



A Report Prepared For:

Bay + Area Property Developers
327 Waverly Street
Palo Alto, California 94301

**LIMITED SUBSURFACE INVESTIGATION REPORT
22471, 22477, 22485, and 22491 MAPLE COURT
HAYWARD, CALIFORNIA**

AUGUST 6, 2015

By:

A handwritten signature in blue ink, appearing to read "Chris Baldassari", written over a horizontal line.

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Senior Geologist

A handwritten signature in blue ink, appearing to read "Kyle S. Flory", written over a horizontal line.

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1440.008.01.005

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1.0 INTRODUCTION

This report has been prepared by PES Environmental, Inc. (PES), on behalf of Bay + Area Property Developers (BAPD) to summarize the results of a limited subsurface investigation conducted at 22471, 22477, 22485, and 22491 Maple Court, Hayward, California (subject property or site). The site location is shown on Plate 1. PES understands BAPD is considering acquisition of the site and, if acquired, intends to develop it for multi-family residential purposes, and that the limited subsurface investigation represents a component of BAPD's environmental due diligence. PES further understands that site redevelopment plans and/or drawings were not available for review at the time of the investigation.

Based on the findings of PES' Phase I Environmental Site Assessment (ESA) conducted for the site (PES, 2015; and summarized in Section 2.0, below), the objectives of the investigation activities were to collect subsurface soil, soil gas and groundwater samples to assess whether volatile organic compounds (VOCs) associated with historical uses of the site and surrounding properties are present beneath the subject property at or above levels of concern.

This report summarizes background information, discusses the methods and results of the recently completed investigation and presents conclusions and recommendations based upon the findings.

2.0 BACKGROUND INFORMATION

2.1 Site Description

The subject property consists of four legal parcels identified by Alameda County Assessor's Parcel Numbers (APNs) 428-61-10, 428-61-11, 428-61-12-2, and 428-61-13-2. The subject property is located in a mixed residential and commercial area. One single-story commercial building is located at 22477 Maple Court, and one single family residence is present at 22491 Maple Court. 22485 Maple Court is currently a concrete-paved parking lot, and 22471 Maple Court is an asphalt-paved parking lot associated with 22477 Maple Court.

2.2 Summary of Findings of PES' Phase I ESA

As noted above, PES conducted Phase I ESA activities for the subject property (PES, 2015). Several areas of recognized and/or potential environmental concerns that warranted further investigation include:

- Records indicating the presence of a dry cleaner (Vamco Dry Cleanomat) at 22477 Maple Court. The site has apparently not been previously investigated and no documents regarding chemical use at the site are available. As such, there is a potential for historical releases of dry cleaning chemicals (e.g., tetrachloroethylene [PCE]) from dry cleaning operations to have impacted groundwater and/or soil vapor beneath the subject property;
- Historical regulatory documents indicate the potential use of PCE-containing solvents as part of a former graphics and printing business at 22479 Maple Court (within 22477 Maple Court); and
- Documented off-site impacts to groundwater and soil vapor from historical dry cleaning operations at a Selix facility (22401 – 22487 Foothill Boulevard) located to the northeast and across Maple Court from the subject property. The Selix site is located downgradient-to-crossgradient from the subject property and is under regulatory oversight of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Based on investigation reports prepared by others, groundwater PCE concentrations associated with the Selix facility appear to be generally low and have not significantly impacted off-site groundwater; however, elevated soil vapor concentrations of PCE have been detected beneath the building at that property and the horizontal extent of PCE-impacted soil vapor has not been defined.

Based on the recognized and/or potential environmental concerns identified above, PES recommended conducting investigation activities to assess potential subsurface impacts at the subject site.

3.0 SUBSURFACE INVESTIGATION

The following sections present the field activities and sampling methods (Section 3.1) and analytical methods (Section 3.2) for the subsurface investigation conducted by PES on March 17, 2015. The soil, grab groundwater, and soil vapor sampling rationale and analytical program was described in PES's proposal to you dated March, 13, 2015 (PES document reference number 1440.008.01.P02).

3.1 Field Activities and Sampling Methods

During the subsurface investigation, PES collected three soil vapor samples, and advanced two soil and groundwater borings at 22471 Maple Court. Four soil vapor samples were collected within the interior of 22477 Maple Court. Two soil vapor samples were collected at 22485 Maple Court, and one soil vapor sample was collected at the single-family residence at 22491 Maple Court. The sample locations are shown on Plate 2. The drilling and sampling activities were conducted with oversight by a licensed California Professional Geologist.

3.1.1 Pre-Field Activities

Boring permits were obtained from the Alameda County Public Works Agency (ACPWA) prior to drilling. Copies of the boring permits are included in Appendix A. PES contacted Underground Service Alert more than 48 hours before beginning drilling activities and Subtronic Corporation of Concord, California cleared the boring locations for subsurface utilities prior to conducting intrusive subsurface activities. PES coordinated with TEG – Northern California, Inc. (TEG) of Rancho Cordova, California, a licensed drilling contractor possessing a valid C-57 California water well contractor's license, to conduct the drilling, sampling, and mobile laboratory services. A site-specific Health and Safety Plan that complied with applicable federal, California Occupational Safety and Health Administration (OSHA), and Title 29 CFR 1910.120 guidelines was also prepared by PES for the sampling activities.

3.1.2 Sampling Methods

3.1.2.1 Soil Sampling

To ascertain depth to first-encountered groundwater at the site, PES observed borehole drilling and prepared a lithologic log of continuously-cored soil at boring GW1 using the Unified Soil Classification System (USCS). The lithologic log is presented in Appendix B.

TEG utilized a track-mounted direct-push drilling rig to advance the borings to the target depth of 28 feet below ground surface (bgs). At borings GW1/SS1 and GW2/SS2, TEG utilized a dual-walled sampling system equipped with a clear acetate liner to collect continuous soil cores. Continuous soil cores were collected by driving a nominal 4-foot long by 2-inch outside-diameter open-tube sampler into undisturbed soil.

One soil sample was collected from each boring at approximately 5 to 5.5 feet bgs. The soil samples were collected in accordance with U.S. Environmental Protection Agency (EPA) Method 5035 using Terracore™ samplers and submitted for analysis by U.S. EPA Method 8260B.

The soil samples were labeled to indicate project location, job number, boring number, sample number, and time and date collected and then immediately placed in a thermally-insulated cooler containing ice. The samples were picked up by a courier that transported them under chain of custody protocol to TestAmerica Laboratories (TestAmerica) of Pleasanton, California, a California state-certified laboratory for the requested chemical analyses.

3.1.2.2 Soil Vapor Survey

The active soil gas survey was conducted in general accordance with procedures outlined in the *Advisory for Active Soil Gas Investigations* published by the Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board, Los Angeles Region and the RWQCB, San Francisco Bay Region dated April 2012 (*Advisory*).

The soil vapor survey was conducted with an on-site mobile laboratory to analyze the samples. Soil vapor samples SV-1 through SV-10 were collected at 5 feet bgs (SV-1 through SV-10) and at one location at 10 feet bgs (SV-4) on March 17, 2015. Soil vapor samples were collected by installing a 1-inch diameter, hollow, stainless-steel, soil vapor probe to the target sampling depth. The probes were equipped with a hardened, reverse-threaded steel tip. The probes were driven to the target depths using a hydraulic-drive, direct-push sampling rig or by hand-held equipment. A hydrated bentonite seal was placed around the rods to reduce the potential for ambient air entering the sample. Upon reaching the target depth, a continuous length of inert ¼-inch-diameter polypropylene nylaflow tubing was inserted down the center of the probe and threaded onto the sampling port. The soil vapor probe was allowed to equilibrate for a minimum of 2 hours prior to purging and vapor sampling.

At the beginning of the soil vapor survey, multiple purge-volume testing was performed at the first sampling location (SV-1) to evaluate an appropriate volume of vapor to be purged from each probe prior to sample collection. Soil vapor samples were collected and analyzed from the probes after extracting 1, 3 and 10 purge-volumes. Based on the results of the purge-volume test and in accordance with the Advisory, three purge-volumes were used for collection of subsequent soil vapor samples.

Each probe was purged using a syringe connected to the tubing via a three-way valve. Following the purging of the appropriate volume of soil vapor, the soil vapor sample was collected with a new syringe. A leak check compound (1,1-difluoroethane), was applied to valves and fittings which could be sources of leaks during sample collection for leak check purposes.

The syringes containing soil vapor samples were immediately transferred to an on-site mobile laboratory under chain-of-custody protocol for chemical analysis. Soil vapor samples were analyzed by the on-site mobile laboratory for VOCs using USEPA Test Method 8260B. Quality control (QC) samples collected and analyzed by the on-site mobile laboratory included a duplicate soil vapor sample, method blank sample, and laboratory control samples. The laboratory analytical reports prepared by the project laboratory for soil vapor samples are presented in Appendix C.

Downhole drilling and sampling equipment were cleaned via high pressure hot water wash prior to use and between borings. Upon completion of sampling activities, each borehole was grouted to the surface with cement grout under the oversight of a ACPWA inspector.

3.1.2.3 Grab Groundwater

Two grab groundwater and soil samples were collected at exterior locations north of the building at 22477 Maple court (Plate 2).

To facilitate groundwater sampling, a 1-inch diameter schedule 40 polyvinyl chloride (PVC) well casing fitted with a 10-foot section of factory-slotted PVC well screen was lowered into the borings. Groundwater samples were collected from the PVC casing with a decontaminated check valve and new Teflon tubing. The samples were collected in appropriate laboratory-provided sample containers. Sample containers were labeled to indicate project location, job number, boring number, sample number, and time and date collected. The samples were immediately placed in a thermally-insulated cooler containing ice. The samples were transported under chain of custody protocol to TestAmerica.

Additionally, to reduce the potential for cross-contamination between sampling locations, downhole drilling and sampling equipment were thoroughly cleaned prior to initiating work and between sampling locations. Sampling equipment was washed in a dilute Alconox (or equivalent) solution, rinsed with potable water, and final rinsed with distilled water between each sampling location. Direct-push drilling equipment was decontaminated with a high-pressure hot water wash between sampling locations. Upon completion of sampling activities, each borehole was grouted to the surface in accordance with ACPWA requirements.

3.2 Analytical Methods

The following test method was used to perform the soil, soil vapor, and groundwater analyses:

- Volatile organic compounds (VOCs) U.S. EPA Test Method 8260B.

4.0 RESULTS OF SUBSURFACE INVESTIGATION

4.1 Subsurface Conditions

Continuously-cored soil at the location of boring GW2 was observed to consist of stiff to hard silts with sand to approximately 15 feet bgs. The silts with sands are underlain by dense sands with silt to 28 feet bgs, the maximum depth explored. Saturated soil (indicative of first-encountered groundwater) was encountered at approximately 22 feet bgs. The lithologic log is presented in Appendix B.

4.2 Laboratory Analytical Results

Analytical results presenting detected compounds for the groundwater, soil, and soil vapor samples are summarized in Tables 1 through 3. Laboratory analytical reports and chain-of-custody forms are presented in Appendix C. Detected VOCs in soil and groundwater samples are presented on Plate 3, and detected VOCs in the soil gas samples are presented on Plate 4.

The groundwater analytical results presented in Table 1 are compared in Section 4.2.1 to the RWQCB risk-based Environmental Screening Level (ESL) concentrations for groundwater (where groundwater is a current or potential drinking water source) and for evaluation of potential vapor intrusion concerns (Table E-1). The ESLs were developed by the RWQCB to be protective of human health and the environment where potentially complete exposure pathways exist, and are based on hypothetical concentrations that would indicate a 1×10^{-6} excess lifetime cancer risk level.

The soil matrix results presented in Table 2 are compared in Section 4.2.2 to the RWQCB's risk-based ESL concentrations for shallow soil (where groundwater is a current or potential drinking water source; ESL Table A-1).

The soil gas results presented in Table 3 are compared in Section 4.2.3 to the RWQCB's risk-based ESL concentrations for vapor intrusion into buildings (ESL Table E-2).

