

January 6, 2015

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By Alameda County Environmental Health at 10:22 am, Jan 08, 2015

Mr. Mark E. Detterman, PG, CEG  
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Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Subject: Fuel Leak Case No. R0000320, Former Paco Pumps, Inc., 9201 San Leandro Street, Oakland, CA

Dear Mr. Detterman:

Please find enclosed the *Data Gaps Investigation and Groundwater Monitoring Report* (Report) for the Former Paco Pumps facility located at 9201 San Leandro in Oakland, California (the Site). The investigation activities performed were completed to fill data gaps in the site characterization and update the focused conceptual site model.

Results from this investigation and groundwater monitoring event indicate that soil and groundwater affected by petroleum hydrocarbons and related compounds remain on Site at concentrations that pose a very low threat to human health and the environment. As presented in the Report, one additional groundwater monitoring event is scheduled for April 2015. Based on the results of the 2014 investigations and anticipated results of the April 2015 sampling event, and the proposed deed restriction, PCC will request Site closure under the State Water Resource Control Board's Low-Threat Underground Storage Tank Case Closure Policy.

If you have any questions during your review of the Report, please feel free to contact Paisha Jorgensen at 925-951-2856 or [pjorgensen@thesourcegroup.net](mailto:pjorgensen@thesourcegroup.net).

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Dave Murray  
PCC Flow Technologies, Inc.

Cc: Mr. Peter Serrurier, Stoel Rives LLP  
Mr. Marc Zeppetello, Barg Coffin Lewis & Trapp, LLP  
Mr. Paisha Jorgensen and Paul Parmentier, The Source Group

**DATA GAPS INVESTIGATION AND  
GROUNDWATER MONITORING REPORT**  
**Former PACO Pumps Site**  
**9201 San Leandro Street, Oakland, California**

04-PFT-005

Prepared For:

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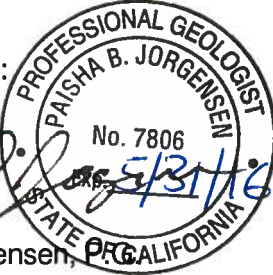
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January 6, 2015

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## 1.0 INTRODUCTION

The Source Group, Inc. (SGI), on behalf of PCC Flow Technologies Holdings, Inc. (PCC), is submitting this *Data Gaps Investigation and Groundwater Monitoring Report* (Report) for the former PACO Pumps facility located at 9201 San Leandro Street in Oakland, California (Site) (Figures 1 and 2). The investigation activities were presented in SGI's *Data Gaps Work Plan* (Work Plan; SGI, 2014) dated June 18, 2014.

The objectives of the Data Gaps investigation activities were to:

- Evaluate the potential presence of polychlorinated biphenyls (PCBs) associated with elevated total extractable petroleum hydrocarbons (TEPH) in shallow soil in the alley along the western portion of the Site, particularly adjacent to monitoring wells MW-10 and MW-11.
- Install one shallow groundwater monitoring well in the southwestern corner of the Site to confirm Site-wide groundwater flow direction and delineate impacted groundwater along the southwestern portion of the Site.
- Evaluate the presence of TEPH in shallow soil beneath an area that appeared to be stained along the western property boundary.
- Assess groundwater conditions by conducting two Site-wide groundwater monitoring and sampling events.
- Collect additional information relating to the construction of floor drains inside the eastern warehouse (Building 1 shown on Figure 2).

All of the data collected during the above referenced characterization and groundwater monitoring activities are presented in subsequent sections of this report.

### 1.1 Regulatory Background

In 2013, SGI submitted the *Remedial Investigation Activities and Groundwater Monitoring Report* (SGI, 2013) to Alameda County Environmental Health (ACEH) and requested case closure for the Site under the California Regional Water Quality Control Board's Low-Threat Underground Storage Tank Case Closure Policy (LTCP; CRWQCB, 2012). ACEH rejected the case closure request in a letter dated March 7, 2014 (ACEH, 2014a). The letter summarized the ACEH evaluation for Site closure under the LTCP. On April 22, 2014, a meeting and Site inspection attended by ACEH staff, PCC representatives, and SGI representatives was held to discuss the status of the Site, current data gaps, and strategize towards Site closure. While most of the issues raised by ACEH in the March 7, 2014 letter were addressed and resolved during the meeting, a few data gaps remained.

In response to the March 7, 2014 letter from ACEH (ACEH, 2014a) and the April 22, 2014 meeting, SGI prepared the Work Plan (SGI, 2014). The Work Plan presented 1) a plan to address the remaining data gaps, and 2) responses to ACEH comments from the March 7, 2014 letter. ACEH

approved the Interim Remedial Action Plan (IRAP) in an August 26, 2014 *Conditional Work Plan Approval* (Conditional Approval; ACEH, 2014b).

The Conditional Approval identified the following conditions for approval of the Work Plan. The text in italics is quoted from the ACEH Conditional Approval letter followed by SGI's response:

- **PCB Investigation** — *Two shallow soil bores are proposed for installation in the vicinity of wells MW-10 and MW-11 due to the detection of extractable-ranged hydrocarbons in soil samples collected at a depth of 2.5 feet below grade surface (bgs) in both of these soil bores. The work plan proposes to submit soil samples for analysis at a depth of 1.0 feet bgs, and to hold samples proposed to be collected at 2.5 and 5 feet bgs. ACEH additionally requests that soil samples from the 2.5 foot depth also be analyzed in order to target soil documented (or anticipated) to contain elevated extractable-ranged hydrocarbons over a reasonably large portion of the area adjacent to the western rail line (area presumed to be between MW-10 and MW-11), or at a minimum, to be in proximity to impacted soil.*

SGI Response – Soil samples from all three depths (1.0, 2.5, and 5.0 feet bgs) were analyzed for PCBs. Laboratory analytical results are discussed in Section 4.2.

- **Western Boundary Surface Soil Staining** — *The work plan also proposes to collect representative soil samples from surficial staining at the southwestern portion of the subject site and analyze the soil samples for extractable-ranged hydrocarbons. Because the staining appeared to be motor oil related, ACEH additionally requests that the samples also be analyzed for the five wear metals. ACEH anticipates that other standard waste oil constituents, such as chlorinated organic compounds and benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds are not a significant concern due to the sun-washed environment of this corner of the site.*

SGI Response – Soil samples from soil borings SB-SGI-1 and SB-SGI-2 were analyzed for the five wear metals. Laboratory analytical results are discussed in Section 4.2 and 5.1.1.

- **Soil Sample Selection Protocols** — *The work plan proposes to install one groundwater monitoring well in the southwestern portion of the site to define a downgradient direction. The work plan proposes to collect and retain for laboratory analysis one to three soil samples. ACEH requests that soil samples be analyzed at significant lithology changes, photoionization detections, and other signs of contamination such as staining or discoloration.*

SGI Response – Two soil samples from boring MW-12 were selected for analysis at lithology changes. No signs of contamination were observed during drilling.

- **Groundwater Sampling Matrix** — *The referenced work plan included a groundwater monitoring matrix (Table 1) proposed for two groundwater monitoring and sampling events. ACEH has reviewed the matrix, is in general agreement with the matrix; however, requests additional sampling at five wells in order to understand changes in groundwater*

*concentrations at these locations since the pilot test work, and also to eliminate potential confusion caused by older non-representative groundwater data. Specifically, ACEH additionally requests the collection of all analytes (Volatile Organic Compounds [VOCs] and Total Petroleum Hydrocarbons [TPH] as gas by EPA 8260, TPH as diesel [TPHd] and motor oil [TPHmo] by EPA 8015) at wells E-5, E-9, E-10, and E-11, and TPHd and TPHmo at well MW-7. This is expected to clarify residual groundwater contamination beneath Area 4 at the site.*

SGL Response – The requested analytes were added to the sampling matrix. Wells E-10 and E-11 could not be located and appear to have been paved over.

- **Silica Gel Cleanup** — *The work plan proposes to use silica gel cleanup (SGC) on extractable-ranged analytical testing in groundwater. ACEH requests that all soil and groundwater samples analyzed for extractable-ranged hydrocarbons be analyzed with SGC.*

SGL Response – All groundwater samples were analyzed for extractable-ranged hydrocarbons following silica gel cleanup. Only soil samples from the 2.5 feet bgs depth in borings SB-SGL-1 and SB-SGL-2 were analyzed extractable-ranged hydrocarbons following silica gel cleanup. Laboratory analytical results are discussed in Section 4.2 and 5.1.1.

The findings from the Data Gaps investigation and groundwater monitoring event have been included on an Updated Response to Comments table, included in Appendix A.

## 1.2 Report Organization

The remainder of this Report is organized into the following sections:

### Section 2.0: Site Background

This section presents the background and history of the Site, including a Revised Conceptual Site Model.

### Section 3.0: Data Gap Investigation Activities

This section presents the methodology of the soil, groundwater, soil vapor sampling performed at the Site.

### Section 4.0: Investigation and Sampling Results

This section presents the investigation and sampling activities results and provides discussion of the results.

### Section 5.0: Data Evaluation and Recommendations

This section presents a summary of Data Gap Investigation activities, evaluation and discussion of the data, and recommendations.

### Section 6.0: References

This section presents a summary of referenced documents used in preparation of this report.

