND 0.0150 1 4/16/2013 12:18:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0150 1 4/16/2013 12:18:00 PM mg/Kg-dry ND 4/16/2013 12:18:00 PM 1,4-Dichlorobenzene 0.0150 mg/Kg-dry 1 ND n-Butylbenzene 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 12:18:00 PM 0.0150 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0224 mg/Kg-dry 1 4/16/2013 12:18:00 PM 1,2,4-Trimethylbenzene ND 0.0150 mg/Kg-dry 1 4/16/2013 12:18:00 PM Hexachlorobutadiene ND J 0.0748 mg/Kg-dry 4/16/2013 12:18:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-003 **Matrix:** Soil

Client Sample ID: GP-30-3

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0255 4/16/2013 12:47:00 PM mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Toluene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 0.0192 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,1,2-Trichloroethane ND 0.0192 4/16/2013 12:47:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0319 mg/Kg-dry 1 4/16/2013 12:47:00 PM Tetrachloroethene (PCE) ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Dibromochloromethane ND 0.0192 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2-Dibromoethane (EDB) ND 0.00319 mg/Kg-dry 1 4/16/2013 12:47:00 PM Chlorobenzene ND 4/16/2013 12:47:00 PM 0.0128 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 12:47:00 PM ND 0.0192 mg/Kg-dry 1 Ethylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 12:47:00 PM m,p-Xylene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM o-Xylene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM ND 0.0128 1 4/16/2013 12:47:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0511 mg/Kg-dry 1 4/16/2013 12:47:00 PM Bromoform ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,1,2,2-Tetrachloroethane ND 0.0128 4/16/2013 12:47:00 PM mg/Kg-dry 1 ND 4/16/2013 12:47:00 PM n-Propylbenzene 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Bromobenzene ND 0.0192 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 2-Chlorotoluene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM ND 4-Chlorotoluene 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM tert-Butylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2,3-Trichloropropane ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2,4-Trichlorobenzene ND 0.0319 4/16/2013 12:47:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 4-Isopropyltoluene ND 1 4/16/2013 12:47:00 PM 0.0128 mg/Kg-dry 1,3-Dichlorobenzene ND 0.0128 1 4/16/2013 12:47:00 PM mg/Kg-dry ND 4/16/2013 12:47:00 PM 1,4-Dichlorobenzene 0.0128 mg/Kg-dry 1 ND n-Butylbenzene 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 12:47:00 PM 0.0128 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0192 mg/Kg-dry 1 4/16/2013 12:47:00 PM 1,2,4-Trimethylbenzene ND 0.0128 mg/Kg-dry 1 4/16/2013 12:47:00 PM Hexachlorobutadiene ND J 0.0639 mg/Kg-dry 4/16/2013 12:47:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/10/2013 11:00:00 AM

Project: Former Pace

Lab ID: 1304102-004 **Matrix**: Soil

Client Sample ID: GP-30-8

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 1:16:00 PM 0.0482 mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0241 1 4/16/2013 1:16:00 PM 0.0331 Toluene 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND trans-1,3-Dichloropropylene 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND 1,1,2-Trichloroethane 0.0361 4/16/2013 1:16:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0602 mg/Kg-dry 1 4/16/2013 1:16:00 PM Tetrachloroethene (PCE) ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM Dibromochloromethane ND 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2-Dibromoethane (EDB) ND 0.00602 mg/Kg-dry 1 4/16/2013 1:16:00 PM Chlorobenzene ND 4/16/2013 1:16:00 PM 0.0241 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 1:16:00 PM ND 0.0361 mg/Kg-dry 1 Ethylbenzene ND 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM m,p-Xylene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM o-Xylene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND 1 4/16/2013 1:16:00 PM Styrene 0.0241 mg/Kg-dry Isopropylbenzene ND 0.0964 mg/Kg-dry 1 4/16/2013 1:16:00 PM Bromoform ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,1,2,2-Tetrachloroethane ND 0.0241 4/16/2013 1:16:00 PM mg/Kg-dry 1 ND 4/16/2013 1:16:00 PM n-Propylbenzene 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM Bromobenzene ND 0.0361 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 2-Chlorotoluene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM ND 4/16/2013 1:16:00 PM 4-Chlorotoluene 0.0241 mg/Kg-dry 1 tert-Butylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2,3-Trichloropropane ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2,4-Trichlorobenzene ND 0.0602 4/16/2013 1:16:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 4-Isopropyltoluene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry ND 4/16/2013 1:16:00 PM 1,4-Dichlorobenzene 0.0241 mg/Kg-dry 1 ND n-Butylbenzene 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2-Dichlorobenzene ND 0.0241 1 4/16/2013 1:16:00 PM mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0361 mg/Kg-dry 1 4/16/2013 1:16:00 PM 1,2,4-Trimethylbenzene ND 0.0241 mg/Kg-dry 1 4/16/2013 1:16:00 PM Hexachlorobutadiene ND 0.120 mg/Kg-dry 4/16/2013 1:16:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-005 **Matrix**: Soil