4.2.1 Groundwater Results

As indicated in Table 1 and as shown on Plate 3, low concentrations of chlorinated VOCs were detected in groundwater samples. As indicated on Table 1, none of the detected concentrations were above their respective ESLs for potential vapor intrusion concerns in groundwater for commercial or residential land uses. PCE was detected in one groundwater sample (in GW2, at $16 \mu\text{g/L}$) above California drinking water Maximum Contaminant Level (MCL); however, groundwater is not currently used as a drinking water source in the vicinity.

4.2.2 Soil Results

As indicated in Table 2 and as shown on Plate 3, VOCs were not detected at or above the respective laboratory reporting limits in either of the soil samples.

4.2.3 Soil Gas Results

As indicated in Table 3 and as shown on Plate 4, the only VOC detected in soil gas samples was PCE. PCE was not detected in the soil gas samples at concentrations above the commercial ESLs for vapor intrusion concerns. PCE was detected at concentrations above the residential ESLs at eight locations, all located on 22471 and 22477 Maple Court (Plate 4). However, no VOCs were detected in the soil vapor sample collected further south at the single-family residence at 22491 Maple Court.

The leak check compound (1,1-DFA), applied during sampling, was not detected at or above the reporting limit¹.

¹ The *Advisory* recommends that primary samples should not have greater than 5% ambient air breakthrough.

5.0 DISCUSSION AND RECOMMENDATIONS

PES performed a limited subsurface investigation at the subject property on March 17, 2015. The investigation included grab groundwater, soil, and soil gas sampling to assess for potential impact to the site from historical operations and potential off-site sources. Borings were advanced and sampled at 12 locations (including two grab groundwater with companion soil sample locations, and ten soil gas sample locations).

5.1 Groundwater

Chlorinated VOCs detected in the groundwater samples were below RWQCB ELSs for residential or commercial settings. One of the samples contained PCE above the California drinking water MCL.

Based on the low concentrations of the detected VOCs, there does not appear to be significant vapor intrusion concerns for the current use (commercial) of the site resultant from impacts to groundwater beneath the site. Furthermore, detected groundwater concentrations are also below residential use ELSs for vapor intrusion concerns. Based on the results of the subsurface investigation, additional groundwater investigation does not appear warranted and none is recommended at this time.

5.2 Soil

As indicated in Table 2, VOCs were not detected in soil samples.

5.3 Soil Gas

As indicated in Table 3, PCE was detected in soil gas. The PCE detections were below applicable commercial ELSs, and indicate that current soil gas conditions do not likely represent an unacceptable risk to current commercial site users due to exposure to soil vapor.

As shown on Plate 4 and Table 2, relatively elevated concentrations of PCE were detected in six of the eight soil gas sample locations collected on 22471 and 22477 Maple Court, represented by soil gas samples SV-1, SV-2, SV-3, SV-4, SV-5, and SV-10. Co-located shallow (5-foot bgs) and deeper (10-foot bgs) samples were also collected at SV-4 in the northwest corner of the subject property; concentrations of PCE were slightly lower in the soil vapor sample collected at 10 feet.

The concentrations of PCE detected at 22471 and 22477 Maple Court were highest beneath and in the direct vicinity of the building at 22477 Maple Court, and indicate the presence of a source of PCE beneath the building, likely from an historic release of PCE related to the former dry cleaning operation.

VOCs were not detected in sample SV-6, suggesting that the release of PCE at the nearby Selix site is not a concern to the subject property. VOCs were also not detected in soil vapor samples SV-9 (collected at 22491 Maple Court) and SV-7 (collected at 22485 Maple Court, north of the single family residence at 22491 Maple Court), and indicate that vapor intrusion from PCE in soil vapor does not represent a concern to the current occupants.

Should the current commercial use in the northern portion of the site be continued, based on the results of this limited investigation no additional investigation or recommendations for remediation activities at the subject property appear warranted and none is recommended at this time.

5.3.1 Residential Redevelopment Considerations

PCE was detected above the conservative residential ESL in soil gas samples collected in the northern portions of the subject site (22471 and 22477 Maple Court), represented by soil gas samples SV-1, SV-2, SV-3, SV-4, SV-5, and SV-10 (Plate 4). Should redevelopment for future residential uses in this area of the site be planned, it is anticipated that industry standard vapor mitigation measures (such as a vapor barrier with a passive ventilation system) may be employed as part of redevelopment to address potential indoor air concerns for future residential users in this portion of the site.

Additionally, due to historical uses of the site and the detections of VOCs in soil gas and groundwater underlying the subject property, PES recommends that a Site Management Plan (SMP) be prepared. The SMP would be provided to the contractor retained for demolition and site redevelopment activities. The SMP would also describe procedures to be followed in the event that potentially contaminated soil or groundwater is encountered during demolition or redevelopment.

6.0 REFERENCES

AEI Consultants (AEI), 2014a. *Subsurface Investigation, 22401 – 22487 Foothill Boulevard, Hayward, California*. Dated April 29.

AEI, 2014b. *Remedial Action Work Plan, 22401 – 22487 Foothill Boulevard, Hayward, California*. December 19.

Alameda County Assessor's Office (Assessor's Office), 2014.
<http://www.acgov.org/assessor/maps2.htm>. Viewed on October 2.

California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2013. *Environmental Screening Levels*. December.

RWQCB, 2014. *Approval of Subsurface Investigation Report and Request for Remedial Action Workplan - Selix Formalwear, 22423 Foothill Boulevard, Hayward, Alameda County.* July 1.

PES Environmental, Inc., 2015. *Phase I Environmental Site Assessment, Parcels 428-61-1 and 428-61-27, Hayward, California.* August 6.

TABLES

Table 1
Summary of Groundwater Analytical Results
22471, 22477, 22485 & 22491 Maple Court
Hayward, California

Sample Identification	Date Sampled	VOCs	
		PCE	TCE
		(µg/L)	(µg/L)
GW1	3/17/2015	1.1	< 0.50
GW2	3/17/2015	16	0.96
Final Groundwater Screening Level ⁽¹⁾		5.0	5.0
Screening Level for Potential Vapor Intrusion ⁽²⁾		63	130

Notes:

Detections are shown in **bold**. Detections above the listed screening levels are shaded.

< 0.50 : Not detected at the specified laboratory reporting limit.

VOCs: Volatile organic compounds by U.S. EPA Test Method 8260B.

µg/L: Micrograms per liter.

PCE: Tetrachloroethylene.

TCE: Trichloroethylene.

Only analytes detected are presented on this table.

⁽¹⁾ December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table F-1A, Final Groundwater Screening Level.

⁽²⁾ December 2013 SFRWQCB ESLs, Table E-1, Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion - Fine - Coarse Mix- Residential Land Use

Table 2
Summary of Soil Analytical Results
22471, 22477, 22485 & 22491 Maple Court
Hayward, California

Sample Identification	Depth (Feet bgs)	Date Sampled	PCE (µg/kg)	TCE (µg/kg)	cis 1,2-DCE (µg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	MTBE (µg/kg)
SS1-5'	5.0	3/17/2015	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
SS2-5'	5.0	3/17/2015	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
Residential land use ESL ⁽¹⁾			550	460	190	44	2,900	23
Commercial/Industrial land use ESL ⁽²⁾			700	460	190	44	2,900	23

Notes:

Detections are shown in **bold**. Detections above the listed screening levels are shaded.

< 4.0 : Not detected at the specified laboratory reporting limit.

µg/kg: Micrograms per kilogram.

PCE: Tetrachloroethylene.

TCE: Trichloroethylene.

cis 1,2-DCE: cis 1,2-dichloroethene.

MTBE: Methyl tert-butyl ether.

⁽¹⁾ ESL = December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-1 Shallow Soils (<3m bgs) where groundwater is a current or potential source of drinking water for Residential Land Use.

⁽²⁾ ESL = December 2013 SFRWQCB ESLs, Table A-2 Shallow Soils (<3m bgs) where groundwater is a current or potential source of drinking water for Commercial or Industrial Use.

Table 3
Summary of Soil Vapor Analytical Results
22471, 22477, 22485 & 22491 Maple Court
Hayward, California

Sample ID	Depth (Feet bgs)	Purge Volume	Date Sampled	PCE (µg/m ³)	TCE (µg/m ³)	cis 1,2- DCE (µg/m ³)	Benzene (µg/m ³)	Toluene (µg/m ³)
SV-1	5.0	1	3/17/2015	360	< 100	< 100	< 80	< 200
	5.0	3	3/17/2015	430	< 100	< 100	< 80	< 200
	5.0	10	3/17/2015	410	< 100	< 100	< 80	< 200
SV-2	5.0	3	3/17/2015	980	< 100	< 100	< 80	< 200
SV-3	5.0	3	3/17/2015	410	< 100	< 100	< 80	< 200
SV-4	5.0	3	3/17/2015	340	< 100	< 100	< 80	< 200
	5.0-DUP	3	3/17/2015	340	< 100	< 100	< 80	< 200
	10.0	3	3/17/2015	290	< 100	< 100	< 80	< 200
SV-5	5.0	3	3/17/2015	430	< 100	< 100	< 80	< 200
SV-6	5.0	3	3/17/2015	< 100	< 100	< 100	< 80	< 200
SV-7	5.0	3	3/17/2015	< 100	< 100	< 100	< 80	< 200
SV-8	5.0	3	3/17/2015	120	< 100	< 100	< 80	< 200
SV-9	5.0	3	3/17/2015	< 100	< 100	< 100	< 80	< 200
SV-10	5.0	3	3/17/2015	1,300	< 100	< 100	< 80	< 200
Residential land use ESL ⁽¹⁾				210	300	3,700	42	160,000
Commercial/Industrial land use ESL ⁽²⁾				2,100	3,000	31,000	420	1,300,000

Notes:

Detections are shown in **bold**. Detections above the listed screening levels are shaded.

< 100: not detected at or above the indicated laboratory reporting limit.

Feet bgs: Feet below ground surface.

µg/m³: micrograms per cubic meter.

PCE: Tetrachloroethylene.

TCE: Trichloroethylene.