## 2.0 SITE BACKGROUND

### 2.1 Site Location and History

The former PACO Pumps facility is located at 9201 San Leandro Street in Oakland, California (the Site, Figures 1 and 2). The Site is an approximately 4.6-acre parcel that is generally bounded by: an access road and heavy industrial/manufacturing business to the north; San Leandro Street, Union Pacific Railroad tracks, and elevated Bay Area Rapid Transit (BART) tracks to the east; Union Pacific Railroad tracks and easements for petroleum pipelines to the west; and industrial/warehousing businesses to the south. The surrounding area is a mix of industrial and heavy industrial (manufacturing) use, although there is residential uses located approximately 450 feet south/southwest of the Site. Currently, the entire Site is covered with either asphalt, concrete, or buildings constructed on concrete slabs. Two large warehouse buildings occupy the western and eastern areas of the Site. The nearest surface water body is San Leandro Creek, which is located approximately 5,000 feet southwest of the Site. No drinking water wells have been identified within ¼-mile of the Site (SGI, 2012a).

The Site was historically used as a manufacturing facility since 1945 for industrial pumps, tents, and as a foundry (Jonas & Associates, Inc. [Jonas], 1991) and has been used for warehousing and medicinal plant growing. Currently, the Site is owned by 9201 San Leandro LLC and used for transportation, storage, and warehousing company.

### 2.2 Previous Site Investigations and Remediation Activities

Subsurface soil and groundwater conditions have been investigated since the 1980's by various consultants including Jonas, ERAS Environmental Inc. (ERAS), Levine Fricke Recon Inc. (LFR), and most recently SGI. According to the ERAS *Subsurface Investigation and Groundwater Monitoring Report* (ERAS, 2008), the Jonas *Site Characterization Report* (Jonas, 1992) identified the location of a former 550-gallon UST located on the southeast side of Building 3. According to LFR, the former UST was used for gasoline storage. The UST was reportedly removed prior to a 1992 investigation of the assumed former tank pit area, where gasoline-impacted soil was discovered. This former UST location was over excavated in the 1992 investigation and soil was removed from the Site. These activities removed major sources of subsurface contamination, but impacted soil remained near the foundation of the building to the west of the former UST location. Several investigations were completed in the area, including drilling of soil borings inside the building located west of the former UST.

LFR conducted additional investigations and a remediation pilot test in 2009 and recommended site remediation by air sparging, soil vapor extraction, and ozone injection. LFR completed five soil borings using membrane interface probe (MIP) technology to evaluate the distribution of contaminants in this part of the Site. LFR also collected two shallow groundwater samples (17 to 20 feet bgs) and two deep groundwater samples (27 to 30 feet bgs), installed two new groundwater monitoring wells, one shallow and one deep air sparge wells, and three soil vapor extraction (SVE)



test wells. The results of the investigation, as summarized by LFR (LFR, 2009), indicated that the deeper groundwater did not contain detectable concentrations of petroleum contaminants, and this finding has been confirmed during subsequent groundwater monitoring events.

After review of the previous site investigation data and LFR vapor extraction test data, SGI made alternative recommendations for remediation with the following approach (SGI, 2009):

- Focused, high- vacuum extraction of vadose zone hydrocarbons in the edges of the former UST excavation, including beneath Building 3; and
- Extraction of hydrocarbons from the shallow groundwater zone, followed by natural attenuation.

In October 2009, SGI submitted a *Remediation Work Plan* (SGI, 2009) that proposed episodes of high-vacuum dual-phase extraction (HVDPE) rather than construction and operation of a fixed remediation system. In April 2010, a 24-hour remedial action pilot test was conducted, and the results indicated that a longer-term remedial action was warranted. In June 2010, after installation of 12 extraction wells and an additional groundwater monitoring well (MW-8), SGI conducted a 10-day dual-phase extraction episode that resulted in the removal of significant hydrocarbon mass and the collection of reliable site contaminant distribution data.

Based on the limited air flow and groundwater extraction rates, low hydrocarbon concentrations present in soil, and a laterally and vertically delineated, limited benzene plume, any effort focused on in-situ remediation of hydrocarbons would be both lengthy and costly, and not substantially more effective than the apparent on-going natural attenuation of hydrocarbons. The *Post Remediation Sampling and First Semi-Annual Monitoring Report*, dated October 8, 2010, described the results of the investigation/remediation at Area 4, post-remediation sampling, and first semi-annual groundwater monitoring. The report also included a human health risk evaluation of soil vapor intrusion into Building 3 indoor air.

On January 5, 2012, at the request of ACEH, SGI submitted a Remedial Investigation (RI) Work Plan (SGI, 2012a) for sub-slab soil gas sampling to confirm the previous soil gas interpretations. The RI Work Plan included a preferential pathway study. Following ACEH comments, RI Work Plan modifications were submitted on June 20, 2012 (SGI, 2012b). ACEH's comments indicated that additional downgradient wells would be appropriate, and suggested that SGI conduct the investigation based on guidance presented in the CRWQCB's LTCP (CRWQCB, 2012). Additional modifications were made to the investigation plan and were discussed with ACEH via email prior to implementation.

In March 2013, three groundwater monitoring wells were installed along the western boundary of the Site. In addition, eight soil vapor probes were installed in Areas 4 (5 probes) and Area 5 (3 probes). Results of subsequent groundwater sampling indicated that groundwater leaving the Site to the west was not impacted with benzene and contained very low concentrations of methyl tert butyl ether (MTBE) and TEPH. Soil vapor sampling indicated that total petroleum hydrocarbons-gasoline range organics (TPH-GRO) and benzene were the most common

compounds detected in soil vapor. Results of the remedial investigation are presented in the *Remedial Investigation Activities and Groundwater Monitoring Report* (SGI, 2013). Semi-annual groundwater monitoring and sampling addresses groundwater conditions site-wide.

### **2.3 Conceptual Site Model**

A revised conceptual site model (CSM) that assesses the nature, extent, and mobility of the release has been developed and is presented Appendix B. Per the LTCP, not all of the supporting data and analysis used to develop the CSM are necessarily presented in this report; however, they may be found in historical reports submitted to ACEH and referenced in Appendix B.

### 3.0 DATA GAPS INVESTIGATION ACTIVITIES

The objectives of the Data Gap activities were to:

- Evaluate the potential presence of PCBs associated with elevated TEPHs in shallow soil in the alley along the western portion of the Site, particularly adjacent to monitoring wells MW-10 and MW-11.
- Install one shallow groundwater monitoring well in the southwestern corner of the Site to confirm Site-wide groundwater flow direction and delineate impacted groundwater in the southwestern portion of the Site.
- Evaluate the presence of TEPH in shallow soil beneath an area that appeared to be stained along the western property boundary.
- Assess groundwater conditions by conducting two Site-wide groundwater monitoring and sampling events.
- Collect additional information relating to the construction of floor drains inside the eastern warehouse (Building 1 shown on Figure 2).

#### 3.1 Pre-Field Activities

Prior to investigative activities at the Site, an application to advance four borings and install one groundwater monitoring wells were prepared and submitted along with appropriate fees to ACEH. A copy of the boring permit is included in Appendix C.

A site visit was performed to mark the locations of the proposed borings at the Site. Underground Services Alert (USA) was notified of the drilling activities as required.

#### 3.2 Shallow Soil Sampling

On September 19, 2014, SGI contracted with Gregg Drilling of Martinez, California to conduct soil sampling at the Site. In response to ACEH concerns regarding the potential presence of PCBs in association with elevated concentrations of TEPH detected in shallow soil during the installation of monitoring wells MW-10 and MW-11, soil samples were collected from two soil borings located adjacent to monitoring wells MW-10 and MW-11. Ground surface in the area of these two sampling locations consisted of asphalt. The two soil borings were completed to approximately five feet bgs using direct-push technology. Soil samples were collected from approximately 1.0, 2.5, and 5.0 feet bgs and submitted to TestAmerica Laboratories Inc. in Pleasanton, California for PCB analysis by USEPA Method 8082.

During an on-Site meeting with ACEH on April 22, 2014, two areas of soil that appeared to have been impacted with what appeared to be used motor oil were observed along the southwestern fence line of the property. This area was being used for stockpiles of broken asphalt. Most of the asphalt appeared to be removed by the property owner prior to the Data Gaps investigation;

however, some broken asphalt remained. Two soil borings were advanced to confirm soil was not impacted at depth. Soil samples were collected from approximately 1.0, 2.5, and 5.0 feet bgs and submitted to TestAmerica Laboratories Inc. in Pleasanton, California for TEPH analysis by USEPA Method 8015, and metals analysis by USEPA Method 6010. Initially, only the soil samples collected from 1.0 ft bgs were analyzed, and the deeper samples were placed on hold pending results.

Following sample collection the borings were backfilled to surface with cement grout.

### **3.3 Shallow Groundwater Monitoring Well Installation**

One shallow groundwater monitoring well (MW-12) was constructed in the southwestern corner of the Site, in an area used for warehousing storage. The well location is presented on Figure 2.

Prior to well installation, a continuous soil boring was advanced at the well location using direct-push technology. The soil boring was advanced to a total depth of 20 feet bgs. A soil core from the borehole was visually evaluated, and the description of soil core included the following information with depth:

- Percentage of sample recovery;
- Depth to first encountered groundwater;
- Grain size classification with Unified Soil Classification System (USCS), (percentages of gravel, sand, silt, and clay);
- Color (Munsell color chart);
- Density;
- Odor; and
- Degree of moisture.

Soil samples were screened in the field for volatile organic compounds (VOCs) using an organic vapor monitor (OVM) equipped with a photo-ionization detector (PID). Approximately 20 grams of soil from various sections of soil core were placed in a self-sealing plastic bag to allow VOCs that may be present in the pore spaces to volatilize. The headspace in the plastic bag then was monitored for VOCs with the OVM. Based on field observations, select soil samples were collected from the boring and were analyzed for total petroleum hydrocarbons-diesel range organics (TPH-DRO, [C10-C28]) and total petroleum hydrocarbons-motor oil range organics (TPH-MRO, [C24-C36]) by EPA Method 8015M (collectively referred to as TEPH); and for VOCs, including TPH-GRO (C5-C12), and BTEX, and fuel additives, by EPA Method 8260B. Soil samples collected for laboratory analysis by EPA Method 8260B were field preserved using Terra Core samplers, an approved sampling protocol for EPA Method 5035. Soil samples were labeled and placed in an ice-filled cooler, and a chain-of-custody record was initiated in the field to accompany the soil samples to the laboratory. Observations of lithology during drilling are described in Section 4.1.