Client Sample ID: GP-28-3

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0311 4/16/2013 1:45:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0156 1 4/16/2013 1:45:00 PM Toluene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM trans-1,3-Dichloropropylene ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,1,2-Trichloroethane ND 0.0233 4/16/2013 1:45:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0389 mg/Kg-dry 1 4/16/2013 1:45:00 PM Tetrachloroethene (PCE) ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM Dibromochloromethane ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2-Dibromoethane (EDB) ND 0.00389 mg/Kg-dry 1 4/16/2013 1:45:00 PM Chlorobenzene ND 4/16/2013 1:45:00 PM 0.0156 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 1:45:00 PM ND 0.0233 mg/Kg-dry 1 Ethylbenzene ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM m,p-Xylene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM o-Xylene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 0.0156 Styrene ND 1 4/16/2013 1:45:00 PM mg/Kg-dry Isopropylbenzene ND 0.0623 mg/Kg-dry 1 4/16/2013 1:45:00 PM Bromoform ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,1,2,2-Tetrachloroethane ND 0.0156 4/16/2013 1:45:00 PM mg/Kg-dry 1 ND 4/16/2013 1:45:00 PM n-Propylbenzene 0.0156 mg/Kg-dry 1 ND 4/16/2013 1:45:00 PM Bromobenzene 0.0233 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 2-Chlorotoluene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM ND 4-Chlorotoluene 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM tert-Butylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2,3-Trichloropropane ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 0.0389 1,2,4-Trichlorobenzene ND 4/16/2013 1:45:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 4-Isopropyltoluene ND 0.0156 1 4/16/2013 1:45:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0156 1 4/16/2013 1:45:00 PM mg/Kg-dry ND 4/16/2013 1:45:00 PM 1,4-Dichlorobenzene 0.0156 mg/Kg-dry 1 ND n-Butylbenzene 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 1:45:00 PM 0.0156 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0233 mg/Kg-dry 1 4/16/2013 1:45:00 PM 1,2,4-Trimethylbenzene ND 0.0156 mg/Kg-dry 1 4/16/2013 1:45:00 PM Hexachlorobutadiene ND 0.0778 mg/Kg-dry 4/16/2013 1:45:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-006 **Matrix**: Soil

Client Sample ID: GP-28-14

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0296 4/16/2013 4:09:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0148 1 4/16/2013 4:09:00 PM Toluene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 0.0222 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,1,2-Trichloroethane ND 0.0222 4/16/2013 4:09:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0371 mg/Kg-dry 1 4/16/2013 4:09:00 PM Tetrachloroethene (PCE) ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM Dibromochloromethane ND 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2-Dibromoethane (EDB) ND 0.00371 mg/Kg-dry 1 4/16/2013 4:09:00 PM Chlorobenzene ND 4/16/2013 4:09:00 PM 0.0148 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 4:09:00 PM ND 0.0222 mg/Kg-dry 1 Ethylbenzene ND 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM m,p-Xylene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM o-Xylene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM ND 0.0148 1 4/16/2013 4:09:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0593 mg/Kg-dry 1 4/16/2013 4:09:00 PM Bromoform ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,1,2,2-Tetrachloroethane ND 0.0148 4/16/2013 4:09:00 PM mg/Kg-dry 1 ND 4/16/2013 4:09:00 PM n-Propylbenzene 0.0148 mg/Kg-dry 1 ND Bromobenzene 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,3,5-Trimethylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 2-Chlorotoluene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM ND 4-Chlorotoluene 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM tert-Butylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2,3-Trichloropropane ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2,4-Trichlorobenzene ND 0.0371 4/16/2013 4:09:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 4-Isopropyltoluene ND 0.0148 1 4/16/2013 4:09:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0148 1 4/16/2013 4:09:00 PM mg/Kg-dry ND 0.0148 4/16/2013 4:09:00 PM 1,4-Dichlorobenzene mg/Kg-dry 1 ND n-Butylbenzene 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2-Dichlorobenzene ND 0.0148 1 mg/Kg-dry 4/16/2013 4:09:00 PM 1,2-Dibromo-3-chloropropane ND 0.0222 mg/Kg-dry 1 4/16/2013 4:09:00 PM 1,2,4-Trimethylbenzene ND 0.0148 mg/Kg-dry 1 4/16/2013 4:09:00 PM Hexachlorobutadiene ND J 0.0741 mg/Kg-dry 4/16/2013 4:09:00 PM

- 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



WO#: 1304102 Date Reported: 4/18/2013

Collection Date: 4/10/2013 1:00:00 PM Client: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304102-007 Matrix: Soil

Client Sample ID: GP-28-22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	by EPA Method 8	3260		Batch	n ID: 440	36 Analyst: EM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	4/16/2013 4:38:00 PM
cis-1,3-Dichloropropene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Toluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
trans-1,3-Dichloropropylene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,1,2-Trichloroethane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,3-Dichloropropane	ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Tetrachloroethene (PCE)	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Dibromochloromethane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2-Dibromoethane (EDB)	ND	0.00281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Chlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Ethylbenzene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
m,p-Xylene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
o-Xylene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Styrene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Isopropylbenzene	ND	0.0450		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Bromoform	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
n-Propylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Bromobenzene	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,3,5-Trimethylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
2-Chlorotoluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
4-Chlorotoluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
tert-Butylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,3-Trichloropropane	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,4-Trichlorobenzene	ND	0.0281		mg/Kg-dry	1	4/16/2013 4:38:00 PM
sec-Butylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
4-Isopropyltoluene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,3-Dichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,4-Dichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
n-Butylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2-Dichlorobenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0169		mg/Kg-dry	1	4/16/2013 4:38:00 PM
1,2,4-Trimethylbenzene	ND	0.0112		mg/Kg-dry	1	4/16/2013 4:38:00 PM
Hexachlorobutadiene	ND J	0.0562		mg/Kg-dry	1	4/16/2013 4:38:00 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
- Н Holding times for preparation or analysis exceeded
- ND Not detected at the Reporting Limit
 - Spike recovery outside accepted recovery limits