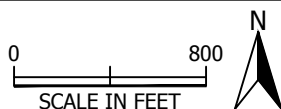
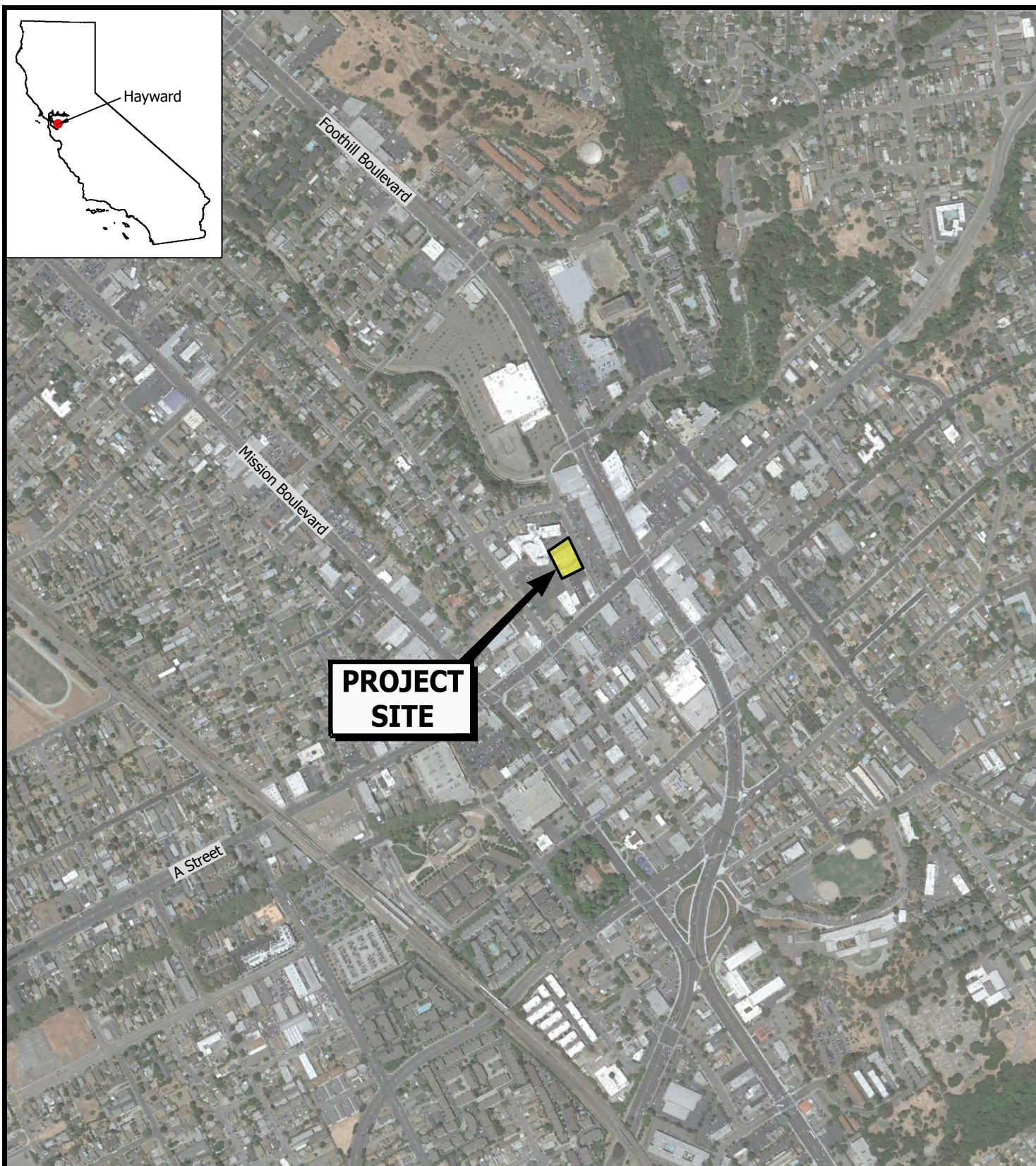
cis 1,2-DCE: cis 1,2-dichloroethene.

ESL: Environmental Screening Level.

⁽¹⁾ December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) ESLs, Table E-2 Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Residential Land Use.

⁽²⁾ December 2013 SFRWQCB ESLs, Table E-2 Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Commercial/Industrial Land Use.

ILLUSTRATIONS



Aerial Photo: June 9, 2014 (Google 2015)



PES Environmental, Inc.
Engineering & Environmental Services

Site Location

Limited Subsurface Investigation
22471, 22477, 22485, and 22491 Maple Court
Hayward, California

PLATE

1



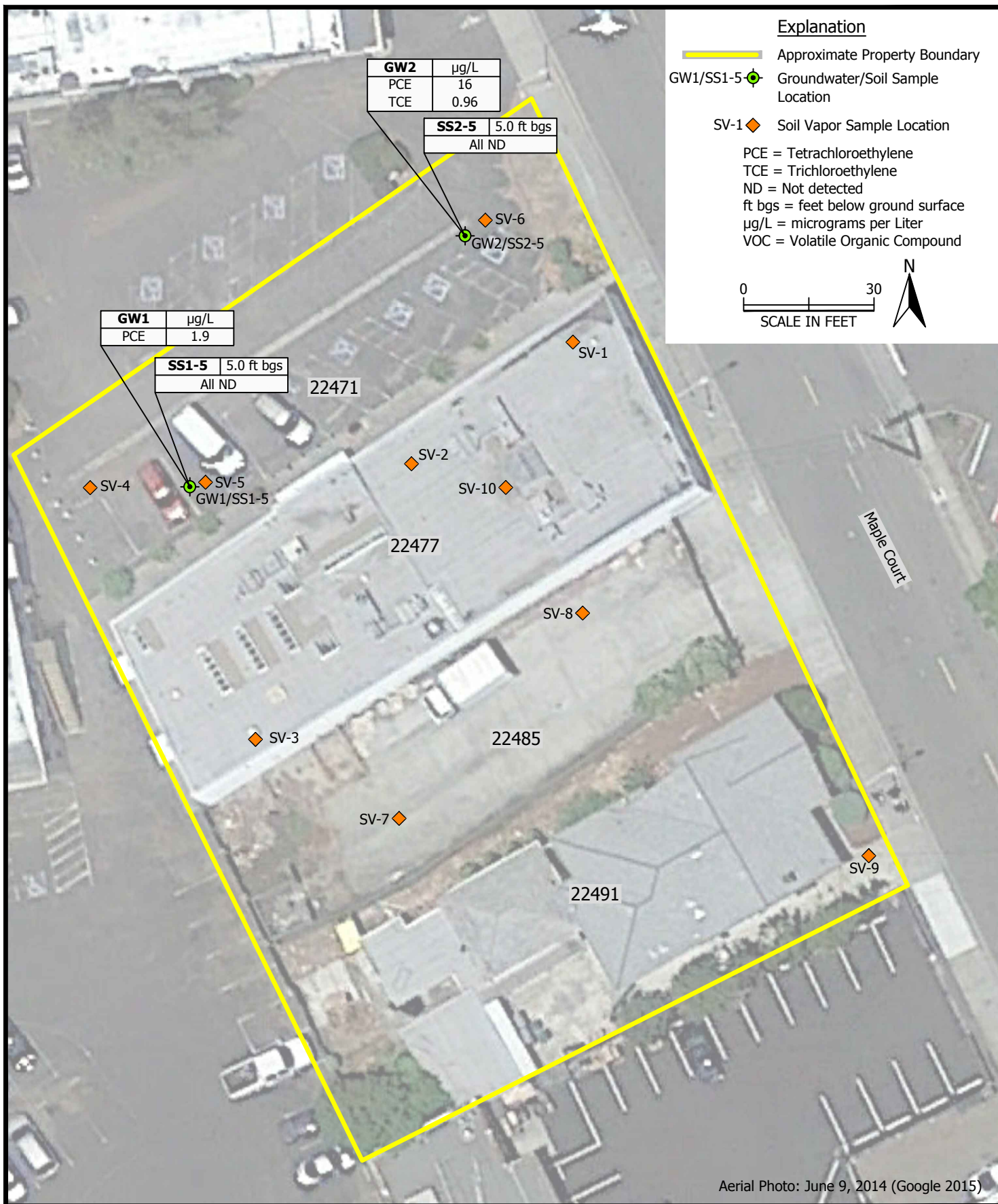
PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Sample Locations

Limited Subsurface Investigation
22471, 22477, 22485, and 22491 Maple Court
Hayward, California

PLATE

2



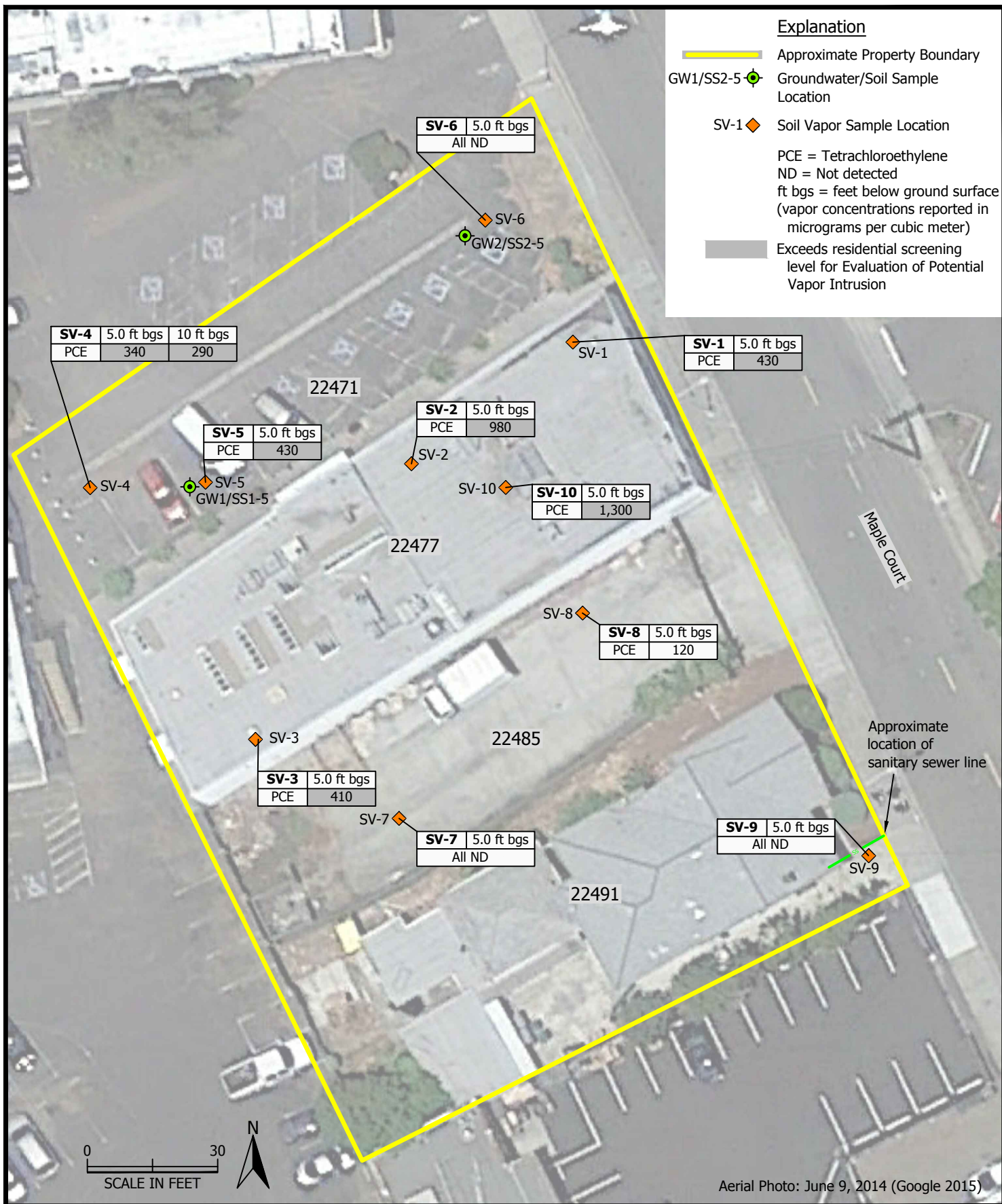
PES Environmental, Inc.
Engineering & Environmental Services

**Summary of Detected VOCs in Grab
Groundwater and Soil Samples**

Limited Subsurface Investigation
22471, 22477, 22485, and 22491 Maple Court
Hayward, California

PLATE

3



PES Environmental, Inc.
Engineering & Environmental Services

Summary of Detected VOCs in Soil Gas Samples

Limited Subsurface Investigation
22471, 22477, 22485, and 22491 Maple Court
Hayward, California

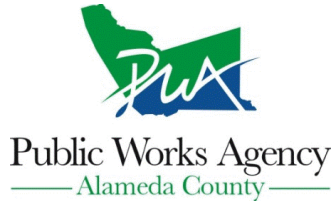
PLATE

4

APPENDIX A

ALAMEDA COUNTY PUBLIC WORKS AGENCY SOIL BORING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/12/2015 By jamesy

Permit Numbers: W2015-0200
Permits Valid from 03/17/2015 to 03/17/2015

Application Id: 1426177125116
Site Location: 22471, 22477, 22485 and 22491 Maple Court, Hayward CA
Project Start Date: 03/17/2015
Assigned Inspector: Contact Sam Brathwaite at (925) 570-7609 or sbrathwaite@groundzonees.com

City of Project Site: Hayward

Completion Date: 03/17/2015

Applicant: PES Environmental Inc - Matthew Eddy
1682 Novato Boulevard, Suite 100, Novato, CA 94947

Phone: 415-497-2741

Property Owner: Justin Tin
458 Carlton Court, South San Francisco, CA 94080

Phone: 650-246-8107

Client: Blake Peters
327 Waverley Street, Palo Alto, CA 94301

Phone: 650-288-5970

Receipt Number: WR2015-0106 Total Due: \$265.00
Payer Name : Matthew R Eddy Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 9 Boreholes