Following completion of the soil boring, the depth and length of the well screen was selected based on lithology of the soil core. The screen was selected to be set from 10 to 20 feet bgs. Prior to well construction, the soil boring was over-drilled with an 8-inch-diameter hollow stem auger.

The well was constructed using 2-inch diameter schedule 40 polyvinyl chloride (PVC). The well screen was constructed using 2-inch diameter schedule 40 PVC with 0.020-inch slots. #2/12 Monterey sand was placed from total depth of well screen to two feet above the well screen. Two feet of bentonite chips were placed above the sand pack followed by neat cement grout to approximately 1-foot bgs. The well was completed at grade with a 12-inch, flush-mounted well box sealed with concrete. The boring log and well construction details for well MW-12 is included in Appendix D.

Following the required curing period, the new well was developed by surging, bailing, and pumping, to produce representative water quality samples. Development continued until the water was clear and generally free of sediment and water quality parameters (pH, temperature, conductivity, and turbidity) stabilized to approximately 10 percent between successive measurements. Well development field data were documented on a groundwater monitoring well development form (included in Appendix E). Following development, the well was surveyed to a common datum, referenced to mean sea level (msl) by a licensed surveyor. The surveyor's report is included in Appendix F.

### **3.4 Groundwater Monitoring and Sampling Event**

Blaine Tech Services, Inc. of San Jose, California was contracted to conduct the Quarter 3, 2014 semi-annual groundwater monitoring and sampling event on October 16, 2014. This section details the monitoring and sampling activities completed.

#### **3.4.1 Groundwater Monitoring**

Groundwater levels were measured in 24 groundwater monitoring wells. Four wells were not accessible during the sampling event: well MW-3 appeared to be missing the well lid and filled with dirt, and wells MW-8, E-10 and E-11 could not be located and appear to have been paved over. All inaccessible well locations are located upgradient of other wells, therefore the lack of data from these four wells during this monitoring event is not considered to be a significant data gap. Groundwater levels in all wells were gauged from the top of the well casing (TOC) using an electronic water level indicator graduated to 0.01-foot. The surveyed top of casing elevations are referenced to msl. Quarter 3, 2014 and historical groundwater elevations are presented in Table 1 and represented as a potentiometric surface on Figure 3.

#### **3.4.2 Groundwater Sampling**

Groundwater samples were collected from 17 of the 24 wells that were used for monitoring. Groundwater wells were purged using standard three well casing purging methods with submersible pumps or disposable bailers. Groundwater samples were collected with disposable bailers. Water quality parameters were measured and recorded during the groundwater purging to

ensure the groundwater samples were representative of aquifer conditions. Samples were transferred directly into laboratory-supplied containers and placed on ice for transport to Accutest, Inc. of San Jose, California under chain-of-custody control. The monitoring well field sampling forms are included in Appendix G. Groundwater samples collected during the sampling event were analyzed for TPH as diesel (TPHd) and TPH as motor oil (TPHmo) by USEPA Method 8015M, TPH-GRO (C6-C10) and VOCs by USEPA Method 8260B, and/or polychlorinated biphenyls (PCBs) by USEPA Method 8082. Results of the groundwater monitoring and sampling event are presented below.

### **3.5 Waste Management**

Soil cuttings, well purge water, well development water, and decontamination water generated during drilling and sampling were stored on Site in properly labeled 55-gallon steel drums pending waste characterization. All waste will be disposed in accordance with applicable laws and regulations.

### **3.6 Building 1 Floor Features**

During the April 22, 2014 Site visit floor drain features were observed in the eastern warehouse (Building 1). ACEH requested an evaluation of the features. SGI used a PID to monitor for the presence of VOCs in the floor drain features. SGI also inquired with the property owner as to the historical use of the floor drain features and any information regarding why at least one of the features has been sealed with cement.

Current property owner is not aware of the use of these features. PID monitoring of the open floor drain features did not detect any vapors. SGI will request the owner to cover the inlet of feature so as not to provide a potential preferential pathway to the subsurface.

### **3.7 Well Conditions Inspection**

During the Quarter 3, 2014 groundwater monitoring event, Blaine Tech inspected all wells and well boxes. The results of this inspection indicated that the lid to the well box and the well cap itself was missing at well MW-3. The well appeared to be filled with dirt and debris, and therefore was not accessible. The inspection also revealed that the lid to well AS-1S is broken, and bolts or tabs are missing from the well boxes as wells E-1, E-2, E-3, E-8, E-9, E-12, AS-1D, ASMW-2S, and ASMW-2D.

In addition, wells MW-8, E-10, and E-11 could not be located. Well MW-8 was last located in September 2012, well E-10 was last located in March 2012, and well E-11 was last located in April 2013. SGI suspects that these wells have been paved over by the property owner during maintenance of the storage yard.

## 4.0 INVESTIGATION AND SAMPLING RESULTS

### 4.1 Site Geology and Hydrogeology

As discussed above, soil samples were collected continuously during construction of groundwater monitoring well MW-12. The MW-12 boring log with well probe construction details is presented in Appendix D. Soil was not logged during the drilling of the four shallow soil boring as the soil was logged during previous investigations.

At the well MW-12 location, ground surface cover consisted of approximately six inches of asphalt. Subsurface soils consist primarily of coarse-grained soil to a depth of 3.5 feet bgs, and fine-grained soil (lean clay) to a depth ranging from approximately 13 feet bgs. Silty sand was observed from 13 to 20 feet bgs, the total depth of the borehole.

Groundwater was observed at approximately 14 feet bgs in the borehole during drilling. Following monitoring well development, groundwater was measured at 9.27 feet bgs in well MW-12. This variation between initial depth to groundwater observed during drilling and final depth to groundwater measured in the completed well was observed during drilling activities in the past. Based on lithology observed during drilling and previous investigations, it appears that the clay present to a depth of approximately 13.5 feet bgs acts as a confining or semi-confining layer.

### 4.2 Soil Sample Results

A total of 12 soil samples were analyzed from the five soil borings drilled on Site. Three soil samples were analyzed from each of borings SB-MW-10 and SB-MW-11; two soil samples were analyzed from each of borings SB-SGI-1 and SB-SGI-2; and two soil samples were analyzed from boring MW-12. Laboratory analytical reports are included in Appendix H, and discussed below.

- PCB concentrations were detected in all six samples in which they were analyzed. PCB congener Aroclor 1254 was detected in five samples a concentrations ranging from 0.028 milligrams per kilogram (mg/kg) in sample SB-MW-10-5 at 5 feet bgs to 2.5 mg/kg in sample SB-MW-11-5 at 5 feet bgs. PCB congener Aroclor 1260 was detected in at a depth of 2.5 feet bgs in SB-MW-10-2.5 at a concentration of 0.013 mg/kg. Laboratory analytical results for PCB analysis are presented in Table 2.
- TPH-DRO concentrations were detected in five of the six soil samples in which they were analyzed. At borehole MW-12, TPH-DRO was detected at a concentration of 44 mg/kg at 4 feet bgs, but was not detected at a depth of 14 feet bgs. TPH-DRO was detected at borehole SB-SGI-1 at a concentration of 280 mg/kg at 1.0 foot bgs and 51 mg/kg at 2.5 feet bgs. TPH-DRO was detected at borehole SB-SGI-2 at a concentration of 580 mg/kg at 1.0 foot bgs and 280 mg/kg at 2.5 feet bgs. Soil samples collected from 2.5 feet bgs in borings SB-SGI-1 and SB-SGI-2 were analyzed for TPH-DRO following silica gel cleanup. Laboratory analytical results for TPH-DRO analysis are presented in Table 2.

- TPH-MRO concentrations were detected in five of the six soil samples in which they were analyzed. At borehole MW-12, TPH-MRO was detected at a concentration of 200 mg/kg at 4 feet bgs, but was not detected at a depth of 14 feet bgs. TPH-MRO was detected at borehole SB-SGI-1 at a concentration of 890 mg/kg at 1.0 foot bgs and 66 mg/kg at 2.5 feet bgs. TPH-MRO was detected at borehole SB-SGI-2 at a concentration of 1,800 mg/kg at 1.0 foot bgs and 600 mg/kg at 2.5 feet bgs. Soil samples collected from 2.5 feet bgs in borings SB-SGI-1 and SB-SGI-2 were analyzed for TPH-MRO following silica gel cleanup. Laboratory analytical results for TPH-MRO analysis are presented in Table 2.
- Cadmium, chromium, lead, nickel, and zinc concentrations were analyzed in four soil samples. Cadmium was detected in three of the four samples at a maximum concentration of 6.4 mg/kg (SB-SGI-2 at 2.5 feet bgs). Chromium was detected in all four samples at a maximum concentration of 140 mg/kg (SB-SGI-2 at 1.0 feet bgs). Lead was detected in all four samples at a maximum concentration of 310 mg/kg (SB-SGI-2 at 1.0 feet bgs). Nickel was detected in all four samples at a maximum concentration of 10 mg/kg (SB-SGI-2 at 2.5 feet bgs). Zinc was detected in all four samples at a maximum concentration of 1,700 mg/kg (SB-SGI-2 at 2.5 feet bgs). Laboratory analytical results for metals analysis are presented in Table 2.
- VOCs, including TPH-GRO, BTEX, and fuel additives were analyzed in soil samples SB-MW-12-4 and SB-MW-12-14. There were no detections of these compounds, or any other VOCs, in these two soil samples. Laboratory analytical results for VOCs were not tabulated due to the absence of detected compounds.