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/10/2013

Project: Former Pace

Lab ID: 1304102-008 **Matrix**: Soil

Client Sample ID: GP-32-20

Result **RL** Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0336 4/16/2013 5:07:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0168 1 4/16/2013 5:07:00 PM Toluene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 0.0252 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,1,2-Trichloroethane ND 0.0252 4/16/2013 5:07:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0420 mg/Kg-dry 1 4/16/2013 5:07:00 PM Tetrachloroethene (PCE) ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM Dibromochloromethane ND 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2-Dibromoethane (EDB) ND 0.00420 mg/Kg-dry 1 4/16/2013 5:07:00 PM Chlorobenzene ND 4/16/2013 5:07:00 PM 0.0168 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 5:07:00 PM ND 0.0252 mg/Kg-dry 1 Ethylbenzene ND 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM m,p-Xylene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM o-Xylene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM ND 0.0168 1 4/16/2013 5:07:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0671 mg/Kg-dry 1 4/16/2013 5:07:00 PM Bromoform ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,1,2,2-Tetrachloroethane ND 0.0168 4/16/2013 5:07:00 PM mg/Kg-dry 1 ND 4/16/2013 5:07:00 PM n-Propylbenzene 0.0168 mg/Kg-dry 1 ND Bromobenzene 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,3,5-Trimethylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 2-Chlorotoluene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM ND 4-Chlorotoluene 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM tert-Butylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2,3-Trichloropropane ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2,4-Trichlorobenzene ND 0.0420 4/16/2013 5:07:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 4-Isopropyltoluene ND 0.0168 1 4/16/2013 5:07:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0168 1 4/16/2013 5:07:00 PM mg/Kg-dry ND 0.0168 4/16/2013 5:07:00 PM 1,4-Dichlorobenzene mg/Kg-dry 1 ND n-Butylbenzene 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2-Dichlorobenzene ND 0.0168 1 mg/Kg-dry 4/16/2013 5:07:00 PM 1,2-Dibromo-3-chloropropane ND 0.0252 mg/Kg-dry 1 4/16/2013 5:07:00 PM 1,2,4-Trimethylbenzene ND 0.0168 mg/Kg-dry 1 4/16/2013 5:07:00 PM Hexachlorobutadiene ND 0.0839 mg/Kg-dry 4/16/2013 5:07:00 PM

- 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



WO#: **1304102**

Date Reported: 4/18/2013

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:20:00 AM

Project: Former Pace

Lab ID: 1304102-010 **Matrix:** Soil

Client Sample ID: GP-27-5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0385 4/16/2013 5:36:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0192 1 4/16/2013 5:36:00 PM Toluene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM trans-1,3-Dichloropropylene ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,1,2-Trichloroethane ND 0.0288 4/16/2013 5:36:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0481 mg/Kg-dry 1 4/16/2013 5:36:00 PM Tetrachloroethene (PCE) ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM Dibromochloromethane ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2-Dibromoethane (EDB) ND 0.00481 mg/Kg-dry 1 4/16/2013 5:36:00 PM Chlorobenzene ND 4/16/2013 5:36:00 PM 0.0192 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 5:36:00 PM ND 0.0288 mg/Kg-dry 1 Ethylbenzene ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM m,p-Xylene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM o-Xylene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM ND 0.0192 1 4/16/2013 5:36:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0769 mg/Kg-dry 1 4/16/2013 5:36:00 PM Bromoform ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,1,2,2-Tetrachloroethane ND 0.0192 4/16/2013 5:36:00 PM mg/Kg-dry 1 ND 4/16/2013 5:36:00 PM n-Propylbenzene 0.0192 mg/Kg-dry 1 Bromobenzene ND 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,3,5-Trimethylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 2-Chlorotoluene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM ND 4-Chlorotoluene 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM tert-Butylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2,3-Trichloropropane ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2,4-Trichlorobenzene ND 0.0481 4/16/2013 5:36:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 4-Isopropyltoluene ND 0.0192 1 4/16/2013 5:36:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0192 1 4/16/2013 5:36:00 PM mg/Kg-dry ND 4/16/2013 5:36:00 PM 1,4-Dichlorobenzene 0.0192 mg/Kg-dry 1 ND n-Butylbenzene 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2-Dichlorobenzene ND 0.0192 1 mg/Kg-dry 4/16/2013 5:36:00 PM ND 1,2-Dibromo-3-chloropropane 0.0288 mg/Kg-dry 1 4/16/2013 5:36:00 PM 1,2,4-Trimethylbenzene ND 0.0192 mg/Kg-dry 1 4/16/2013 5:36:00 PM Hexachlorobutadiene ND 0.0961 mg/Kg-dry 4/16/2013 5:36:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 10:50:00 AM

Project: Former Pace

Lab ID: 1304102-011 **Matrix:** Soil

Client Sample ID: GP-27-14.5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 6:05:00 PM 0.0399 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Toluene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 0.0300 trans-1,3-Dichloropropylene ND mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,1,2-Trichloroethane ND 0.0300 4/16/2013 6:05:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0499 mg/Kg-dry 1 4/16/2013 6:05:00 PM Tetrachloroethene (PCE) ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Dibromochloromethane ND 0.0300 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2-Dibromoethane (EDB) ND 0.00499 mg/Kg-dry 1 4/16/2013 6:05:00 PM Chlorobenzene ND 4/16/2013 6:05:00 PM 0.0200 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 6:05:00 PM ND 0.0300 mg/Kg-dry 1 Ethylbenzene ND 0.0300 mg/Kg-dry 1 4/16/2013 6:05:00 PM m,p-Xylene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM o-Xylene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 0.0200 Styrene ND 1 4/16/2013 6:05:00 PM mg/Kg-dry Isopropylbenzene ND 0.0799 mg/Kg-dry 1 4/16/2013 6:05:00 PM Bromoform ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,1,2,2-Tetrachloroethane ND 0.0200 4/16/2013 6:05:00 PM mg/Kg-dry 1 ND 4/16/2013 6:05:00 PM n-Propylbenzene 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Bromobenzene ND 0.0300 mg/Kg-dry 1 1,3,5-Trimethylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 2-Chlorotoluene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM ND 4-Chlorotoluene 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM tert-Butylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2,3-Trichloropropane ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2,4-Trichlorobenzene ND 0.0499 4/16/2013 6:05:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 4-Isopropyltoluene ND 0.0200 1 4/16/2013 6:05:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0200 1 4/16/2013 6:05:00 PM mg/Kg-dry ND 4/16/2013 6:05:00 PM 1,4-Dichlorobenzene 0.0200 mg/Kg-dry 1 ND n-Butylbenzene 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2-Dichlorobenzene ND 0.0200 1 4/16/2013 6:05:00 PM mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0300 mg/Kg-dry 1 4/16/2013 6:05:00 PM 1,2,4-Trimethylbenzene ND 0.0200 mg/Kg-dry 1 4/16/2013 6:05:00 PM Hexachlorobutadiene ND J 0.0998 mg/Kg-dry 4/16/2013 6:05:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 11:20:00 AM