Driller: TEG - Lic #: 706568 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-0200	03/12/2015	06/15/2015	9	1.00 in.	30.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting,

Alameda County Public Works Agency - Water Resources Well Permit

once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B

LITHOLOGIC LOG

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS		PT		PEAT AND OTHER HIGHLY ORGANIC SOILS	

ABBREVIATION KEY

PID (PPM)	- Photo Ionization Detector readings in parts per million from field headspace sample screening.
BLOWS/6IN	- Blows required to drive sampler 6 inches as indicated on the logs using sample drive hammer weight of 140 pounds falling 30 inches.
(10,60,30)	- Percent gravel, percent sand, percent silt/clay
2.5YR 6/2	- Soil Color according to Munsell Soil Color Charts (1994 Revised Edition)
feet MSL	- feet above Mean Sea Level
feet BGS	- feet below ground surface

SYMBOLS KEY

	- No Soil Sample Recovered
	- Partial Soil Sample Recovered
	- Undisturbed Soil Sample Recovered
	- Soil Sample Submitted for Laboratory Analysis
	- Hydropunch Sample
	- First Encountered Wet Soil
	- Piezometric Groundwater level



PES Environmental, Inc.
Engineering & Environmental Services

Unified Soil Classification System Chart
505 Brannan Street
San Francisco, CA

PLATE

B-0



PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				BLACK CLAY (CL) (7.5YR 2.5/1), moist, stiff, (0% gravel, 0% sand, 100% fines)
		5		DARK BROWN SILT WITH SAND (ML) (10YR 3/3), moist, medium stiff, very fine- to fine-grained sand, (0% gravel, 25% sand, 75% fines) Sample ID: SS1-5
				Change in color to DARK YELLOWISH BROWN (10YR 4/4), increase in sand content to (0% gravel, 30% sand, 70% fines) at 8 feet bgs.
		10		DARK YELLOWISH BROWN SILTY SAND (SM) (10YR 4/6), dry, very fine- to fine-grained sand, (0% gravel, 70% sand, 30% fines)
				BROWN SANDY SILT (ML) (10YR 4/3), moist, very fine- to fine-grained sand, (0% gravel, 40% sand, 60% fines)
		15		BROWN SILTY SAND (SM) (10YR 4/3), dry, very fine- to fine- grained sand, (0% gravel, 70% sand, 30% fines)
				Change in color to BROWN (10YR 4/4), increase in fines to (0% gravel, 60% sand, 40% fines) at 16 feet bgs.
		20		DARK YELLOWISH BROWN SANDY SILT (ML) (10YR 3/4), moist, fine- to medium-grained sand, (0% gravel, 40% sand, 60% fines) Increase in gravel content to (10% gravel, 40% sand, 50% fines) at 21 feet bgs, subangular gravel up to 1.5-inch diameter.
				DARK BROWN WELL-GRADED SAND (SW) (10YR 3/3), wet, fine- to medium-grained sand, subangular gravel up to 1-inch diameter, (10% gravel, 90% sand, 0% fines)
		25		BROWN SILT (ML) (10YR 4/3), wet, very fine- to fine-grained sand, (0% gravel, 10% sand, 90% fines)
				Bottom of boring at 28 feet bgs. Boring backfilled with neat cement grout.
		30		

PROJECT 22471 - 22491 Maple Court
LOCATION Hayward, CA
JOB NUMBER 1440.008.01.003
LOGGED BY M. Eddy
DRILL RIG Direct Push

REVIEWED BY KSF
DIAMETER OF HOLE 2.25 inches
TOTAL DEPTH OF HOLE 28 feet
DATE STARTED 3/17/15
DATE COMPLETED 3/17/15

PLATE
B-1

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-63578-1

Client Project/Site: Maple Court/Hayward

For:

PES Environmental, Inc.

1682 Novato Boulevard

Suite 100

Novato, California 94947-7021

Attn: Mr. Kyle Flory



Authorized for release by:

3/23/2015 5:15:45 PM

Afsaneh Salimpour, Senior Project Manager

(925)484-1919

afsaneh.salimpour@testamericainc.com

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results through

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Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Job ID: 720-63578-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-63578-1

Comments

No additional comments.

Receipt

The samples were received on 3/17/2015 4:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Client Sample ID: SS1-5'

Lab Sample ID: 720-63578-1

No Detections.

Client Sample ID: GW1

Lab Sample ID: 720-63578-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.1		0.50		ug/L	1		8260B	Total/NA

Client Sample ID: SS2-5'

Lab Sample ID: 720-63578-3

No Detections.

Client Sample ID: GW2

Lab Sample ID: 720-63578-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	16		0.50		ug/L	1		8260B	Total/NA
Trichloroethene	0.96		0.50		ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SS1-5'

Date Collected: 03/17/15 12:45

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Acetone	ND		40		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Benzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Dichlorobromomethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Bromobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Chlorobromomethane	ND		16		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Bromoform	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Bromomethane	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
2-Butanone (MEK)	ND		40		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
n-Butylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
sec-Butylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
tert-Butylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Carbon disulfide	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Carbon tetrachloride	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Chlorobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Chloroethane	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Chloroform	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Chloromethane	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
2-Chlorotoluene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
4-Chlorotoluene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Chlorodibromomethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2-Dichlorobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,3-Dichlorobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,4-Dichlorobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,3-Dichloropropane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1-Dichloropropene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2-Dibromo-3-Chloropropane	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Ethylene Dibromide	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Dibromomethane	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Dichlorodifluoromethane	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1-Dichloroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2-Dichloroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1-Dichloroethene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
cis-1,2-Dichloroethene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
trans-1,2-Dichloroethene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2-Dichloropropane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
cis-1,3-Dichloropropene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
trans-1,3-Dichloropropene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Ethylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Hexachlorobutadiene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
2-Hexanone	ND		40		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Isopropylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
4-Isopropyltoluene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Methylene Chloride	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
4-Methyl-2-pentanone (MIBK)	ND		40		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Naphthalene	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
N-Propylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Styrene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1,1,2-Tetrachloroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1

TestAmerica Pleasanton

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SS1-5'

Date Collected: 03/17/15 12:45

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Tetrachloroethene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Toluene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2,3-Trichlorobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2,4-Trichlorobenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1,1-Trichloroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1,2-Trichloroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Trichloroethene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Trichlorofluoromethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2,3-Trichloropropane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,2,4-Trimethylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
1,3,5-Trimethylbenzene	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Vinyl acetate	ND		16		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Vinyl chloride	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
Xylenes, Total	ND		8.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1
2,2-Dichloropropane	ND		4.0		ug/Kg		03/17/15 22:45	03/19/15 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		45 - 131	03/17/15 22:45	03/19/15 20:53	1
1,2-Dichloroethane-d4 (Surr)	105		60 - 140	03/17/15 22:45	03/19/15 20:53	1
Toluene-d8 (Surr)	97		58 - 140	03/17/15 22:45	03/19/15 20:53	1

Client Sample ID: GW1

Date Collected: 03/17/15 13:07

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/20/15 18:16	1
Acetone	ND		50		ug/L			03/20/15 18:16	1
Benzene	ND		0.50		ug/L			03/20/15 18:16	1
Dichlorobromomethane	ND		0.50		ug/L			03/20/15 18:16	1
Bromobenzene	ND		1.0		ug/L			03/20/15 18:16	1
Chlorobromomethane	ND		1.0		ug/L			03/20/15 18:16	1
Bromoform	ND		1.0		ug/L			03/20/15 18:16	1
Bromomethane	ND		1.0		ug/L			03/20/15 18:16	1
2-Butanone (MEK)	ND		50		ug/L			03/20/15 18:16	1
n-Butylbenzene	ND		1.0		ug/L			03/20/15 18:16	1
sec-Butylbenzene	ND		1.0		ug/L			03/20/15 18:16	1
tert-Butylbenzene	ND		1.0		ug/L			03/20/15 18:16	1
Carbon disulfide	ND		5.0		ug/L			03/20/15 18:16	1
Carbon tetrachloride	ND		0.50		ug/L			03/20/15 18:16	1
Chlorobenzene	ND		0.50		ug/L			03/20/15 18:16	1
Chloroethane	ND		1.0		ug/L			03/20/15 18:16	1
Chloroform	ND		1.0		ug/L			03/20/15 18:16	1
Chloromethane	ND		1.0		ug/L			03/20/15 18:16	1
2-Chlorotoluene	ND		0.50		ug/L			03/20/15 18:16	1
4-Chlorotoluene	ND		0.50		ug/L			03/20/15 18:16	1
Chlorodibromomethane	ND		0.50		ug/L			03/20/15 18:16	1
1,2-Dichlorobenzene	ND		0.50		ug/L			03/20/15 18:16	1
1,3-Dichlorobenzene	ND		0.50		ug/L			03/20/15 18:16	1

TestAmerica Pleasanton

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW1

Date Collected: 03/17/15 13:07

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.50		ug/L			03/20/15 18:16	1
1,3-Dichloropropane	ND		1.0		ug/L			03/20/15 18:16	1
1,1-Dichloropropene	ND		0.50		ug/L			03/20/15 18:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			03/20/15 18:16	1
Ethylene Dibromide	ND		0.50		ug/L			03/20/15 18:16	1
Dibromomethane	ND		0.50		ug/L			03/20/15 18:16	1
Dichlorodifluoromethane	ND		0.50		ug/L			03/20/15 18:16	1
1,1-Dichloroethane	ND		0.50		ug/L			03/20/15 18:16	1
1,2-Dichloroethane	ND		0.50		ug/L			03/20/15 18:16	1
1,1-Dichloroethene	ND		0.50		ug/L			03/20/15 18:16	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			03/20/15 18:16	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			03/20/15 18:16	1
1,2-Dichloropropane	ND		0.50		ug/L			03/20/15 18:16	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			03/20/15 18:16	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			03/20/15 18:16	1
Ethylbenzene	ND		0.50		ug/L			03/20/15 18:16	1
Hexachlorobutadiene	ND		1.0		ug/L			03/20/15 18:16	1
2-Hexanone	ND		50		ug/L			03/20/15 18:16	1
Isopropylbenzene	ND		0.50		ug/L			03/20/15 18:16	1
4-Isopropyltoluene	ND		1.0		ug/L			03/20/15 18:16	1
Methylene Chloride	ND		5.0		ug/L			03/20/15 18:16	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			03/20/15 18:16	1
Naphthalene	ND		1.0		ug/L			03/20/15 18:16	1
N-Propylbenzene	ND		1.0		ug/L			03/20/15 18:16	1
Styrene	ND		0.50		ug/L			03/20/15 18:16	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			03/20/15 18:16	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			03/20/15 18:16	1
Tetrachloroethene	1.1		0.50		ug/L			03/20/15 18:16	1
Toluene	ND		0.50		ug/L			03/20/15 18:16	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			03/20/15 18:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/20/15 18:16	1
1,1,1-Trichloroethane	ND		0.50		ug/L			03/20/15 18:16	1
1,1,2-Trichloroethane	ND		0.50		ug/L			03/20/15 18:16	1
Trichloroethene	ND		0.50		ug/L			03/20/15 18:16	1
Trichlorofluoromethane	ND		1.0		ug/L			03/20/15 18:16	1
1,2,3-Trichloropropane	ND		0.50		ug/L			03/20/15 18:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			03/20/15 18:16	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			03/20/15 18:16	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/20/15 18:16	1
Vinyl acetate	ND		10		ug/L			03/20/15 18:16	1
Vinyl chloride	ND		0.50		ug/L			03/20/15 18:16	1
Xylenes, Total	ND		1.0		ug/L			03/20/15 18:16	1
2,2-Dichloropropane	ND		0.50		ug/L			03/20/15 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		03/20/15 18:16	1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		03/20/15 18:16	1
Toluene-d8 (Surr)	98		70 - 130		03/20/15 18:16	1

TestAmerica Pleasanton

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: SS2-5'