A discussion of the laboratory analytical results for soil samples is presented in the Data Evaluation section.

### **4.3 Groundwater Sampling Results**

The Quarter 3, 2014 semi-annual groundwater monitoring and sampling event was conducted on October 16, 2014. Groundwater levels were measured in all accessible wells, and groundwater samples were collected from a subset of the wells.

#### **4.3.1 Groundwater Elevations**

The depth-to-water measurements ranged from 6.95 feet below top of casing (btoc) in MW-6 to 9.80 feet btoc in E-3. Groundwater elevations ranged from 9.72 feet msl in E-3 to 12.51 feet msl in MW-6. However, a review of historical groundwater elevation data indicates that the groundwater level measured in well MW-6 was abnormally low and in well E-3 it was abnormally high.

A review of elevation data and the potentiometric surface map indicates shallow zone groundwater flows in a westerly direction at a gradient of approximately 0.0038 feet/foot in Areas 4 and 5. The flow direction and gradient is consistent with historical groundwater flow patterns.



A potentiometric surface map was constructed from the shallow groundwater elevation data and is presented as Figure 3. Quarter 3, 2014 and historical groundwater elevation data are included in Table 1.

#### 4.3.2 Groundwater Analytical Results

On October 16, 2014, total of 19 wells were sampled as part of the Quarter 3, 2014 groundwater monitoring event. Groundwater samples from all 19 wells were analyzed for TPHd and TPHmo. In addition, groundwater samples from a subset of 14 wells were also analyzed for VOCs (including TPH-GRO, BTEX, and fuel additives). Laboratory analytical results for MTBE, benzene, TPH-GRO, and TPHd are presented on Figure 4. Quarter 3, 2014 laboratory analytical results and historical laboratory analytical results are summarized in Tables 3 and 4, respectively. The laboratory analytical report for groundwater samples are presented in Appendix H and results summarized below:

- TPH-GRO concentrations were detected in eight wells: MW-4, MW-6, E-3, E-6, E-7, E-8, E-9, and E-12. Concentrations in these wells were generally within historic ranges with concentrations ranging from 66.2 micrograms per liter ( $\mu\text{g/L}$ ) in MW-4 to 39,300  $\mu\text{g/L}$  in E-9. TPH-GRO concentration trends have been stable in all wells, with the highest concentrations in wells downgradient of the former UST adjacent to Building 3. TPH-GRO was not detected in perimeter wells MW-1, MW-5, MW-9, MW-10, MW-11, and newly constructed well MW-12, indicating that groundwater containing TPH-GRO is delineated within the Site.
- TPHd concentrations were detected in all 19 wells sampled. Concentrations were generally within historic ranges with concentrations ranging from 24.5  $\mu\text{g/L}$  in MW-9 to 106,000  $\mu\text{g/L}$  in E-3. TPHd concentration trends have been stable or decreasing. The highest concentrations were detected in wells E-3 and E-5, downgradient of the former UST adjacent to Building 3. TPHd was detected at low concentrations in boundary wells MW-1, MW-5, MW-9, MW-10, and MW-11. The groundwater sample collected from newly constructed well MW-12 had a TPHd concentration of 39.9  $\mu\text{g/L}$ . The low concentrations of TPHd in boundary wells indicate that TPHd-containing groundwater is generally delineated within the Site.
- TPHmo concentrations were detected in all 19 wells sampled. TPHmo concentrations ranged from 48.5  $\mu\text{g/L}$  in E-12 to 153,000  $\mu\text{g/L}$  in E-3. Concentration trends are generally stable or decreasing, and within historic ranges. The highest concentrations were detected in wells E-3, E-5, and E-7, downgradient of the former UST adjacent to Building 3. TPHmo was detected at low concentrations in boundary wells MW-1, MW-5, MW-9, MW-10, and MW-11. The groundwater sample collected from newly constructed well MW-12 had a TPHmo concentration of 63.1  $\mu\text{g/L}$ . The low concentrations of TPHmo in boundary wells indicate that TPHmo-containing groundwater is generally delineated within the Site.
- Benzene concentrations were detected in nine wells: shallow wells MW-6, E-3, E-6, E-7, E-8, E-9, and E-12, and deeper well AS-1D. Concentrations were generally within historic

ranges with concentrations ranging from 0.30 µg/L in E-6 to 2,460 µg/L in E-9. Benzene concentration trends are generally stable or decreasing. Elevated benzene concentrations are co-located with elevated TPH-GRO concentrations. Benzene was not detected in boundary wells MW-1, MW-5, MW-9, MW-10, MW-11, and newly constructed well MW-12, indicating that benzene-containing groundwater is delineated within the Site.

- MTBE concentrations were detected in only six wells MW-9, MW-12, E-3, E-5, E-6, and E-7. Concentrations were generally within historic ranges with concentrations ranging from 0.28 µg/L in MW-12 to 1.4 µg/L in E-7. Where detected, MTBE concentration trends have been stable or decreasing.
- Wells MW-10 and MW-11 were sampled for PCBs after the soil analytical results indicated PCB impacts to shallow soil adjacent to these two wells. PCBs were not detected in these two groundwater samples.
- Fuel constituents/additives toluene, ethylbenzene, xylenes, 1,2-dichloroethane (1,2-DCA), and tert-butyl alcohol (TBA) were also detected in groundwater samples. Concentration trends of these constituents appear to be stable or decreasing in all wells.
- Laboratory analytical results from the sample collected from the deep monitoring well in the former UST area (AS1D) indicated that only very low concentrations of TPHd, TPHmo, and benzene were detected in the sample. This confirms previous findings that contamination is vertically defined and limited to the shallow groundwater zone.

Results of the Quarter 3, 2014 semi-annual groundwater sampling indicate the downgradient boundary wells (MW-1, MW-5, MW-9, MW-10, MW-11, and MW-12) contain low and decreasing concentrations of TPHd and TPHmo. The absence of TPH-GRO, BTEX, and MTBE in groundwater samples collected from the downgradient boundary wells indicates the volatile organic plume is stable and contained on Site.

## 5.0 DATA EVALUATION AND RECOMMENDATIONS

This report documents the Data Gaps investigation activities and groundwater monitoring for Site soil and groundwater conducted at 9201 San Leandro Street, Oakland, California in September and October 2014. A discussion of SGI's conclusions and recommendations based on the results, are presented below.

### 5.1 Data Evaluation

The following sections discuss the results of the soil and groundwater investigations at the Site. A discussion of how the results compare with the appropriate screening criteria is included.

#### 5.1.1 Soil

Results of the Data Gaps investigation indicate that PCBs are present in all six shallow soil samples collected from locations where elevated concentrations of TEPH were previously detected. Because the PCB impacts in shallow soil along the western boundary of the Site are not considered to be sourced from the former UST, it is appropriate to screen PCB results against the CRWQCB's Environmental Screening Levels. PCBs concentrations above the ESL for direct contact (0.74 mg/kg) were detected in two of the six samples. PCB Aroclor 1254 was detected at concentrations of 1.0 mg/kg in sample SB-MW-10-1 at 1.0 foot bgs, and 2.5 mg/kg in sample SB-MW-11-5 at 5.0 foot bgs. The area is covered by asphalt and the current property owner has no plans to alter the current use; therefore, a current exposure pathway for direct contact with PCB-impacted soil is not complete.

Shallow soil samples were collected from an area along the southwestern fenceline that was used for stockpiling of broken asphalt. Soil appeared to be stained from surface disposal of what appeared to be used motor oil. TEPH and metals were detected in all four soil samples. Because these shallow soil impacts along the western boundary of the Site are not considered to be sourced from the former UST, it is appropriate to screen the TEPH and metals results against ESLs. While the ESL ceiling value for TPH-DRO and TPH-MRO are the lowest screening levels, they are not appropriate to use since the impacted area is really limited and would not cause a nuisance to the general public. It is appropriate to screen the TPH-DRO results against the leaching to groundwater criteria (570 mg/kg) and to screen the TPH-MRO results against the direct exposure criteria (100,000 mg/kg). As presented on Table 2, the TEPH results are well below their appropriate corresponding screening levels. TEPH results from soil samples collected from boring MW-12, advanced approximately 20 feet east of SB-SGI-2, indicate very low concentrations of TEPH in shallow soil (4.0 feet bgs). TEPH were not detected in the deeper soil sample collected from 14 feet bgs. These results confirm that the shallow TEPH impacts in this area were sourced from the surface disposal of what appeared to be used motor oil, and not from the former UST. Laboratory analytical results for TEPH analysis and appropriate screening criteria are presented on Table 2.

The four shallow soil samples from the areas of stained soil were also analyzed for the five wear metals (cadmium, chromium, lead, nickel, and zinc). Laboratory analytical results indicate that metals concentrations were below their corresponding screening criteria in all four shallow soil samples analyzed from borings SB-SGI-1 and SB-SGI-2. The lower of the direct exposure or ceiling value was used as the appropriate ESL criteria. While the urban area ecotoxicity ESL was the lowest ESL for cadmium, nickel, and zinc, this criterion is not appropriate for use due to the limited extent of an environment capable of supporting terrestrial plants and animals.

As discussed above VOCs, soil samples SB-MW-12-4 and SB-MW-12-14 were also analyzed for TPH-GRO, BTEX, and fuel additives. There were no detections of these compounds, or any other VOCs, in these two soil samples.