Project: Former Pace

Lab ID: 1304102-012 **Matrix**: Soil

Client Sample ID: GP-26-2

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0306 4/16/2013 6:34:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0153 1 4/16/2013 6:34:00 PM Toluene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM trans-1,3-Dichloropropylene ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,1,2-Trichloroethane ND 0.0229 4/16/2013 6:34:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0382 mg/Kg-dry 1 4/16/2013 6:34:00 PM Tetrachloroethene (PCE) ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM Dibromochloromethane ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2-Dibromoethane (EDB) ND 0.00382 mg/Kg-dry 1 4/16/2013 6:34:00 PM Chlorobenzene ND 4/16/2013 6:34:00 PM 0.0153 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 6:34:00 PM ND 0.0229 mg/Kg-dry 1 Ethylbenzene ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM m,p-Xylene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM o-Xylene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 0.0153 ND 1 4/16/2013 6:34:00 PM Styrene mg/Kg-dry Isopropylbenzene ND 0.0611 mg/Kg-dry 1 4/16/2013 6:34:00 PM Bromoform ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,1,2,2-Tetrachloroethane ND 0.0153 4/16/2013 6:34:00 PM mg/Kg-dry 1 ND 4/16/2013 6:34:00 PM n-Propylbenzene 0.0153 mg/Kg-dry 1 ND Bromobenzene 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,3,5-Trimethylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 2-Chlorotoluene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM ND 4-Chlorotoluene 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM tert-Butylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2,3-Trichloropropane ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2,4-Trichlorobenzene ND 0.0382 4/16/2013 6:34:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 4-Isopropyltoluene ND 0.0153 1 4/16/2013 6:34:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0153 1 4/16/2013 6:34:00 PM mg/Kg-dry ND 4/16/2013 6:34:00 PM 1,4-Dichlorobenzene 0.0153 mg/Kg-dry 1 ND n-Butylbenzene 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2-Dichlorobenzene ND 1 0.0153 mg/Kg-dry 4/16/2013 6:34:00 PM 1,2-Dibromo-3-chloropropane ND 0.0229 mg/Kg-dry 1 4/16/2013 6:34:00 PM 1,2,4-Trimethylbenzene ND 0.0153 mg/Kg-dry 1 4/16/2013 6:34:00 PM Hexachlorobutadiene ND J 0.0764 mg/Kg-dry 4/16/2013 6:34:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 11:30:00 AM

Project: Former Pace

Lab ID: 1304102-013 **Matrix:** Soil

Client Sample ID: GP-26-6

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0369 4/16/2013 7:07:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0184 1 4/16/2013 7:07:00 PM Toluene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM trans-1,3-Dichloropropylene ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,1,2-Trichloroethane ND 0.0277 4/16/2013 7:07:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0461 mg/Kg-dry 1 4/16/2013 7:07:00 PM Tetrachloroethene (PCE) ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM Dibromochloromethane ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2-Dibromoethane (EDB) ND 0.00461 mg/Kg-dry 1 4/16/2013 7:07:00 PM Chlorobenzene ND 4/16/2013 7:07:00 PM 0.0184 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 7:07:00 PM ND 0.0277 mg/Kg-dry 1 Ethylbenzene ND 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM m,p-Xylene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM o-Xylene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM Styrene ND 0.0184 1 4/16/2013 7:07:00 PM mg/Kg-dry Isopropylbenzene ND 0.0738 mg/Kg-dry 1 4/16/2013 7:07:00 PM Bromoform ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,1,2,2-Tetrachloroethane ND 0.0184 4/16/2013 7:07:00 PM mg/Kg-dry 1 ND 4/16/2013 7:07:00 PM n-Propylbenzene 0.0184 mg/Kg-dry 1 ND Bromobenzene 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,3,5-Trimethylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 2-Chlorotoluene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM ND 4/16/2013 7:07:00 PM 4-Chlorotoluene 0.0184 mg/Kg-dry 1 tert-Butylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2,3-Trichloropropane ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2,4-Trichlorobenzene ND 0.0461 4/16/2013 7:07:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 4-Isopropyltoluene ND 0.0184 1 4/16/2013 7:07:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0184 1 4/16/2013 7:07:00 PM mg/Kg-dry ND 0.0184 4/16/2013 7:07:00 PM 1,4-Dichlorobenzene mg/Kg-dry 1 ND n-Butylbenzene 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2-Dichlorobenzene ND 0.0184 1 mg/Kg-dry 4/16/2013 7:07:00 PM ND 1,2-Dibromo-3-chloropropane 0.0277 mg/Kg-dry 1 4/16/2013 7:07:00 PM 1,2,4-Trimethylbenzene ND 0.0184 mg/Kg-dry 1 4/16/2013 7:07:00 PM Hexachlorobutadiene ND 0.0922 mg/Kg-dry 4/16/2013 7:07:00 PM

- 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



PES Environmental, Inc.