Date Collected: 03/17/15 13:50

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-3

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Acetone	ND		35		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Benzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Dichlorobromomethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Bromobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Chlorobromomethane	ND		14		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Bromoform	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Bromomethane	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
2-Butanone (MEK)	ND		35		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
n-Butylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
sec-Butylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
tert-Butylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Carbon disulfide	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Carbon tetrachloride	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Chlorobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Chloroethane	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Chloroform	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Chloromethane	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
2-Chlorotoluene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
4-Chlorotoluene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Chlorodibromomethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2-Dichlorobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,3-Dichlorobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,4-Dichlorobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,3-Dichloropropane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1-Dichloropropene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2-Dibromo-3-Chloropropane	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Ethylene Dibromide	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Dibromomethane	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Dichlorodifluoromethane	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1-Dichloroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2-Dichloroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1-Dichloroethene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
cis-1,2-Dichloroethene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
trans-1,2-Dichloroethene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2-Dichloropropane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
cis-1,3-Dichloropropene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
trans-1,3-Dichloropropene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Ethylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Hexachlorobutadiene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
2-Hexanone	ND		35		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Isopropylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
4-Isopropyltoluene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Methylene Chloride	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
4-Methyl-2-pentanone (MIBK)	ND		35		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Naphthalene	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
N-Propylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Styrene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1,1,2-Tetrachloroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1

TestAmerica Pleasanton

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SS2-5'

Date Collected: 03/17/15 13:50

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-3

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Tetrachloroethene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Toluene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2,3-Trichlorobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2,4-Trichlorobenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1,1-Trichloroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1,2-Trichloroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Trichloroethene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Trichlorofluoromethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2,3-Trichloropropane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,2,4-Trimethylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
1,3,5-Trimethylbenzene	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Vinyl acetate	ND		14		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Vinyl chloride	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
Xylenes, Total	ND		7.1		ug/Kg		03/17/15 22:45	03/19/15 21:21	1
2,2-Dichloropropane	ND		3.5		ug/Kg		03/17/15 22:45	03/19/15 21:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		45 - 131	03/17/15 22:45	03/19/15 21:21	1
1,2-Dichloroethane-d4 (Surr)	111		60 - 140	03/17/15 22:45	03/19/15 21:21	1
Toluene-d8 (Surr)	99		58 - 140	03/17/15 22:45	03/19/15 21:21	1

Client Sample ID: GW2

Date Collected: 03/17/15 14:45

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/20/15 18:47	1
Acetone	ND		50		ug/L			03/20/15 18:47	1
Benzene	ND		0.50		ug/L			03/20/15 18:47	1
Dichlorobromomethane	ND		0.50		ug/L			03/20/15 18:47	1
Bromobenzene	ND		1.0		ug/L			03/20/15 18:47	1
Chlorobromomethane	ND		1.0		ug/L			03/20/15 18:47	1
Bromoform	ND		1.0		ug/L			03/20/15 18:47	1
Bromomethane	ND		1.0		ug/L			03/20/15 18:47	1
2-Butanone (MEK)	ND		50		ug/L			03/20/15 18:47	1
n-Butylbenzene	ND		1.0		ug/L			03/20/15 18:47	1
sec-Butylbenzene	ND		1.0		ug/L			03/20/15 18:47	1
tert-Butylbenzene	ND		1.0		ug/L			03/20/15 18:47	1
Carbon disulfide	ND		5.0		ug/L			03/20/15 18:47	1
Carbon tetrachloride	ND		0.50		ug/L			03/20/15 18:47	1
Chlorobenzene	ND		0.50		ug/L			03/20/15 18:47	1
Chloroethane	ND		1.0		ug/L			03/20/15 18:47	1
Chloroform	ND		1.0		ug/L			03/20/15 18:47	1
Chloromethane	ND		1.0		ug/L			03/20/15 18:47	1
2-Chlorotoluene	ND		0.50		ug/L			03/20/15 18:47	1
4-Chlorotoluene	ND		0.50		ug/L			03/20/15 18:47	1
Chlorodibromomethane	ND		0.50		ug/L			03/20/15 18:47	1
1,2-Dichlorobenzene	ND		0.50		ug/L			03/20/15 18:47	1
1,3-Dichlorobenzene	ND		0.50		ug/L			03/20/15 18:47	1

TestAmerica Pleasanton

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW2

Date Collected: 03/17/15 14:45

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.50		ug/L			03/20/15 18:47	1
1,3-Dichloropropane	ND		1.0		ug/L			03/20/15 18:47	1
1,1-Dichloropropene	ND		0.50		ug/L			03/20/15 18:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			03/20/15 18:47	1
Ethylene Dibromide	ND		0.50		ug/L			03/20/15 18:47	1
Dibromomethane	ND		0.50		ug/L			03/20/15 18:47	1
Dichlorodifluoromethane	ND		0.50		ug/L			03/20/15 18:47	1
1,1-Dichloroethane	ND		0.50		ug/L			03/20/15 18:47	1
1,2-Dichloroethane	ND		0.50		ug/L			03/20/15 18:47	1
1,1-Dichloroethene	ND		0.50		ug/L			03/20/15 18:47	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			03/20/15 18:47	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			03/20/15 18:47	1
1,2-Dichloropropane	ND		0.50		ug/L			03/20/15 18:47	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			03/20/15 18:47	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			03/20/15 18:47	1
Ethylbenzene	ND		0.50		ug/L			03/20/15 18:47	1
Hexachlorobutadiene	ND		1.0		ug/L			03/20/15 18:47	1
2-Hexanone	ND		50		ug/L			03/20/15 18:47	1
Isopropylbenzene	ND		0.50		ug/L			03/20/15 18:47	1
4-Isopropyltoluene	ND		1.0		ug/L			03/20/15 18:47	1
Methylene Chloride	ND		5.0		ug/L			03/20/15 18:47	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			03/20/15 18:47	1
Naphthalene	ND		1.0		ug/L			03/20/15 18:47	1
N-Propylbenzene	ND		1.0		ug/L			03/20/15 18:47	1
Styrene	ND		0.50		ug/L			03/20/15 18:47	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			03/20/15 18:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			03/20/15 18:47	1
Tetrachloroethene	16		0.50		ug/L			03/20/15 18:47	1
Toluene	ND		0.50		ug/L			03/20/15 18:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			03/20/15 18:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/20/15 18:47	1
1,1,1-Trichloroethane	ND		0.50		ug/L			03/20/15 18:47	1
1,1,2-Trichloroethane	ND		0.50		ug/L			03/20/15 18:47	1
Trichloroethene	0.96		0.50		ug/L			03/20/15 18:47	1
Trichlorofluoromethane	ND		1.0		ug/L			03/20/15 18:47	1
1,2,3-Trichloropropane	ND		0.50		ug/L			03/20/15 18:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			03/20/15 18:47	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			03/20/15 18:47	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/20/15 18:47	1
Vinyl acetate	ND		10		ug/L			03/20/15 18:47	1
Vinyl chloride	ND		0.50		ug/L			03/20/15 18:47	1
Xylenes, Total	ND		1.0		ug/L			03/20/15 18:47	1
2,2-Dichloropropane	ND		0.50		ug/L			03/20/15 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130					03/20/15 18:47	1
1,2-Dichloroethane-d4 (Surr)	101		72 - 130					03/20/15 18:47	1
Toluene-d8 (Surr)	99		70 - 130					03/20/15 18:47	1

TestAmerica Pleasanton

Surrogate Summary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (45-131)	12DCE (60-140)	TOL (58-140)
720-63578-1	SS1-5'	93	105	97
720-63578-3	SS2-5'	98	111	99
LCS 720-177960/5	Lab Control Sample	98	95	101
LCSD 720-177960/6	Lab Control Sample Dup	102	96	101
MB 720-177960/4	Method Blank	102	100	101

Surrogate Legend

BFB = 4-Bromofluorobenzene

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (67-130)	12DCE (72-130)	TOL (70-130)
720-63578-2	GW1	101	102	98
720-63578-4	GW2	99	101	99
LCS 720-177999/5	Lab Control Sample	100	103	103
LCSD 720-177999/6	Lab Control Sample Dup	101	98	102
MB 720-177999/4	Method Blank	103	101	101

Surrogate Legend

BFB = 4-Bromofluorobenzene

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-177960/4

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg			03/19/15 16:14	1
Acetone	ND		50		ug/Kg			03/19/15 16:14	1
Benzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Dichlorobromomethane	ND		5.0		ug/Kg			03/19/15 16:14	1
Bromobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Chlorobromomethane	ND		20		ug/Kg			03/19/15 16:14	1
Bromoform	ND		5.0		ug/Kg			03/19/15 16:14	1
Bromomethane	ND		10		ug/Kg			03/19/15 16:14	1
2-Butanone (MEK)	ND		50		ug/Kg			03/19/15 16:14	1
n-Butylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
sec-Butylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
tert-Butylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Carbon disulfide	ND		5.0		ug/Kg			03/19/15 16:14	1
Carbon tetrachloride	ND		5.0		ug/Kg			03/19/15 16:14	1
Chlorobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Chloroethane	ND		10		ug/Kg			03/19/15 16:14	1
Chloroform	ND		5.0		ug/Kg			03/19/15 16:14	1
Chloromethane	ND		10		ug/Kg			03/19/15 16:14	1
2-Chlorotoluene	ND		5.0		ug/Kg			03/19/15 16:14	1
4-Chlorotoluene	ND		5.0		ug/Kg			03/19/15 16:14	1
Chlorodibromomethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,3-Dichloropropane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,1-Dichloropropene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/Kg			03/19/15 16:14	1
Ethylene Dibromide	ND		5.0		ug/Kg			03/19/15 16:14	1
Dibromomethane	ND		10		ug/Kg			03/19/15 16:14	1
Dichlorodifluoromethane	ND		10		ug/Kg			03/19/15 16:14	1
1,1-Dichloroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2-Dichloroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,1-Dichloroethene	ND		5.0		ug/Kg			03/19/15 16:14	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			03/19/15 16:14	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2-Dichloropropane	ND		5.0		ug/Kg			03/19/15 16:14	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			03/19/15 16:14	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			03/19/15 16:14	1
Ethylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Hexachlorobutadiene	ND		5.0		ug/Kg			03/19/15 16:14	1
2-Hexanone	ND		50		ug/Kg			03/19/15 16:14	1
Isopropylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
4-Isopropyltoluene	ND		5.0		ug/Kg			03/19/15 16:14	1
Methylene Chloride	ND		10		ug/Kg			03/19/15 16:14	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			03/19/15 16:14	1
Naphthalene	ND		10		ug/Kg			03/19/15 16:14	1
N-Propylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Styrene	ND		5.0		ug/Kg			03/19/15 16:14	1

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-177960/4

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
Tetrachloroethene	ND		5.0		ug/Kg			03/19/15 16:14	1
Toluene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
Trichloroethene	ND		5.0		ug/Kg			03/19/15 16:14	1
Trichlorofluoromethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			03/19/15 16:14	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			03/19/15 16:14	1
Vinyl acetate	ND		20		ug/Kg			03/19/15 16:14	1
Vinyl chloride	ND		5.0		ug/Kg			03/19/15 16:14	1
Xylenes, Total	ND		10		ug/Kg			03/19/15 16:14	1
2,2-Dichloropropane	ND		5.0		ug/Kg			03/19/15 16:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		45 - 131		03/19/15 16:14	1
1,2-Dichloroethane-d4 (Surr)	100		60 - 140		03/19/15 16:14	1
Toluene-d8 (Surr)	101		58 - 140		03/19/15 16:14	1