### 5.1.2 Groundwater

The Quarter 3, 2014 semi-annual groundwater monitoring and sampling event was conducted on October 19, 2014. Groundwater elevation data indicates shallow zone groundwater flows in a westerly direction at a gradient of approximately 0.0038 feet/foot, which is consistent with historical groundwater flow patterns.

TPH-GRO concentration trends are stable in all wells, with the highest concentrations in wells downgradient of the former gasoline UST at Building 3. TPH-GRO was not detected in boundary wells MW-1, MW-5, MW-9, MW-10, MW-11, and newly constructed well MW-12, indicating that groundwater containing TPH-GRO is delineated within the Site.

TPHd concentration trends are stable or decreasing. The highest concentrations were detected in wells E-3 and E-5, downgradient of the former gasoline UST at Building 3. TPHd was detected at low concentrations in boundary wells MW-1, MW-5, MW-9, MW-10, MW-11, and MW-12, indicating that TPHd-containing groundwater is essentially delineated within the Site.

TPHmo concentration trends are generally stable or decreasing, and within historic ranges. The highest concentrations were detected in wells E-3, E-5, and E-7, downgradient of the former UST adjacent to Building 3. TPHmo was detected at low concentrations in boundary wells MW-1, MW-5, MW-9, MW-10, MW-11, and MW-12. The low concentrations of TPHmo in boundary wells indicate that TPHmo-containing groundwater is essentially delineated within the Site.

Benzene concentration trends are generally stable or decreasing. Benzene was not detected in boundary wells MW-1, MW-5, MW-9, MW-10, MW-11, and newly constructed well MW-12, indicating that benzene-containing groundwater has been delineated and is not migrating from the Site.

MTBE concentrations were detected in only six wells and generally are within historic ranges. Where detected, MTBE concentration trends have been stable or decreasing.

Groundwater samples from wells MW-10 and MW-11 were analyzed for PCBs after the analytical results indicated PCB impacts to shallow soil at these locations. PCBs were not detected in these

two groundwater samples, and therefore confirm that PCBs in shallow soil have not leached into groundwater at these locations.

## 5.2 Recommendations

Based on the results of the well conditions inspection, a review of historical groundwater concentration trends and the presence of nearby wells, SGI recommends the destruction of well MW-3, rather than rehabilitation of well MW-3. Well AS-1S, located approximately 8 feet downgradient of well MW-3, has very similar concentration values and trends of TEPH and VOCs (Table 4). The presence of these two wells in such close proximity is redundant.

A Deed Restriction will be prepared by PCC and the current property owner that will address ACEH's concerns raised in March 7, 2014 comment letter and denial of Site closure. The Deed Restriction will be completed with ACEH's oversight and is expected to include building usage and site usage and soil management requirements.

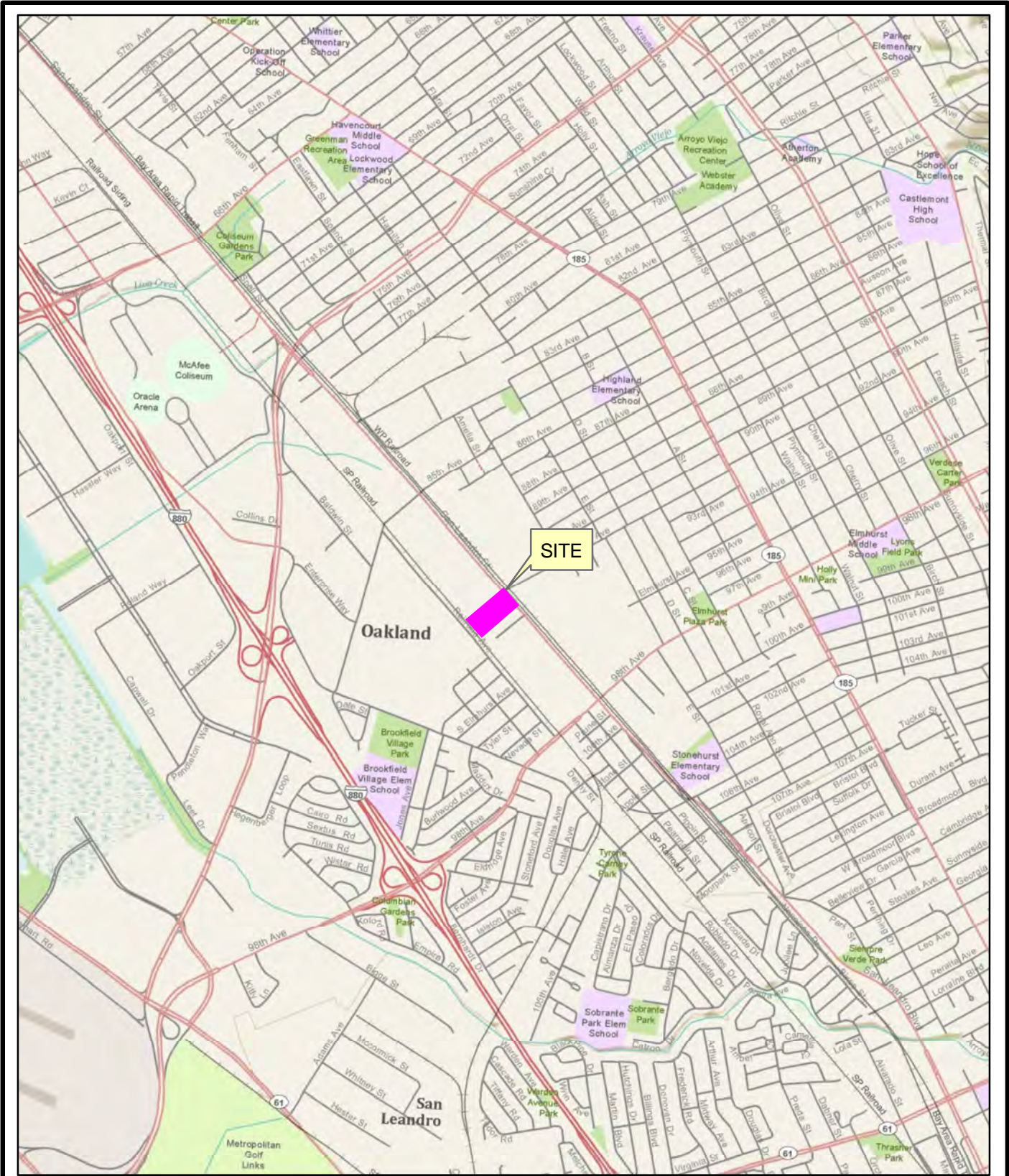
As proposed in the Work Plan, semi-annual groundwater sampling is planned for April 2015. Based on the results of the 2014 investigations and anticipated results of the April 2015 sampling event, SGI will request Site closure under the State Water Resource Control Board's Low-Threat Underground Storage Tank Case Closure Policy (CRWQCB, 2012).