Analytical Report

Collection Date: 4/11/2013 12:10:00 PM

WO#: **1304102**Date Reported: **4/18/2013**

Project: Former Pace

Lab ID: 1304102-015 **Matrix:** Soil

Client Sample ID: GP-29-3

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 0.0233 4/16/2013 7:36:00 PM mg/Kg-dry 1 mg/Kg-dry cis-1,3-Dichloropropene ND 0.0117 1 4/16/2013 7:36:00 PM Toluene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM trans-1,3-Dichloropropylene ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,1,2-Trichloroethane ND 0.0175 4/16/2013 7:36:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0292 mg/Kg-dry 1 4/16/2013 7:36:00 PM Tetrachloroethene (PCE) ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM Dibromochloromethane ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2-Dibromoethane (EDB) ND 0.00292 mg/Kg-dry 1 4/16/2013 7:36:00 PM Chlorobenzene ND 4/16/2013 7:36:00 PM 0.0117 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 7:36:00 PM ND 0.0175 mg/Kg-dry 1 Ethylbenzene ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM m,p-Xylene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM o-Xylene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM Styrene ND 1 4/16/2013 7:36:00 PM 0.0117 mg/Kg-dry Isopropylbenzene ND 0.0467 mg/Kg-dry 1 4/16/2013 7:36:00 PM Bromoform ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,1,2,2-Tetrachloroethane ND 0.0117 4/16/2013 7:36:00 PM mg/Kg-dry 1 ND 4/16/2013 7:36:00 PM n-Propylbenzene 0.0117 mg/Kg-dry 1 ND Bromobenzene 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,3,5-Trimethylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 2-Chlorotoluene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM ND 4-Chlorotoluene 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM tert-Butylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2,3-Trichloropropane ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2,4-Trichlorobenzene ND 0.0292 4/16/2013 7:36:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 4-Isopropyltoluene ND 0.0117 1 4/16/2013 7:36:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0117 1 4/16/2013 7:36:00 PM mg/Kg-dry ND 4/16/2013 7:36:00 PM 1,4-Dichlorobenzene 0.0117 mg/Kg-dry 1 ND n-Butylbenzene 0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 7:36:00 PM 0.0117 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0175 mg/Kg-dry 1 4/16/2013 7:36:00 PM 1,2,4-Trimethylbenzene ND0.0117 mg/Kg-dry 1 4/16/2013 7:36:00 PM Hexachlorobutadiene ND J 0.0584 mg/Kg-dry 4/16/2013 7:36:00 PM

- 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



WO#: **1304102**Date Reported: **4/18/2013**

Client: PES Environmental, Inc. Collection Date: 4/11/2013 12:30:00 PM

Project: Former Pace

Lab ID: 1304102-016 **Matrix:** Soil

Client Sample ID: GP-29-5

Result RL Qual Units DF **Date Analyzed Analyses Volatile Organic Compounds by EPA Method 8260** Batch ID: 4436 Analyst: EM Dibromomethane ND 4/16/2013 8:05:00 PM 0.0316 mg/Kg-dry 1 cis-1,3-Dichloropropene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Toluene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM trans-1,3-Dichloropropylene ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,1,2-Trichloroethane ND 0.0237 4/16/2013 8:05:00 PM mg/Kg-dry 1 1.3-Dichloropropane ND 0.0395 mg/Kg-dry 1 4/16/2013 8:05:00 PM Tetrachloroethene (PCE) ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Dibromochloromethane ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2-Dibromoethane (EDB) ND 0.00395 mg/Kg-dry 1 4/16/2013 8:05:00 PM Chlorobenzene ND 4/16/2013 8:05:00 PM 0.0158 1 mg/Kg-dry 1,1,1,2-Tetrachloroethane 4/16/2013 8:05:00 PM ND 0.0237 mg/Kg-dry 1 Ethylbenzene ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM m,p-Xylene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM o-Xylene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Styrene ND 0.0158 1 4/16/2013 8:05:00 PM mg/Kg-dry Isopropylbenzene ND 0.0632 mg/Kg-dry 1 4/16/2013 8:05:00 PM Bromoform ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,1,2,2-Tetrachloroethane ND 0.0158 4/16/2013 8:05:00 PM mg/Kg-dry 1 ND 4/16/2013 8:05:00 PM n-Propylbenzene 0.0158 mg/Kg-dry 1 ND Bromobenzene 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,3,5-Trimethylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 2-Chlorotoluene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM ND 4-Chlorotoluene 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM tert-Butylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2,3-Trichloropropane ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2,4-Trichlorobenzene ND 0.0395 4/16/2013 8:05:00 PM mg/Kg-dry 1 sec-Butylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 4-Isopropyltoluene ND 0.0158 1 4/16/2013 8:05:00 PM mg/Kg-dry 1,3-Dichlorobenzene ND 0.0158 1 4/16/2013 8:05:00 PM mg/Kg-dry ND 4/16/2013 8:05:00 PM 1,4-Dichlorobenzene 0.0158 mg/Kg-dry 1 ND n-Butylbenzene 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2-Dichlorobenzene ND 1 4/16/2013 8:05:00 PM 0.0158 mg/Kg-dry 1,2-Dibromo-3-chloropropane ND 0.0237 mg/Kg-dry 1 4/16/2013 8:05:00 PM 1,2,4-Trimethylbenzene ND 0.0158 mg/Kg-dry 1 4/16/2013 8:05:00 PM Hexachlorobutadiene ND 0.0790 mg/Kg-dry 4/16/2013 8:05:00 PM

- 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



3600 Fremont Ave. N.
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 Lab ID: 1304101

April 18, 2013

Attention Kelly Rankich:

Fremont Analytical, Inc. received 9 sample(s) on 4/12/2013 for the analyses presented in the following report.