Lab Sample ID: LCS 720-177960/5

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	70 - 144
Acetone	250	231		ug/Kg		93	30 - 162
Benzene	50.0	48.2		ug/Kg		96	70 - 130
Dichlorobromomethane	50.0	48.4		ug/Kg		97	70 - 140
Bromobenzene	50.0	45.3		ug/Kg		91	70 - 130
Chlorobromomethane	50.0	47.5		ug/Kg		95	70 - 130
Bromoform	50.0	50.6		ug/Kg		101	59 - 158
Bromomethane	50.0	51.0		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	229		ug/Kg		91	53 - 133
n-Butylbenzene	50.0	50.6		ug/Kg		101	70 - 142
sec-Butylbenzene	50.0	48.7		ug/Kg		97	70 - 136
tert-Butylbenzene	50.0	47.0		ug/Kg		94	70 - 130
Carbon disulfide	50.0	46.1		ug/Kg		92	60 - 140
Carbon tetrachloride	50.0	49.9		ug/Kg		100	70 - 142
Chlorobenzene	50.0	45.8		ug/Kg		92	70 - 130
Chloroethane	50.0	50.9		ug/Kg		102	65 - 130
Chloroform	50.0	47.8		ug/Kg		96	77 - 127
Chloromethane	50.0	45.7		ug/Kg		91	55 - 140
2-Chlorotoluene	50.0	46.7		ug/Kg		93	70 - 138

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-177960/5

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 136
Chlorodibromomethane	50.0	51.2		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	46.6		ug/Kg		93	70 - 130
1,3-Dichlorobenzene	50.0	46.4		ug/Kg		93	70 - 131
1,4-Dichlorobenzene	50.0	46.9		ug/Kg		94	70 - 130
1,3-Dichloropropane	50.0	48.1		ug/Kg		96	70 - 140
1,1-Dichloropropene	50.0	52.3		ug/Kg		105	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	45.1		ug/Kg		90	60 - 145
Ethylene Dibromide	50.0	48.9		ug/Kg		98	70 - 140
Dibromomethane	50.0	49.1		ug/Kg		98	70 - 139
Dichlorodifluoromethane	50.0	45.9		ug/Kg		92	37 - 158
1,1-Dichloroethane	50.0	48.7		ug/Kg		97	70 - 130
1,2-Dichloroethane	50.0	47.0		ug/Kg		94	70 - 130
1,1-Dichloroethene	50.0	45.5		ug/Kg		91	76 - 122
cis-1,2-Dichloroethene	50.0	47.2		ug/Kg		94	70 - 138
trans-1,2-Dichloroethene	50.0	48.4		ug/Kg		97	67 - 130
1,2-Dichloropropane	50.0	49.2		ug/Kg		98	73 - 127
cis-1,3-Dichloropropene	50.0	51.9		ug/Kg		104	68 - 147
trans-1,3-Dichloropropene	50.0	56.6		ug/Kg		113	70 - 155
Ethylbenzene	50.0	47.1		ug/Kg		94	80 - 137
Hexachlorobutadiene	50.0	50.0		ug/Kg		100	70 - 132
2-Hexanone	250	227		ug/Kg		91	44 - 133
Isopropylbenzene	50.0	48.1		ug/Kg		96	70 - 130
4-Isopropyltoluene	50.0	48.3		ug/Kg		97	70 - 133
Methylene Chloride	50.0	47.3		ug/Kg		95	70 - 134
4-Methyl-2-pentanone (MIBK)	250	234		ug/Kg		94	60 - 160
Naphthalene	50.0	49.6		ug/Kg		99	60 - 147
N-Propylbenzene	50.0	48.8		ug/Kg		98	70 - 130
Styrene	50.0	47.5		ug/Kg		95	70 - 130
1,1,1,2-Tetrachloroethane	50.0	48.2		ug/Kg		96	70 - 130
1,1,2,2-Tetrachloroethane	50.0	48.2		ug/Kg		96	70 - 146
Tetrachloroethene	50.0	49.3		ug/Kg		99	70 - 132
Toluene	50.0	46.3		ug/Kg		93	80 - 128
1,2,3-Trichlorobenzene	50.0	48.8		ug/Kg		98	60 - 140
1,2,4-Trichlorobenzene	50.0	51.4		ug/Kg		103	60 - 140
1,1,1-Trichloroethane	50.0	47.9		ug/Kg		96	70 - 130
1,1,2-Trichloroethane	50.0	49.3		ug/Kg		99	70 - 130
Trichloroethene	50.0	48.9		ug/Kg		98	70 - 133
Trichlorofluoromethane	50.0	52.2		ug/Kg		104	60 - 140
1,2,3-Trichloropropane	50.0	47.8		ug/Kg		96	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.3		ug/Kg		91	60 - 140
1,2,4-Trimethylbenzene	50.0	47.0		ug/Kg		94	70 - 130
1,3,5-Trimethylbenzene	50.0	47.8		ug/Kg		96	70 - 131
Vinyl acetate	50.0	62.5		ug/Kg		125	38 - 176
Vinyl chloride	50.0	48.5		ug/Kg		97	58 - 125
m-Xylene & p-Xylene	50.0	46.9		ug/Kg		94	70 - 146
o-Xylene	50.0	46.5		ug/Kg		93	70 - 140

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-177960/5

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 162
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	98		45 - 131				
1,2-Dichloroethane-d4 (Surr)	95		60 - 140				
Toluene-d8 (Surr)	101		58 - 140				

Lab Sample ID: LCSD 720-177960/6

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	48.9		ug/Kg		98	70 - 144	2	20
Acetone	250	232		ug/Kg		93	30 - 162	0	30
Benzene	50.0	47.7		ug/Kg		95	70 - 130	1	20
Dichlorobromomethane	50.0	47.7		ug/Kg		95	70 - 140	1	20
Bromobenzene	50.0	44.9		ug/Kg		90	70 - 130	1	20
Chlorobromomethane	50.0	46.8		ug/Kg		94	70 - 130	1	20
Bromoform	50.0	51.5		ug/Kg		103	59 - 158	2	20
Bromomethane	50.0	49.0		ug/Kg		98	59 - 132	4	20
2-Butanone (MEK)	250	226		ug/Kg		91	53 - 133	1	20
n-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 142	1	20
sec-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 136	0	20
tert-Butylbenzene	50.0	47.1		ug/Kg		94	70 - 130	0	20
Carbon disulfide	50.0	46.0		ug/Kg		92	60 - 140	0	20
Carbon tetrachloride	50.0	49.8		ug/Kg		100	70 - 142	0	20
Chlorobenzene	50.0	47.4		ug/Kg		95	70 - 130	3	20
Chloroethane	50.0	50.7		ug/Kg		101	65 - 130	1	20
Chloroform	50.0	47.2		ug/Kg		94	77 - 127	1	20
Chloromethane	50.0	44.9		ug/Kg		90	55 - 140	2	20
2-Chlorotoluene	50.0	46.4		ug/Kg		93	70 - 138	1	20
4-Chlorotoluene	50.0	46.4		ug/Kg		93	70 - 136	1	20
Chlorodibromomethane	50.0	50.0		ug/Kg		100	70 - 146	2	20
1,2-Dichlorobenzene	50.0	45.8		ug/Kg		92	70 - 130	2	20
1,3-Dichlorobenzene	50.0	46.5		ug/Kg		93	70 - 131	0	20
1,4-Dichlorobenzene	50.0	46.8		ug/Kg		94	70 - 130	0	20
1,3-Dichloropropane	50.0	47.1		ug/Kg		94	70 - 140	2	20
1,1-Dichloropropene	50.0	51.8		ug/Kg		104	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	43.5		ug/Kg		87	60 - 145	4	20
Ethylene Dibromide	50.0	47.5		ug/Kg		95	70 - 140	3	20
Dibromomethane	50.0	47.5		ug/Kg		95	70 - 139	3	20
Dichlorodifluoromethane	50.0	44.5		ug/Kg		89	37 - 158	3	20
1,1-Dichloroethane	50.0	48.0		ug/Kg		96	70 - 130	2	20
1,2-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130	3	20
1,1-Dichloroethene	50.0	47.4		ug/Kg		95	76 - 122	4	20
cis-1,2-Dichloroethene	50.0	46.4		ug/Kg		93	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	47.9		ug/Kg		96	67 - 130	1	20
1,2-Dichloropropane	50.0	48.5		ug/Kg		97	73 - 127	1	20

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-177960/6

Matrix: Solid

Analysis Batch: 177960

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	50.0	51.2		ug/Kg		102	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	55.0		ug/Kg		110	70 - 155	3	20
Ethylbenzene	50.0	48.5		ug/Kg		97	80 - 137	3	20
Hexachlorobutadiene	50.0	49.5		ug/Kg		99	70 - 132	1	20
2-Hexanone	250	221		ug/Kg		89	44 - 133	2	20
Isopropylbenzene	50.0	49.9		ug/Kg		100	70 - 130	4	20
4-Isopropyltoluene	50.0	48.0		ug/Kg		96	70 - 133	1	20
Methylene Chloride	50.0	49.1		ug/Kg		98	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)	250	228		ug/Kg		91	60 - 160	3	20
Naphthalene	50.0	48.4		ug/Kg		97	60 - 147	2	20
N-Propylbenzene	50.0	48.5		ug/Kg		97	70 - 130	1	20
Styrene	50.0	48.8		ug/Kg		98	70 - 130	3	20
1,1,1,2-Tetrachloroethane	50.0	48.8		ug/Kg		98	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	47.4		ug/Kg		95	70 - 146	2	20
Tetrachloroethene	50.0	49.1		ug/Kg		98	70 - 132	1	20
Toluene	50.0	47.7		ug/Kg		95	80 - 128	3	20
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140	3	20
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140	3	20
1,1,1-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130	0	20
1,1,2-Trichloroethane	50.0	48.6		ug/Kg		97	70 - 130	1	20
Trichloroethene	50.0	48.1		ug/Kg		96	70 - 133	2	20
Trichlorofluoromethane	50.0	54.4		ug/Kg		109	60 - 140	4	20
1,2,3-Trichloropropane	50.0	48.2		ug/Kg		96	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.5		ug/Kg		91	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	46.7		ug/Kg		93	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 131	0	20
Vinyl acetate	50.0	60.3		ug/Kg		121	38 - 176	4	20
Vinyl chloride	50.0	47.9		ug/Kg		96	58 - 125	1	20
m-Xylene & p-Xylene	50.0	48.4		ug/Kg		97	70 - 146	3	20
o-Xylene	50.0	47.9		ug/Kg		96	70 - 140	3	20
2,2-Dichloropropane	50.0	50.5		ug/Kg		101	70 - 162	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	96		60 - 140
Toluene-d8 (Surr)	101		58 - 140

Lab Sample ID: MB 720-177999/4

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/20/15 09:59	1
Acetone	ND		50		ug/L			03/20/15 09:59	1
Benzene	ND		0.50		ug/L			03/20/15 09:59	1
Dichlorobromomethane	ND		0.50		ug/L			03/20/15 09:59	1
Bromobenzene	ND		1.0		ug/L			03/20/15 09:59	1