## 6.0 REFERENCES


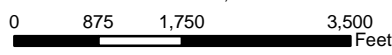

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## FIGURES



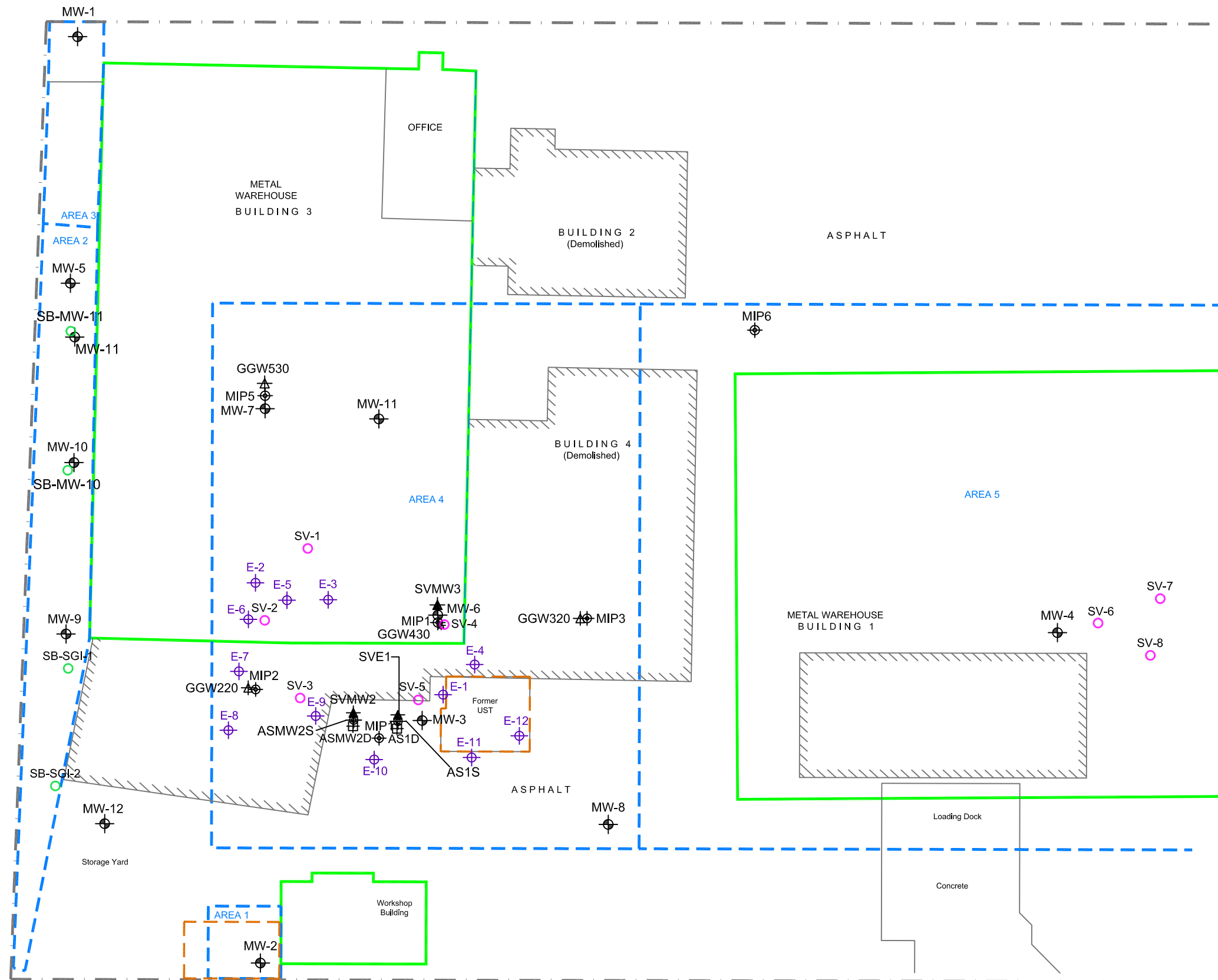


SOURCE: 7.5 MINUTE USGS TOPOGRAPHIC MAP FROM ARCGIS MAP SERVICE

 <b>THE SOURCE GROUP, INC.</b> 1962 FREEMAN AVE. SIGNAL HILL, CA 90755	PROJECT NO.: 04-PFT-001	DATE: 10/14/2009	DR.BY: AC	APP.BY: SS	SCALE 1:24,000 	N  <b>FIGURE 1</b>
	<b>FORMER PACO PUMPS FACILITY</b> 9201 SAN LEANDRO STREET OAKLAND, CALIFORNIA				<b>SITE LOCATION MAP</b>	



S:\Clients N - Q\Paco Pumps\Reports\Q3-14\_data gaps Report\Figures\Fig.2-Paco Pumps Site Plan.dwg



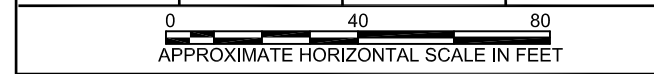
**LEGEND**

- Site Boundary
- Project Areas of Concern
- Area of Excavation
- Building Outline
- Former Buildings
- Railroad Tracks
- Deep Groundwater Air Injection or Air Injection Monitoring Well by LFR January 2009
- Shallow Groundwater Air Injection or Air Injection Monitoring Well LFR January 2009
- Groundwater Monitoring Well
- Soil Boring Sample by SGI 2014
- Soil Vapor Probe by SGI 2013
- Groundwater Monitoring Well by SGI 2010
- Vadose Well by LFR January 2009
- Membrane Interface Probe by LFR January 2009
- Grab Groundwater Sample Location by LFR January 2009

**SITE PLAN**

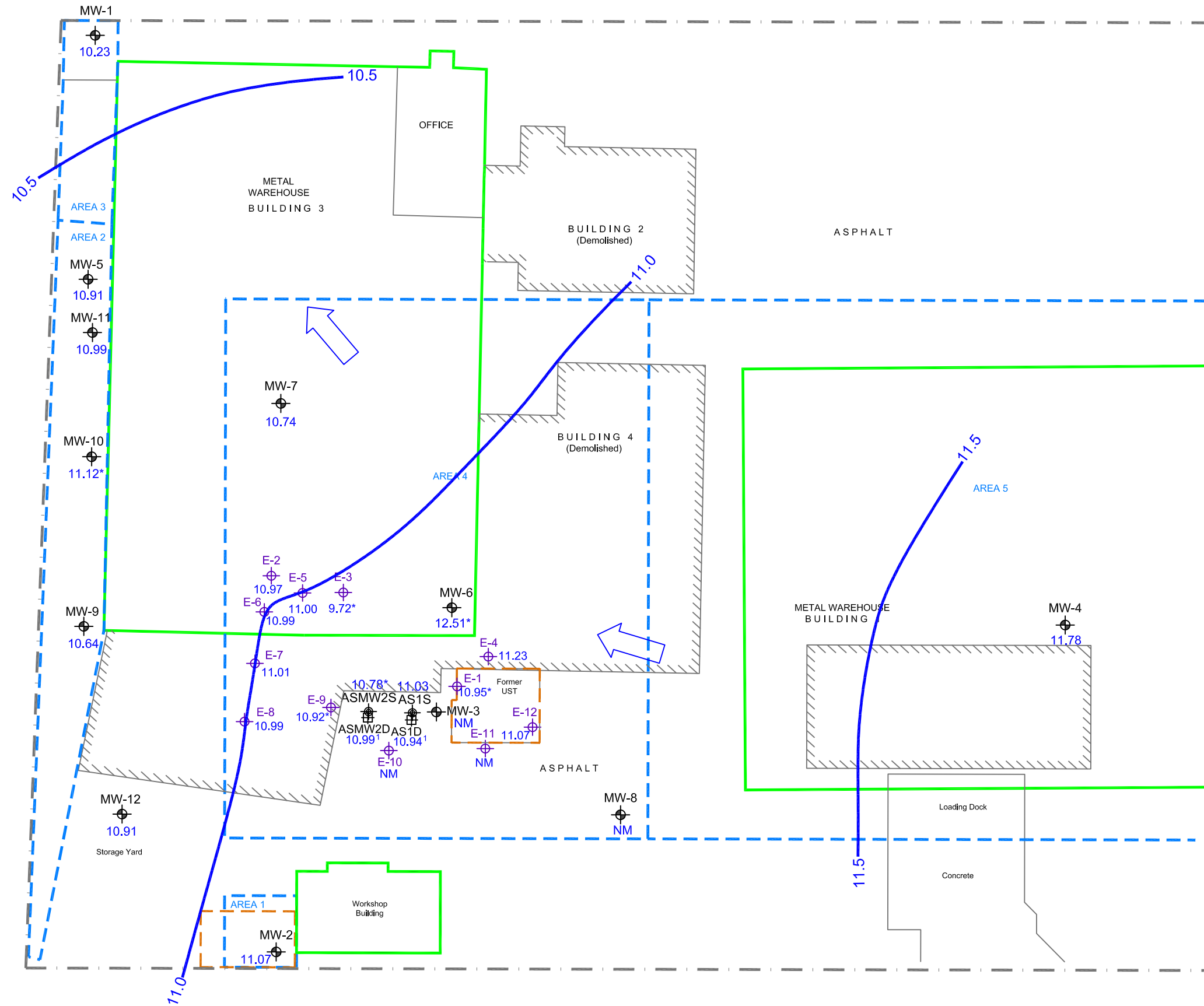
FORMER PACO PUMPS SITE  
9201 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
04-PFT-005	11/03/2014	SGI/AC	PP



**THE SOURCE GROUP, INC.**  
3478 BUSKIRK AVENUE, SUITE 100  
PLEASANT HILL, CA 94523

**FIGURE**  
2



**LEGEND**

- Site Boundary
- Project Areas of Concern
- Area of Excavation
- Building Outline
- Former Buildings
- Railroad Tracks
- AS1D Deep Groundwater Air Injection or Air Injection Monitoring Well by LFR January 2009
- AS1S Shallow Groundwater Air Injection or Air Injection Monitoring Well LFR January 2009
- MW-1 Groundwater Monitoring Well
- E-1 Groundwater Monitoring Well by SGI 2010
- 10.90 Groundwater Elevation (Feet Above Mean Sea Level)
- \* Data Not Used For Contouring
- 1 Not Contoured; Well Screened in Deeper Groundwater Zone
- NM Not Measured
- Groundwater Flow Direction
- Groundwater Contour (Feet Above Mean See Level)

**GROUNDWATER ELEVATION AND POTENTIOMETRIC SURFACE MAP- OCTOBER 2014**

FORMER PACO PUMPS SITE  
9201 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