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,

Michael Dee

MGR

Sr. Chemist / Principal

Date: 04/18/2013



CLIENT: PES Environmental, Inc. Work Order Sample Summary

Project: Former Pace **Lab Order**: 1304101

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1304101-001	GP-31-W	04/10/2013 2:05 PM	04/12/2013 1:12 PM
1304101-002	GP-30-W	04/10/2013 3:00 PM	04/12/2013 1:12 PM
1304101-003	GP-28-W	04/10/2013 3:30 PM	04/12/2013 1:12 PM
1304101-004	GP-32-W	04/11/2013 1:00 PM	04/12/2013 1:12 PM
1304101-005	GP-26-W	04/11/2013 3:50 PM	04/12/2013 1:12 PM
1304101-006	GP-27-W	04/11/2013 2:40 PM	04/12/2013 1:12 PM
1304101-007	GP-29-W	04/11/2013 3:30 PM	04/12/2013 1:12 PM
1304101-008	GP-27A-W	04/11/2013 4:10 PM	04/12/2013 1:12 PM
1304101-009	Trip Blank	04/05/2013 12:00 AM	04/12/2013 1:12 PM



Case Narrative

WO#: **1304101**Date: **4/18/2013**

CLIENT: PES Environmental, Inc.

Project: Former Pace

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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



WO#: **1304101**

Date Reported: 4/18/2013

CLIENT: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304101-001 **Collection Date:** 4/10/2013 2:05:00 PM

Client Sample ID: GP-31-W Matrix: Water

Units DF **Date Analyzed Analyses** Result RL Qual Volatile Organic Compounds by EPA Method 8260 Batch ID: R8155 Analyst: EM Vinyl chloride ND 0.200 μg/L 4/16/2013 7:42:00 AM Surr: Dibromofluoromethane 104 72.1-122 %REC 4/16/2013 7:42:00 AM 1 Surr: Toluene-d8 92.0 62.1-129 %REC 4/16/2013 7:42:00 AM Surr: 1-Bromo-4-fluorobenzene %REC 94.5 66.8-124 4/16/2013 7:42:00 AM

Lab ID: 1304101-002 Collection Date: 4/10/2013 3:00:00 PM

Client Sample ID: GP-30-W Matrix: Water

Result **RL Qual Units** DF **Date Analyzed Analyses** Batch ID: R8155 Analyst: EM **Volatile Organic Compounds by EPA Method 8260** Vinyl chloride 0.910 0.200 4/16/2013 8:08:00 AM μg/L Surr: Dibromofluoromethane 104 72.1-122 %REC 1 4/16/2013 8:08:00 AM Surr: Toluene-d8 92.3 62.1-129 %REC 1 4/16/2013 8:08:00 AM Surr: 1-Bromo-4-fluorobenzene 93.8 66.8-124 %REC 4/16/2013 8:08:00 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



WO#: **1304101**

Date Reported: 4/18/2013

CLIENT: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304101-003 **Collection Date:** 4/10/2013 3:30:00 PM

Client Sample ID: GP-28-W Matrix: Water

Units DF **Date Analyzed Analyses** Result RL Qual Volatile Organic Compounds by EPA Method 8260 Batch ID: R8155 Analyst: EM Vinyl chloride 1.20 0.200 μg/L 4/16/2013 8:34:00 AM Surr: Dibromofluoromethane 105 72.1-122 %REC 4/16/2013 8:34:00 AM 1 Surr: Toluene-d8 92.5 62.1-129 %REC 4/16/2013 8:34:00 AM Surr: 1-Bromo-4-fluorobenzene 93.3 %REC 66.8-124 4/16/2013 8:34:00 AM

Lab ID: 1304101-004 Collection Date: 4/11/2013 1:00:00 PM

Client Sample ID: GP-32-W Matrix: Water

Result **RL Qual Units** DF **Date Analyzed Analyses** Batch ID: R8155 Analyst: EM **Volatile Organic Compounds by EPA Method 8260** Vinyl chloride ND 0.200 4/16/2013 9:01:00 AM μg/L Surr: Dibromofluoromethane 103 72.1-122 %REC 4/16/2013 9:01:00 AM Surr: Toluene-d8 90.4 62.1-129 %REC 1 4/16/2013 9:01:00 AM Surr: 1-Bromo-4-fluorobenzene 91.4 66.8-124 %REC 4/16/2013 9:01:00 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



WO#: **1304101**

Date Reported: 4/18/2013

CLIENT: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304101-005 **Collection Date:** 4/11/2013 3:50:00 PM

Client Sample ID: GP-26-W Matrix: Water

Units DF **Date Analyzed Analyses** Result RL Qual Volatile Organic Compounds by EPA Method 8260 Batch ID: R8155 Analyst: EM Vinyl chloride ND 0.200 μg/L 4/16/2013 9:27:00 AM Surr: Dibromofluoromethane 104 72.1-122 %REC 4/16/2013 9:27:00 AM Surr: Toluene-d8 91.8 62.1-129 %REC 4/16/2013 9:27:00 AM Surr: 1-Bromo-4-fluorobenzene 91.0 %REC 66.8-124 4/16/2013 9:27:00 AM

Lab ID: 1304101-006 Collection Date: 4/11/2013 2:40:00 PM

Client Sample ID: GP-27-W Matrix: Water

Result **RL Qual Units** DF **Date Analyzed Analyses** Batch ID: R8155 Analyst: EM **Volatile Organic Compounds by EPA Method 8260** Vinyl chloride ND 0.200 4/16/2013 9:54:00 AM μg/L Surr: Dibromofluoromethane 107 72.1-122 %REC 4/16/2013 9:54:00 AM Surr: Toluene-d8 93.1 62.1-129 %REC 1 4/16/2013 9:54:00 AM Surr: 1-Bromo-4-fluorobenzene 91.6 66.8-124 %REC 4/16/2013 9:54:00 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



WO#: 1304101

Date Reported: 4/18/2013

CLIENT: PES Environmental, Inc.