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-177999/4

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobromomethane	ND		1.0		ug/L			03/20/15 09:59	1
Bromoform	ND		1.0		ug/L			03/20/15 09:59	1
Bromomethane	ND		1.0		ug/L			03/20/15 09:59	1
2-Butanone (MEK)	ND		50		ug/L			03/20/15 09:59	1
n-Butylbenzene	ND		1.0		ug/L			03/20/15 09:59	1
sec-Butylbenzene	ND		1.0		ug/L			03/20/15 09:59	1
tert-Butylbenzene	ND		1.0		ug/L			03/20/15 09:59	1
Carbon disulfide	ND		5.0		ug/L			03/20/15 09:59	1
Carbon tetrachloride	ND		0.50		ug/L			03/20/15 09:59	1
Chlorobenzene	ND		0.50		ug/L			03/20/15 09:59	1
Chloroethane	ND		1.0		ug/L			03/20/15 09:59	1
Chloroform	ND		1.0		ug/L			03/20/15 09:59	1
Chloromethane	ND		1.0		ug/L			03/20/15 09:59	1
2-Chlorotoluene	ND		0.50		ug/L			03/20/15 09:59	1
4-Chlorotoluene	ND		0.50		ug/L			03/20/15 09:59	1
Chlorodibromomethane	ND		0.50		ug/L			03/20/15 09:59	1
1,2-Dichlorobenzene	ND		0.50		ug/L			03/20/15 09:59	1
1,3-Dichlorobenzene	ND		0.50		ug/L			03/20/15 09:59	1
1,4-Dichlorobenzene	ND		0.50		ug/L			03/20/15 09:59	1
1,3-Dichloropropane	ND		1.0		ug/L			03/20/15 09:59	1
1,1-Dichloropropene	ND		0.50		ug/L			03/20/15 09:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			03/20/15 09:59	1
Ethylene Dibromide	ND		0.50		ug/L			03/20/15 09:59	1
Dibromomethane	ND		0.50		ug/L			03/20/15 09:59	1
Dichlorodifluoromethane	ND		0.50		ug/L			03/20/15 09:59	1
1,1-Dichloroethane	ND		0.50		ug/L			03/20/15 09:59	1
1,2-Dichloroethane	ND		0.50		ug/L			03/20/15 09:59	1
1,1-Dichloroethene	ND		0.50		ug/L			03/20/15 09:59	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			03/20/15 09:59	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			03/20/15 09:59	1
1,2-Dichloropropane	ND		0.50		ug/L			03/20/15 09:59	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			03/20/15 09:59	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			03/20/15 09:59	1
Ethylbenzene	ND		0.50		ug/L			03/20/15 09:59	1
Hexachlorobutadiene	ND		1.0		ug/L			03/20/15 09:59	1
2-Hexanone	ND		50		ug/L			03/20/15 09:59	1
Isopropylbenzene	ND		0.50		ug/L			03/20/15 09:59	1
4-Isopropyltoluene	ND		1.0		ug/L			03/20/15 09:59	1
Methylene Chloride	ND		5.0		ug/L			03/20/15 09:59	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			03/20/15 09:59	1
Naphthalene	ND		1.0		ug/L			03/20/15 09:59	1
N-Propylbenzene	ND		1.0		ug/L			03/20/15 09:59	1
Styrene	ND		0.50		ug/L			03/20/15 09:59	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			03/20/15 09:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			03/20/15 09:59	1
Tetrachloroethene	ND		0.50		ug/L			03/20/15 09:59	1
Toluene	ND		0.50		ug/L			03/20/15 09:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			03/20/15 09:59	1

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-177999/4

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/20/15 09:59	1
1,1,1-Trichloroethane	ND		0.50		ug/L			03/20/15 09:59	1
1,1,2-Trichloroethane	ND		0.50		ug/L			03/20/15 09:59	1
Trichloroethene	ND		0.50		ug/L			03/20/15 09:59	1
Trichlorofluoromethane	ND		1.0		ug/L			03/20/15 09:59	1
1,2,3-Trichloropropane	ND		0.50		ug/L			03/20/15 09:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			03/20/15 09:59	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			03/20/15 09:59	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			03/20/15 09:59	1
Vinyl acetate	ND		10		ug/L			03/20/15 09:59	1
Vinyl chloride	ND		0.50		ug/L			03/20/15 09:59	1
Xylenes, Total	ND		1.0		ug/L			03/20/15 09:59	1
2,2-Dichloropropane	ND		0.50		ug/L			03/20/15 09:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130		03/20/15 09:59	1
1,2-Dichloroethane-d4 (Surr)	101		72 - 130		03/20/15 09:59	1
Toluene-d8 (Surr)	101		70 - 130		03/20/15 09:59	1

Lab Sample ID: LCS 720-177999/5

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	27.1		ug/L		108	62 - 130
Acetone	125	115		ug/L		92	26 - 180
Benzene	25.0	24.8		ug/L		99	79 - 130
Dichlorobromomethane	25.0	27.0		ug/L		108	70 - 130
Bromobenzene	25.0	25.1		ug/L		100	70 - 130
Chlorobromomethane	25.0	26.5		ug/L		106	70 - 130
Bromoform	25.0	27.3		ug/L		109	68 - 136
Bromomethane	25.0	24.4		ug/L		98	43 - 151
2-Butanone (MEK)	125	122		ug/L		98	54 - 130
n-Butylbenzene	25.0	24.5		ug/L		98	70 - 142
sec-Butylbenzene	25.0	23.9		ug/L		95	70 - 134
tert-Butylbenzene	25.0	24.2		ug/L		97	70 - 135
Carbon disulfide	25.0	23.1		ug/L		92	58 - 130
Carbon tetrachloride	25.0	26.5		ug/L		106	70 - 146
Chlorobenzene	25.0	24.6		ug/L		99	70 - 130
Chloroethane	25.0	24.7		ug/L		99	62 - 138
Chloroform	25.0	26.2		ug/L		105	70 - 130
Chloromethane	25.0	23.6		ug/L		95	52 - 175
2-Chlorotoluene	25.0	24.1		ug/L		96	70 - 130
4-Chlorotoluene	25.0	24.3		ug/L		97	70 - 130
Chlorodibromomethane	25.0	28.8		ug/L		115	70 - 145
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130
1,3-Dichlorobenzene	25.0	24.9		ug/L		100	70 - 130
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-177999/5

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	25.0	26.1		ug/L		105	70 - 130
1,1-Dichloropropene	25.0	26.4		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	70 - 136
Ethylene Dibromide	25.0	26.9		ug/L		108	70 - 130
Dibromomethane	25.0	26.8		ug/L		107	70 - 130
Dichlorodifluoromethane	25.0	25.6		ug/L		102	34 - 132
1,1-Dichloroethane	25.0	25.3		ug/L		101	70 - 130
1,2-Dichloroethane	25.0	26.0		ug/L		104	61 - 132
1,1-Dichloroethene	25.0	21.5		ug/L		86	64 - 128
cis-1,2-Dichloroethene	25.0	25.4		ug/L		101	70 - 130
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	68 - 130
1,2-Dichloropropane	25.0	25.7		ug/L		103	70 - 130
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	70 - 130
trans-1,3-Dichloropropene	25.0	30.4		ug/L		122	70 - 140
Ethylbenzene	25.0	24.4		ug/L		97	80 - 120
Hexachlorobutadiene	25.0	22.6		ug/L		91	70 - 130
2-Hexanone	125	120		ug/L		96	60 - 164
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 130
4-Isopropyltoluene	25.0	24.0		ug/L		96	70 - 130
Methylene Chloride	25.0	25.5		ug/L		102	70 - 147
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	58 - 130
Naphthalene	25.0	23.3		ug/L		93	70 - 130
N-Propylbenzene	25.0	24.2		ug/L		97	70 - 130
Styrene	25.0	25.3		ug/L		101	70 - 130
1,1,1,2-Tetrachloroethane	25.0	26.3		ug/L		105	70 - 130
1,1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		99	70 - 130
Tetrachloroethene	25.0	25.6		ug/L		102	70 - 130
Toluene	25.0	24.1		ug/L		96	78 - 120
1,2,3-Trichlorobenzene	25.0	23.0		ug/L		92	70 - 130
1,2,4-Trichlorobenzene	25.0	25.2		ug/L		101	70 - 130
1,1,1-Trichloroethane	25.0	26.6		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	25.9		ug/L		104	70 - 130
Trichloroethene	25.0	25.8		ug/L		103	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	66 - 132
1,2,3-Trichloropropane	25.0	25.1		ug/L		101	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.8		ug/L		91	42 - 162
1,2,4-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 132
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 130
Vinyl acetate	25.0	30.0		ug/L		120	43 - 163
Vinyl chloride	25.0	23.8		ug/L		95	54 - 135
m-Xylene & p-Xylene	25.0	24.6		ug/L		98	70 - 142
o-Xylene	25.0	24.9		ug/L		100	70 - 130
2,2-Dichloropropane	25.0	28.9		ug/L		116	70 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		72 - 130

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-177999/5

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: LCSD 720-177999/6

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	25.5		ug/L		102	62 - 130	6	20
Acetone	125	111		ug/L		89	26 - 180	4	30
Benzene	25.0	24.6		ug/L		98	79 - 130	1	20
Dichlorobromomethane	25.0	26.3		ug/L		105	70 - 130	3	20
Bromobenzene	25.0	24.9		ug/L		100	70 - 130	1	20
Chlorobromomethane	25.0	25.4		ug/L		102	70 - 130	4	20
Bromoform	25.0	26.2		ug/L		105	68 - 136	4	20
Bromomethane	25.0	24.2		ug/L		97	43 - 151	1	20
2-Butanone (MEK)	125	115		ug/L		92	54 - 130	6	20
n-Butylbenzene	25.0	24.8		ug/L		99	70 - 142	1	20
sec-Butylbenzene	25.0	24.6		ug/L		98	70 - 134	3	20
tert-Butylbenzene	25.0	24.6		ug/L		98	70 - 135	2	20
Carbon disulfide	25.0	23.0		ug/L		92	58 - 130	0	20
Carbon tetrachloride	25.0	25.9		ug/L		104	70 - 146	2	20
Chlorobenzene	25.0	24.5		ug/L		98	70 - 130	1	20
Chloroethane	25.0	24.4		ug/L		98	62 - 138	1	20
Chloroform	25.0	25.5		ug/L		102	70 - 130	3	20
Chloromethane	25.0	23.3		ug/L		93	52 - 175	2	20
2-Chlorotoluene	25.0	24.5		ug/L		98	70 - 130	2	20
4-Chlorotoluene	25.0	24.7		ug/L		99	70 - 130	2	20
Chlorodibromomethane	25.0	27.2		ug/L		109	70 - 145	5	20
1,2-Dichlorobenzene	25.0	24.6		ug/L		99	70 - 130	2	20
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130	0	20
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130	0	20
1,3-Dichloropropane	25.0	24.7		ug/L		99	70 - 130	5	20
1,1-Dichloropropene	25.0	26.2		ug/L		105	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	23.5		ug/L		94	70 - 136	6	20
Ethylene Dibromide	25.0	25.5		ug/L		102	70 - 130	5	20
Dibromomethane	25.0	25.4		ug/L		102	70 - 130	5	20
Dichlorodifluoromethane	25.0	25.9		ug/L		104	34 - 132	1	20
1,1-Dichloroethane	25.0	24.9		ug/L		100	70 - 130	2	20
1,2-Dichloroethane	25.0	24.5		ug/L		98	61 - 132	6	20
1,1-Dichloroethene	25.0	21.2		ug/L		85	64 - 128	1	20
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	68 - 130	0	20
1,2-Dichloropropane	25.0	24.6		ug/L		99	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	26.8		ug/L		107	70 - 130	4	20
trans-1,3-Dichloropropene	25.0	29.1		ug/L		116	70 - 140	5	20
Ethylbenzene	25.0	24.6		ug/L		98	80 - 120	1	20
Hexachlorobutadiene	25.0	23.1		ug/L		92	70 - 130	2	20
2-Hexanone	125	111		ug/L		88	60 - 164	8	20

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-177999/6

Matrix: Water

Analysis Batch: 177999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene	25.0	25.0		ug/L		100	70 - 130	1	20
4-Isopropyltoluene	25.0	24.4		ug/L		98	70 - 130	2	20
Methylene Chloride	25.0	24.3		ug/L		97	70 - 147	5	20
4-Methyl-2-pentanone (MIBK)	125	113		ug/L		91	58 - 130	8	20
Naphthalene	25.0	22.4		ug/L		90	70 - 130	4	20
N-Propylbenzene	25.0	24.8		ug/L		99	70 - 130	3	20
Styrene	25.0	25.2		ug/L		101	70 - 130	1	20
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	70 - 130	4	20
Tetrachloroethene	25.0	25.4		ug/L		102	70 - 130	1	20
Toluene	25.0	24.5		ug/L		98	78 - 120	2	20
1,2,3-Trichlorobenzene	25.0	22.6		ug/L		90	70 - 130	2	20
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	70 - 130	2	20
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	70 - 130	2	20
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	70 - 130	4	20
Trichloroethene	25.0	25.2		ug/L		101	70 - 130	2	20
Trichlorofluoromethane	25.0	25.0		ug/L		100	66 - 132	0	20
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	70 - 130	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.6		ug/L		90	42 - 162	1	20
1,2,4-Trimethylbenzene	25.0	24.7		ug/L		99	70 - 132	1	20
1,3,5-Trimethylbenzene	25.0	25.0		ug/L		100	70 - 130	2	20
Vinyl acetate	25.0	27.9		ug/L		112	43 - 163	7	20
Vinyl chloride	25.0	23.7		ug/L		95	54 - 135	1	20
m-Xylene & p-Xylene	25.0	24.6		ug/L		99	70 - 142	0	20
o-Xylene	25.0	25.0		ug/L		100	70 - 130	0	20
2,2-Dichloropropane	25.0	29.8		ug/L		119	70 - 140	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		72 - 130
Toluene-d8 (Surr)	102		70 - 130