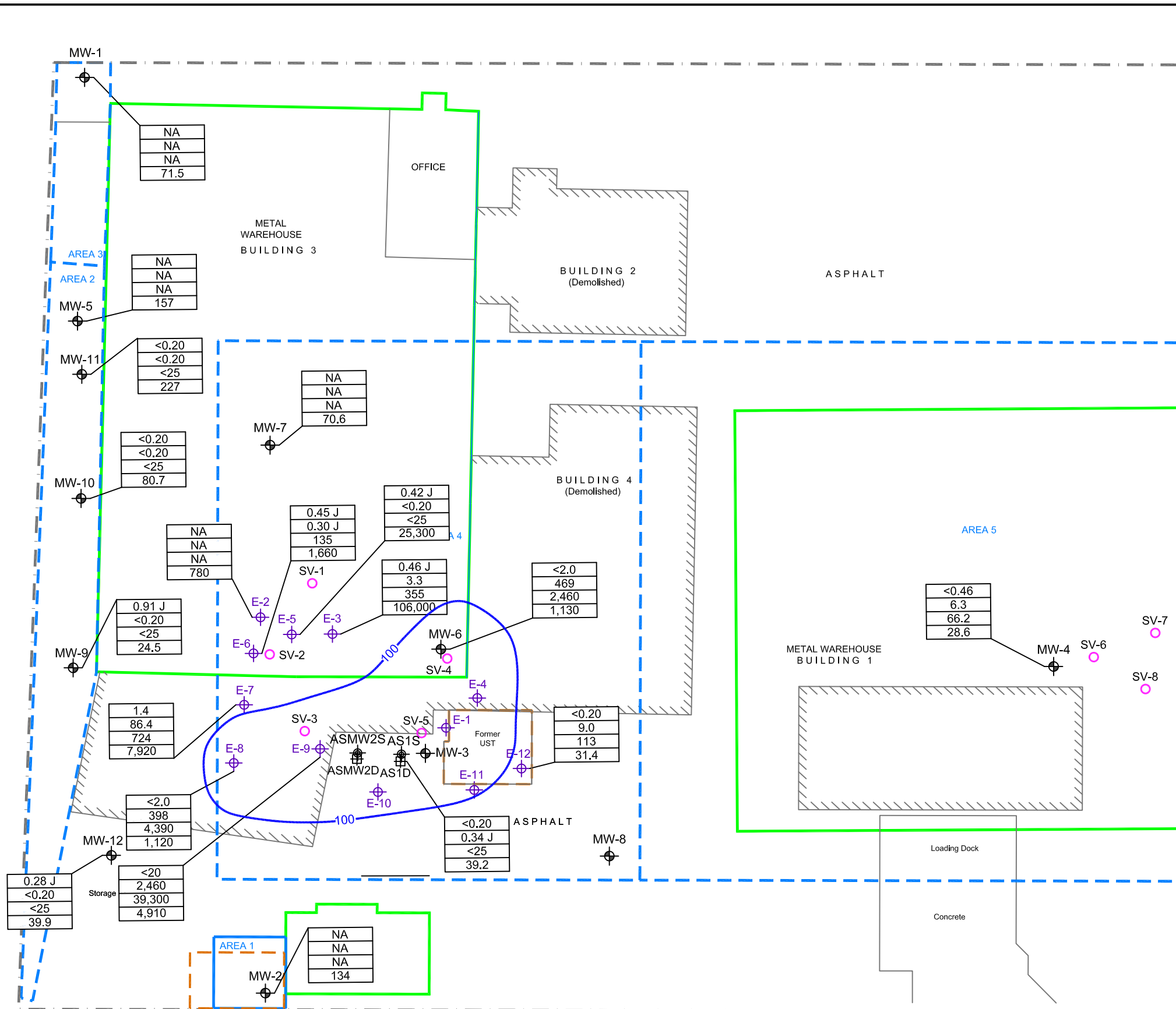
PROJECT NO.	DATE	DRAWN BY:	APP. BY:
04-PFT-005	12/02/2014	ZA	PJ



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environmental  
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PLEASANT HILL, CA 94523



**FIGURE 3**



**LEGEND**

- Site Boundary
- - - Project Areas of Concern
- - - Area of Excavation
- ▭ Building Outline
- ▨ Former Buildings
- ||||| Railroad Tracks
- AS1D Deep Groundwater Air Injection or Air Injection Monitoring Well by LFR January 2009
- AS1S Shallow Groundwater Air Injection or Air Injection Monitoring Well LFR January 2009
- MW-1 Groundwater Monitoring Well
- E-1 Groundwater Monitoring Well by SGI 2010
- SV-6 Soil Vapor Probe by SGI 2013
- MW-4
 

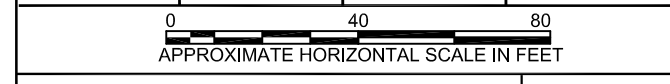
<0.46	← Methyl Tert-Butyl Ether (MTBE)
6.3	← Benzene
66.2	← TPH-GRO
28.6	← TPHd
- <0.20 Not Detected At A Concentration Grater Than The Reporting Limit
- TPH-GRO Total Petroleum Hydrocarbons - Gasoline Range Organics
- TPHd Total Petroleum Hydrocarbons As Diesel
- J Estimated Value Above Method Detection Limit but Below Laboratory Reporting Limit
- NA Parameter Not Analyzed
- 100- Benzene Isoconcentration Contour

All concentrations in micrograms per liter (µg/L)

**MTBE, BENZENE, TPH-GRO, AND TPH-DRO CONCENTRATIONS IN GROUNDWATER - OCTOBER 2014**

FORMER PACO PUMPS SITE  
9201 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
04-PFT-004	12/12/2014	ZA	PJ



**SGI THE SOURCE GROUP, INC.**  
environmental  
3478 BUSKIRK AVENUE, SUITE 100  
PLEASANT HILL, CA 94523

**FIGURE 4**

## TABLES

**Table1**  
**Current and Historical Groundwater Elevations**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Measured	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>
MW-1	15-Nov-92	18.05	9.34	8.71
	9-Mar-93		8.50	9.55
	21-Jul-93		9.00	9.05
	26-May-94		9.06	8.99
	24-Aug-94		8.40	9.65
	22-Nov-94		8.20	9.85
	8-Feb-95		8.30	9.75
	31-May-95		9.35	8.70
	8-Aug-95		9.16	8.89
	29-Nov-95		9.28	8.77
	29-Feb-96		7.62	10.43
	23-May-96		8.28	9.77
	4-Nov-96		9.20	8.85
	13-May-97	9.04	9.01	
	14-Nov-07	8.50	9.55	
	17-Jun-08	9.04	9.01	
	13-Jan-09	17.76	8.65	9.11
	28-Apr-09		8.67	9.09
	6-Nov-09		8.79	8.97
	28-Jun-10		8.77	8.99
	30-Dec-10		7.20	10.56
	8-Jun-11		8.12	9.64
	15-Dec-11		8.76	9.00
28-Mar-12	6.90		10.86	
13-Sep-12	8.92		8.84	
5-Apr-13	7.73		10.03	
1-Oct-13	8.68	9.08		
16-Oct-14	7.53	10.23		
MW-2	15-Nov-92	19.40	10.05	9.35
	9-Mar-93		9.21	10.19
	21-Jul-93		9.72	9.68
	26-May-94		9.58	9.82
	24-Aug-94		9.98	9.42
	22-Nov-94		8.70	10.70
	8-Feb-95		8.68	10.72
	31-May-95		9.48	9.92
	8-Aug-95		9.64	9.76
	29-Nov-95		9.86	9.54
	29-Feb-96		8.12	11.28
	23-May-96		8.70	10.70
	4-Nov-96		9.50	9.90
	13-May-97	9.44	9.96	
	14-Nov-07	8.94	10.46	
	17-Jun-08	9.57	9.83	
	13-Jan-09	19.12	9.21	9.91
	28-Apr-09		9.30	9.82
	6-Nov-09		8.91	10.21
	28-Jun-10		9.33	9.79
	30-Dec-10		7.52	11.60
	8-Jun-11		8.52	10.60
	15-Dec-11		9.25	9.87
28-Mar-12	7.45		11.67	
13-Sep-12	9.50		9.62	
5-Apr-13	8.19		10.93	
1-Oct-13	9.06	10.06		
16-Oct-14	8.05	11.07		

**Table1**  
**Current and Historical Groundwater Elevations**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Measured	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>
MW-3	15-Nov-92	19.70	10.35	9.35
	9-Mar-93		9.19	10.51
	21-Jul-93		11.07	8.63
	26-May-94		10.04	9.66
	24-Aug-94		11.08	8.62
	22-Nov-94		8.92	10.78
	8-Feb-95		8.90	10.80
	31-May-95		10.16	9.54
	8-Aug-95		9.92	9.78
	29-Nov-95		10.7	9.00
	29-Feb-96		8.52	11.18
	23-May-96		8.15	11.55
	4-Nov-96		7.21	12.49
	13-May-97		9.82	9.88
	14-Nov-07		9.21	10.49
	17-Jun-08		9.81	9.89
	13-Jan-09	19.42	9.58	9.84
	28-Apr-09		9.59	9.83
	6-Nov-09		9.52	9.90
	28-Jun-10		9.60	9.82
	30-Dec-10		7.74	11.68
	8-Jun-11		8.80	10.62
	15-Dec-11		9.54	9.88
28-Mar-12		7.74	11.68	
13-Sep-12		9.69	9.73	
5-Apr-13		8.65	10.77	
1-Oct-13		9.39	10.03	
16-Oct-14			NA	--
MW-4	15-Nov-92	19.65	8.87	10.78
	9-Mar-93		7.96	11.69
	21-Jul-93		8.06	11.59
	26-May-94		8.57	11.08
	24-Aug-94		8.75	10.90
	22-Nov-94		7.41	12.24
	8-Feb-95		7.20	12.45
	31-May-95		8.32	11.33
	8-Aug-95		8.66	10.99
	29-Nov-95		8.93	10.72
	29-Feb-96		6.54	13.11
	23-May-96		7.24	12.41
	4-Nov-96		8.58	11.07
	13-May-97		8.42	11.23
	14-Nov-07		7.61	12.04
	17-Jun-08		8.31	11.34
	13-Jan-09	19.37	NM	NM
	28-Apr-09		NM	NM
	6-Nov-09		8.00	11.37
	28-Jun-10		8.05	11.32
	30-Dec-10		5.70	13.67
	8-Jun-11		6.88	12.49
	15-Dec-11		8.88	10.49
28-Mar-12		5.77	13.60	
13-Sep-12		8.29	11.08	
5-Apr-13		6.96	12.41	
1-Oct-13		8.04	11.33	
16-Oct-14		7.59	11.78	