Project: Former Pace

Lab ID: 1304101-007 Collection Date: 4/11/2013 3:30:00 PM

Client Sample ID: GP-29-W Matrix: Water

Units DF **Date Analyzed Analyses** Result RL Qual Volatile Organic Compounds by EPA Method 8260 Batch ID: R8155 Analyst: EM Vinyl chloride ND 0.200 μg/L 4/16/2013 10:21:00 AM Surr: Dibromofluoromethane 106 72 1-122 %REC 4/16/2013 10:21:00 AM 1 Surr: Toluene-d8 92.4 62.1-129 %REC 4/16/2013 10:21:00 AM Surr: 1-Bromo-4-fluorobenzene %REC 91.1 66.8-124 4/16/2013 10:21:00 AM

Lab ID: 1304101-009 **Collection Date**: 4/5/2013

Client Sample ID: Trip Blank Matrix: Water

Analyses Result RL Qual Units DF Date Analyzed

Field Parameters Batch ID: Analyst:

SACODE TB

Volatile Organic Compounds by EPA Method 8260 Batch ID: R8155 Analyst: EM

ND 0.200 4/16/2013 12:52:00 AM Vinyl chloride μg/L 1 Surr: Dibromofluoromethane 99.1 72.1-122 %REC 4/16/2013 12:52:00 AM 1 %REC Surr: Toluene-d8 89.8 62.1-129 1 4/16/2013 12:52:00 AM %REC Surr: 1-Bromo-4-fluorobenzene 90.1 66.8-124 4/16/2013 12:52:00 AM

Qualifiers: B Analyte detected in the associated Method Blank

E Value above quantitation range

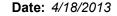
J Analyte detected below quantitation limits

RL Reporting Limit

D Dilution was required

H Holding times for preparation or analysis exceeded

ND Not detected at the Reporting Limit





Work Order: 1304101

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Volatile Organic Compounds by EPA Method 8260

Project: Former Pac	е					Volatile	Organi	c Compoui	nds by EP	A Method	8260
Sample ID: 1304105-001AMS	SampType: MS			Units: µg/L		Prep Date	: 4/16/201	13	RunNo: 815	55	
Client ID: BATCH	Batch ID: R8155					Analysis Date	4/16/201	13	SeqNo: 162	2624	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	19.3	0.200	20.00	0	96.5	45.6	149				
Surr: Dibromofluoromethane	53.4		50.00		107	72.1	122				
Surr: Toluene-d8	55.1		50.00		110	62.1	129				
Surr: 1-Bromo-4-fluorobenzene	53.7		50.00		107	66.8	124				
Sample ID: 1304113-001ADUP	SampType: DUP			Units: µg/L		Prep Date	: 4/16/201	13	RunNo: 815	55	
Client ID: BATCH	Batch ID: R8155					Analysis Date	4/16/201	13	SeqNo: 162	2629	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0	0	30	
Surr: Dibromofluoromethane	51.4		50.00		103	72.1	122		0		
Surr: Toluene-d8	43.9		50.00		87.8	62.1	129		0		
Surr: 1-Bromo-4-fluorobenzene	44.2		50.00		88.4	66.8	124		0		
Sample ID: LCS-R8155	SampType: LCS			Units: µg/L		Prep Date	: 4/15/201	13	RunNo: 815	55	
Client ID: LCSW	Batch ID: R8155					Analysis Date	: 4/15/201	13	SeqNo: 162	2635	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	17.2	0.200	20.00	0	85.9	56.2	130				
Surr: Dibromofluoromethane	51.2		50.00		102	72.1	122				
Surr: Toluene-d8	54.8		50.00		110	62.1	129				
Surr: 1-Bromo-4-fluorobenzene	53.5		50.00		107	66.8	124				

Analyte detected in the associated Method Blank Qualifiers:

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

Dilution was required D

Analyte detected below quantitation limits

RL Reporting Limit

Value above quantitation range Ε

ND Not detected at the Reporting Limit



Date: 4/18/2013

Work Order: 1304101

Project:

QC SUMMARY REPORT

CLIENT: PES Environmental, Inc.

Former Pace

Volatile Organic Compounds by EPA Method 8260

Sample ID: MB-R8155	SampType: MBLK			Units: µg/L		Prep Da	te: 4/15/20	13	RunNo: 815	55	
Client ID: MBLKW	Batch ID: R8155					Analysis Da	te: 4/15/20	13	SeqNo: 162	636	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200									
Surr: Dibromofluoromethane	49.1		50.00		98.2	72.1	122				
Surr: Toluene-d8	44.3		50.00		88.5	62.1	129				
Surr: 1-Bromo-4-fluorobenzene	44.1		50.00		88.2	66.8	124				