TestAmerica Pleasanton

QC Association Summary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

GC/MS VOA

Analysis Batch: 177960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-63578-1	SS1-5'	Total/NA	Solid	8260B	177973
720-63578-3	SS2-5'	Total/NA	Solid	8260B	177973
LCS 720-177960/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-177960/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-177960/4	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 177973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-63578-1	SS1-5'	Total/NA	Solid	5035	
720-63578-3	SS2-5'	Total/NA	Solid	5035	

Analysis Batch: 177999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-63578-2	GW1	Total/NA	Water	8260B	
720-63578-4	GW2	Total/NA	Water	8260B	
LCS 720-177999/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-177999/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 720-177999/4	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Client Sample ID: SS1-5'

Date Collected: 03/17/15 12:45

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			177973	03/17/15 22:45	LPL	TAL PLS
Total/NA	Analysis	8260B		1	177960	03/19/15 20:53	ASC	TAL PLS

Client Sample ID: GW1

Date Collected: 03/17/15 13:07

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	177999	03/20/15 18:16	ASC	TAL PLS

Client Sample ID: SS2-5'

Date Collected: 03/17/15 13:50

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			177973	03/17/15 22:45	LPL	TAL PLS
Total/NA	Analysis	8260B		1	177960	03/19/15 21:21	ASC	TAL PLS

Client Sample ID: GW2

Date Collected: 03/17/15 14:45

Date Received: 03/17/15 16:20

Lab Sample ID: 720-63578-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	177999	03/20/15 18:47	ASC	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16

Method Summary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

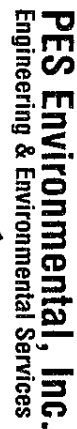
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: PES Environmental, Inc.
Project/Site: Maple Court/Hayward

TestAmerica Job ID: 720-63578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-63578-1	SS1-5'	Solid	03/17/15 12:45	03/17/15 16:20
720-63578-2	GW1	Water	03/17/15 13:07	03/17/15 16:20
720-63578-3	SS2-5'	Solid	03/17/15 13:50	03/17/15 16:20
720-63578-4	GW2	Water	03/17/15 14:45	03/17/15 16:20



LABORATORY: 125T HINER1C9

JOB NUMBER: 1440.008.01

NAME / LOCATION: Maple Court / Hayward

PROJECT MANAGER:

SAMPLERS: Mr. Edd

720-63578

159924

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

ANALYSIS REQUESTED

RECORDER: M. E. Day

[illegible][illegible][illegible]

720-63578 Chain of Custody

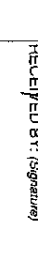
Page 28 of 29

3/23/2015

NOTES

Turn Around Time: Standard TAT

CHAIN OF CUSTODY RECORD

Turn Around Time: <u>Standard TAR</u>					
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE	TIME
				3/17/15	15:43
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE	TIME
				3/17/15	16:30
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE	TIME
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE	TIME
DISPATCHED BY: (Signature)		DATE	TIME	RECEIVED FOR LAB BY: (Signature)	
METHOD OF SHIPMENT:		3.6°C			
Page <u>1</u> of <u>1</u>					

Login Sample Receipt Checklist

Client: PES Environmental, Inc.

Job Number: 720-63578-1

Login Number: 63578

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



30 March 2015

Mr. Kyle Flory
PES Environmental, Inc.
1682 Novato Blvd., Suite 100
Novato, CA 94947

**SUBJECT: DATA REPORT - PES Environmental, Inc. Project # 144000801001
22471-24477 Maple Court, Hayward, California**

TEG Project # 50317F

Mr. Flory:

Please find enclosed a data report for the samples analyzed from the above referenced project for PES Environmental. The samples were analyzed on site in TEG's mobile laboratory. TEG conducted a total of 14 analyses on 14 soil vapor samples.

-- 14 analyses on soil vapors for volatile organic hydrocarbons by EPA method 8260B.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and calibration data are included in the tables.

TEG appreciates the opportunity to have provided analytical services to PES Environmental on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak
Director, TEG-Northern California



PES Environmental, Inc.
Project # 144000801001
22471-24477 Maple Court
Hayward, California

TEG Project #50317F

EPA Method 8260B VOC Analyses of SOIL VAPOR in micrograms per cubic meter of Vapor

SAMPLE NUMBER:		Probe	SV-1	SV-1	SV-1	SV-2	SV-3
		Blank					
SAMPLE DEPTH (feet):			5.0	5.0	5.0	5.0	5.0
PURGE VOLUME:			1	3	10	3	3
COLLECTION DATE:		3/17/15	3/17/15	3/17/15	3/17/15	3/17/15	3/17/15
COLLECTION TIME:		10:05	10:25	10:45	11:06	11:27	11:50
DILUTION FACTOR:		1	1	1	1	1	1
	RL						
Dichlorodifluoromethane	100	nd	nd	nd	nd	nd	nd
Vinyl Chloride	100	nd	nd	nd	nd	nd	nd
Chloroethane	100	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	100	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	100	nd	nd	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	100	nd	nd	nd	nd	nd	nd
Methylene Chloride	100	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	100	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	100	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	100	nd	nd	nd	nd	nd	nd
Chloroform	100	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	100	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	100	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	100	nd	nd	nd	nd	nd	nd
Benzene	80	nd	nd	nd	nd	nd	nd
Trichloroethene	100	nd	nd	nd	nd	nd	nd
Toluene	200	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	100	nd	nd	nd	nd	nd	nd
Tetrachloroethene	100	nd	360	430	410	980	410
Ethylbenzene	100	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	100	nd	nd	nd	nd	nd	nd
m,p-Xylene	200	nd	nd	nd	nd	nd	nd
o-Xylene	100	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	100	nd	nd	nd	nd	nd	nd
1,1 Difluoroethane (leak check)	10000	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)		92%	87%	91%	87%	91%	88%
Surrogate Recovery (1,2-DCA-d4)		97%	94%	101%	98%	101%	104%
Surrogate Recovery (Toluene-d8)		93%	93%	94%	93%	94%	93%

'RL' Indicates reporting limit at a dilution factor of 1

'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Leif Jonsson

page 1



PES Environmental, Inc.
Project # 144000801001
22471-24477 Maple Court
Hayward, California

TEG Project #50317F

EPA Method 8260B VOC Analyses of SOIL VAPOR in micrograms per cubic meter of Vapor

SAMPLE NUMBER:		SV-4	SV-4	SV-4	SV-5	SV-6	SV-7
			dup				
SAMPLE DEPTH (feet):		5.0	5.0	10.0	5.0	5.0	5.0
PURGE VOLUME:		3	3	3	3	3	3
COLLECTION DATE:		3/17/15	3/17/15	3/17/15	3/17/15	3/17/15	3/17/15
COLLECTION TIME:		12:31	12:31	12:10	13:12	13:38	14:22
DILUTION FACTOR:		1	1	1	1	1	1
	RL						
Dichlorodifluoromethane	100	nd	nd	nd	nd	nd	nd
Vinyl Chloride	100	nd	nd	nd	nd	nd	nd
Chloroethane	100	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	100	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	100	nd	nd	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	100	nd	nd	nd	nd	nd	nd
Methylene Chloride	100	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	100	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	100	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	100	nd	nd	nd	nd	nd	nd
Chloroform	100	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	100	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	100	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	100	nd	nd	nd	nd	nd	nd
Benzene	80	nd	nd	nd	nd	nd	nd
Trichloroethene	100	nd	nd	nd	nd	nd	nd
Toluene	200	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	100	nd	nd	nd	nd	nd	nd
Tetrachloroethene	100	340	340	290	430	nd	nd
Ethylbenzene	100	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	100	nd	nd	nd	nd	nd	nd
m,p-Xylene	200	nd	nd	nd	nd	nd	nd
o-Xylene	100	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	100	nd	nd	nd	nd	nd	nd
1,1 Difluoroethane (leak check)	10000	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)		93%	90%	91%	90%	88%	87%
Surrogate Recovery (1,2-DCA-d4)		102%	101%	103%	103%	99%	104%
Surrogate Recovery (Toluene-d8)		93%	93%	90%	93%	92%	90%

'RL' Indicates reporting limit at a dilution factor of 1

'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Leif Jonsson

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PES Environmental, Inc.
Project # 144000801001
22471-24477 Maple Court
Hayward, California

TEG Project #50317F

EPA Method 8260B VOC Analyses of SOIL VAPOR in micrograms per cubic meter of Vapor

SAMPLE NUMBER:		SV-8	SV-9	SV-10
SAMPLE DEPTH (feet):		5.0	5.0	5.0
PURGE VOLUME:		3	3	3
COLLECTION DATE:		3/17/15	3/17/15	3/17/15
COLLECTION TIME:		13:58	14:46	16:28
DILUTION FACTOR:		1	1	1
RL				
Dichlorodifluoromethane	100	nd	nd	nd
Vinyl Chloride	100	nd	nd	nd
Chloroethane	100	nd	nd	nd
Trichlorofluoromethane	100	nd	nd	nd
1,1-Dichloroethene	100	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	100	nd	nd	nd
Methylene Chloride	100	nd	nd	nd
trans-1,2-Dichloroethene	100	nd	nd	nd
1,1-Dichloroethane	100	nd	nd	nd
cis-1,2-Dichloroethene	100	nd	nd	nd
Chloroform	100	nd	nd	nd
1,1,1-Trichloroethane	100	nd	nd	nd
Carbon Tetrachloride	100	nd	nd	nd
1,2-Dichloroethane	100	nd	nd	nd
Benzene	80	nd	nd	nd
Trichloroethene	100	nd	nd	nd
Toluene	200	nd	nd	nd
1,1,2-Trichloroethane	100	nd	nd	nd
Tetrachloroethene	100	120	nd	1300
Ethylbenzene	100	nd	nd	nd
1,1,1,2-Tetrachloroethane	100	nd	nd	nd
m,p-Xylene	200	nd	nd	nd
o-Xylene	100	nd	nd	nd
1,1,2,2-Tetrachloroethane	100	nd	nd	nd
1,1 Difluoroethane (leak check)		10000	nd	nd
Surrogate Recovery (DBFM)		91%	90%	86%
Surrogate Recovery (1,2-DCA-d4)		108%	104%	95%
Surrogate Recovery (Toluene-d8)		95%	94%	87%

'RL' Indicates reporting limit at a dilution factor of 1

'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
Analyses performed by: Mr. Leif Jonsson

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PES Environmental, Inc.
Project # 144000801001
22471-24477 Maple Court
Hayward, California

TEG Project #50317F

CALIBRATION DATA - Calibration Check Compounds

	<i>Vinyl Chloride</i>	<i>1,1 DCE</i>	<i>Chloroform</i>	<i>1,2 DCP</i>	<i>Toluene</i>	<i>Ethylbenzene</i>
<i>Midpoint</i>	10.0	10.0	10.0	10.0	10.0	10.0

Continuing Calibration - Midpoint

<i>3/17/15</i>	9.4	8.3	9.4	9.5	9.3	9.8
	94%	83%	94%	95%	93%	98%

DISTRIBUTION

**LIMITED SUBSURFACE INVESTIGATION REPORT
22471, 22477, 22485, and 22491 MAPLE COURT
HAYWARD, CALIFORNIA**

AUGUST 6, 2015

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