Holding times for preparation or analysis exceeded

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit



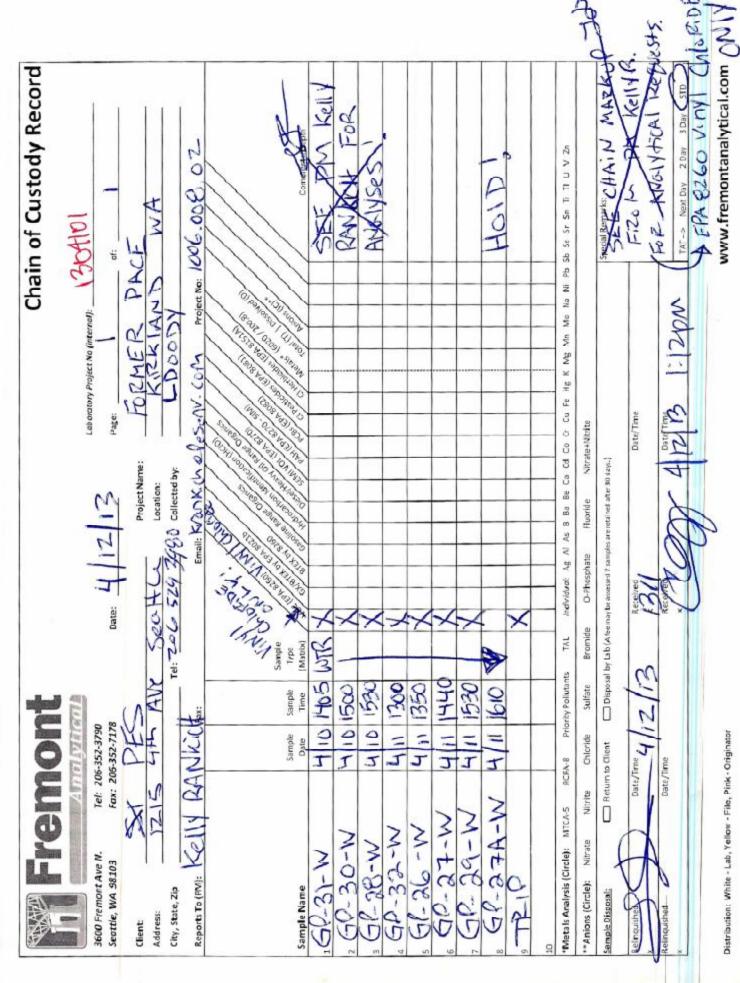
Sample Log-In Check List

	ent Name: PES ged by: Clare Griggs	Work Order N Date Received	umber: 1304101 l: 4/12/2013	3 1:12:00 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?	<u>Client</u>							
<u>Log</u>	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 \square						
10.	Was preservative added to bottles?	Yes	No 🗹	NA \square					
4.4	Letthere has decreased in VOA sinte	Yes	N						
	Is there headspace present in VOA vials?		No ⊻ No □	NA 🗀					
	Did all sample containers arrive in good cond Does paperwork match bottle labels?	Yes V	No \square						
10.	paper neikinaten sette tassis.								
14.	Are matrices correctly identified on Chain of 0	Custody? Yes ✓	No 🗌						
15.	Is it clear what analyses were requested?	Yes 🗸	No \square						
16.	Were all holding times able to be met?	Yes 🗹	No 🗆						
Special Handling (if applicable)									
17.	Was client notified of all discrepancies with the	his order? Yes \square	No 🗆	NA 🗹	1				
	Person Notified: By Whom: Regarding:	Date: Via: eMail	Phone Fax	☐ In Person					
	Client Instructions:								

18. Additional remarks/Disrepancies

Item Information

Item #	Temp °C	Condition
Cooler 1	4.1	Good
Cooler 2	2.4	Good
Tmp Blk 1	4.7	Good
Tmp Blk 2	1.2	Good



MEMORANDUM

TO: Project File DATE: April 22, 2013

FROM: Jerry Harris

SUBJECT: Laboratory Data Validation Review

PROJECT: Former Pace Facility Kirkland, WA

PROJECT #: 1006.008.02.002

TASK: April 10 and 11, 2013 Groundwater Samples

LAB: Fremont Analytical Service Request No. 1304101

Groundwater sampling was conducted at the former Pace facility in Kirkland, Washington on April 10 and 11, 2013. Seven (7) groundwater samples were collected from the site. In addition, one blind field duplicate (sample ID GP-32-W) was collected with primary sample GP-26-W. A trip blank was also prepared by the laboratory, traveled with the samples, and returned to the laboratory for analysis.

The samples were analyzed for vinyl chloride (VC) by United States Environmental Protection Agency (USEPA) Method 8260. The VC analyses were performed in one primary analysis group (ID 8155). Laboratory analytical services were provided by Fremont Analytical (FA) of Seattle, Washington. FA Project number: 1304101.

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 sample log-in checklist reported that the samples were received in good condition. The laboratory received the samples in two coolers at cooler temperatures of 4.1

and 2.4 degrees centigrade (°C). Temperature blanks were also included in each cooler and the blank temperatures were 4.7 and 1.2° C, respectively. The cooler temperatures and the cooler #1 blank temperature were within the USEPA recommended temperature range of $4^{\circ} \pm 2^{\circ}$ C. The temperature of the blank in the second cooler was below the lower limit of the recommended range but above freezing. The sample log-in checklist indicated that the samples were properly cooled during shipment and no potential issues were identified (i.e. frozen samples, cracked or broken sample containers, etc.) to suggest that the low blank temperature of cooler #2 adversely impacted the samples. Based upon the information provided by the laboratory and the cooler temperatures, the low blank temperature from cooler #2 is not considered sufficient cause to warrant qualification of the data. No data qualifications were warranted based upon the laboratory receipt temperatures.

Holding Times

USEPA Method 8260

The analyses for VC were performed within the recommended 14 day holding time limit for water 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

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 VC at a concentration at or above the MRL. No data qualifications were warranted.

Trip Blank Results

USEPA Method 8260

One trip blank was analyzed with the single analysis group. This meets the required trip blank frequency for the project. The trip blank results did not report VC at a concentration at or above the MRL. No data qualifications were warranted.

Field Duplicate Analyses

USEPA Method 8260

One blind field duplicate was prepared from a project sample and analyzed with the single analysis group. This meets the required blind duplicate frequency for the project. The blind field duplicate (ID GP-32-W) was prepared with project sample GP-26-W. VC was not detected in the primary sample or the blind field duplicate. Based upon this information, the field duplicate relative percent difference (RPD) met the RPD control limit of 20 for duplicates. No data qualifications were warranted.

Laboratory Duplicate Analyses

USEPA Method 8260

The laboratory prepared one batch (non-project) duplicate sample for analysis group 8155. The primary and laboratory duplicate pair was analyzed for VC by USEPA Method 8260. The RPD for VC was within the laboratory control criterion of 30 RPD. No data were qualified.

Surrogate Recoveries

USEPA Method 8260

The surrogate %R results for all USEPA Method 8260 soil and water 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

USEPA Method 8260

One laboratory control sample (LCS) was prepared and analyzed for the single analytical batch. The LCS %R for VC was within the laboratory control limit. No qualifications were warranted.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260

One batch (non-project) 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 %R for VC in analysis batch 8155 was within the laboratory control limit. 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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