**Table1**  
**Current and Historical Groundwater Elevations**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Measured	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>
MW-5	24-Aug-94	18.49	8.22	10.27
	22-Nov-94		7.90	10.59
	8-Feb-95		7.92	10.57
	31-May-95		8.74	9.75
	8-Aug-95		8.93	9.56
	29-Nov-95		9.11	9.38
	29-Feb-96		7.36	11.13
	23-May-96		7.92	10.57
	4-Nov-96		8.78	9.71
	13-May-97		8.82	9.67
	14-Nov-07	8.16	10.33	
	17-Jun-08	8.75	9.74	
	13-Jan-09	18.21	8.46	9.75
	28-Apr-09		8.50	9.71
	6-Nov-09		9.93	8.28
	28-Jun-10		8.42	9.79
	30-Dec-10		6.68	11.53
	8-Jun-11		7.64	10.57
	15-Dec-11		8.45	9.76
	28-Mar-12		6.77	11.44
13-Sep-12	8.63		9.58	
5-Apr-13	7.45		10.76	
1-Oct-13	8.33	9.88		
16-Oct-14	7.30	10.91		
MW-6	13-Jan-09	19.46	9.59	9.87
	28-Apr-09		9.65	9.81
	6-Nov-09		9.60	9.86
	28-Jun-10		9.54	9.92
	30-Dec-10		7.80	11.66
	8-Jun-11		8.74	10.72
	15-Dec-11		9.64	9.82
	28-Mar-12		7.77	11.69
	13-Sep-12		9.82	9.64
	5-Apr-13		8.69	10.77
	1-Oct-13		9.45	10.01
16-Oct-14	6.95	12.51		
MW-7	13-Jan-09	19.44	9.66	9.78
	28-Apr-09		9.67	9.77
	6-Nov-09		9.64	9.80
	28-Jun-10		NM	NM
	30-Dec-10		7.89	11.55
	8-Jun-11		8.79	10.65
	15-Dec-11		9.64	9.80
	28-Mar-12		7.81	11.63
	13-Sep-12		9.80	9.64
	5-Apr-13		8.70	10.74
	1-Oct-13		9.50	9.94
16-Oct-14	8.70	10.74		
MW-8	28-Jun-10	18.27	8.07	10.20
	30-Dec-10		5.92	12.35
	8-Jun-11		7.30	10.97
	15-Dec-11		7.86	10.41
	28-Mar-12		6.09	12.18
	13-Sep-12		8.10	10.17
	5-Apr-13		NA	--
	1-Oct-13		NA	--
16-Oct-14	NA	--		

**Table1**  
**Current and Historical Groundwater Elevations**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Measured	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>		
MW-9	5-Apr-13	18.53	8.20	10.33		
	1-Oct-13		8.69	9.84		
	16-Oct-14		7.89	10.64		
MW-10	5-Apr-13	18.12	7.34	10.78		
	1-Oct-13		8.21	9.91		
	16-Oct-14		7.00	11.12		
MW-11	5-Apr-13	18.32	7.53	10.79		
	1-Oct-13		8.42	9.90		
	16-Oct-14		7.33	10.99		
MW-12	16-Oct-14	19.41	8.50	10.91		
AS-1S	13-Jan-09	19.38	9.45	9.93		
	28-Apr-09		9.67	9.71		
	6-Nov-09		9.63	9.75		
	28-Jun-10		9.90	9.48		
	30-Dec-10		7.65	11.73		
	8-Jun-11		8.65	10.73		
	15-Dec-11		9.01	10.37		
	28-Mar-12		7.68	11.70		
	13-Sep-12		8.89	10.49		
	5-Apr-13		8.50	10.88		
	1-Oct-13		9.51	9.87		
	16-Oct-14		8.35	11.03		
	ASMW2S		13-Jan-09	19.38	9.51	9.87
28-Apr-09		9.55	9.83			
6-Nov-09		9.53	9.85			
28-Jun-10		10.30	9.08			
30-Dec-10		7.73	11.65			
8-Jun-11		8.70	10.68			
15-Dec-11		9.51	9.87			
28-Mar-12		7.67	11.71			
5-Apr-13		8.47	10.91			
1-Oct-13		9.35	10.03			
16-Oct-14		8.60	10.78			
AS-1D		13-Jan-09	19.31		9.42	9.89
		28-Apr-09			9.48	9.83
	6-Nov-09	9.50		9.81		
	28-Jun-10	9.90		9.41		
	30-Dec-10	7.65		11.66		
	8-Jun-11	8.60		10.71		
	15-Dec-11	9.47		9.84		
	28-Mar-12	7.66		11.65		
	13-Sep-12	9.65		9.66		
	5-Apr-13	8.40		10.91		
	1-Oct-13	9.30		10.01		
	16-Oct-14	8.37		10.94		
	ASMW-2D	13-Jan-09		19.52	9.65	9.87
28-Apr-09		9.69	9.83			
6-Nov-09		9.70	9.82			
28-Jun-10		9.70	9.82			
30-Dec-10		7.88	11.64			
8-Jun-11		8.85	10.67			
15-Dec-11		9.65	9.87			
28-Mar-12		7.86	11.66			
5-Apr-13		8.66	10.86			
1-Oct-13		9.50	10.02			
16-Oct-14		8.53	10.99			



**Table1**  
**Current and Historical Groundwater Elevations**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Measured	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>
E-1	15-Dec-11	19.35	9.43	9.92
	28-Mar-12		6.82	12.53
	13-Sep-12		9.57	9.78
	5-Apr-13		8.52	10.83
	1-Oct-13		9.25	10.10
	16-Oct-14		8.40	10.95
E-2	30-Dec-10	19.56	7.95	11.61
	8-Jun-11		8.91	10.65
	15-Dec-11		9.70	9.86
	28-Mar-12		7.93	11.63
	30-Jun-10			19.56
	13-Sep-12		9.90	9.66
	5-Apr-13		8.81	10.75
	1-Oct-13		9.58	9.98
14-Oct-14	8.59	10.97		
E-3	15-Dec-11	19.52	9.72	9.80
	28-Mar-12		7.84	11.68
	13-Sep-12		10.10	9.42
	5-Apr-13		8.67	10.85
	1-Oct-13		9.53	9.99
	16-Oct-14		9.80	9.72
E-4	15-Dec-11	19.52	9.60	9.92
	28-Mar-12		7.80	11.72
	13-Sep-12		9.71	9.81
	5-Apr-13		8.78	10.74
	1-Oct-13		9.50	10.02
	16-Oct-14		8.29	11.23
E-5	15-Dec-11	19.53	9.69	9.84
	28-Mar-12		7.89	11.64
	13-Sep-12		9.90	9.63
	5-Apr-13		8.61	10.92
	1-Oct-13		9.53	10.00
	16-Oct-14		8.53	11.00
E-6	15-Dec-11	19.46	9.61	9.85
	28-Mar-12		7.81	11.65
	13-Sep-12		9.20	10.26
	5-Apr-13		9.00	10.46
	1-Oct-13		9.48	9.98
	16-Oct-14		8.47	10.99
E-7	30-Dec-10	19.59	7.95	11.64
	8-Jun-11		8.89	10.70
	15-Dec-11		9.72	9.87
	28-Mar-12		7.94	11.65
	13-Sep-12		10.00	9.59
	5-Apr-13		8.75	10.84
	1-Oct-13		9.63	9.96
	16-Jan-14		8.58	11.01
E-8	30-Dec-10	19.59	7.96	11.63
	8-Jun-11		8.88	10.71
	15-Dec-11		9.73	9.86
	28-Mar-12		7.93	11.66
	13-Sep-12		9.90	9.69
	5-Apr-13		8.70	10.89
	1-Oct-13		9.60	9.99
	16-Oct-14		8.60	10.99

**Table1**  
**Current and Historical Groundwater Elevations**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Measured	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>
E-9	15-Dec-11	19.49	9.63	9.86
	28-Mar-12		7.84	11.65
	13-Sep-12		10.07	9.42
	5-Apr-13		9.20	10.29
	1-Oct-13		9.55	9.94
	16-Oct-14		8.57	10.92
E-10	15-Dec-11	19.3	9.44	9.86
	28-Mar-12		7.64	11.66
	13-Sep-12		N/A	--
	5-Apr-13		N/A	--
	1-Oct-13		N/A	--
	16-Oct-14		N/A	--
E-11	15-Dec-11	19.19	9.28	9.91
	28-Mar-12		7.45	11.74
	13-Sep-12		10.05	9.14
	5-Apr-13		8.29	10.90
	1-Oct-13		N/A	--
	1-Oct-13		N/A	--
E-12	15-Dec-11	18.89	8.89	10.00
	28-Mar-12		7.05	11.84
	13-Sep-12		9.08	9.81
	5-Apr-13		8.02	10.87
	1-Oct-13		8.80	10.09
	16-Oct-14		7.82	11.07

**Notes:**

<sup>(1)</sup> Top-of-casing and groundwater elevation in North America Vertical Datum 1988; wells re-surveyed by Tronoff Associates Land Surveying on February 2, 2009.

<sup>(2)</sup> Depth to water measured in feet below top of casing.

N/A = Not Available.

-- = not measured.

**Table 2**  
**Summary of Analytical Results for Soil**  
Former Paco Pumps Site  
9201 San Leandro Street, Oakland, California

Sample ID	Location	Date Sampled	Depth	Total Petroleum Hydrocarbons (TPH)			Volatile Organic Compounds (VOCs)				Metals					Polychlorinated Biphenyls (PCBs)	
				Gasoline Range Organics (C5-C12)	Diesel Range Organics (C10-C28)	Motor Oil Range Organics (C24-C36)	Benzene	Toluene	Ethylbenzene	Xylenes	Cadmium	Chromium	Lead	Nickel	Zinc	Aroclor 1254	Aroclor 1260
				(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SB-SGI-1-1'	SB-SGI-1	9/19/2014	1	<0.25	280	890	--	--	--	--	<0.48	110	27	74	160	--	--
SB-SGI-1-2.5'	SB-SGI-1	9/19/2014	2.5	<0.22	51 H <sup>1</sup>	66 H <sup>1</sup>	--	--	--	--	0.46	35	24	43	160	--	--
SB-SGI-2-1'	SB-SGI-2	9/19/2014	1	NA	580	1,800	--	--	--	--	4.7	140	310	93	1,500	--	--
SB-SGI-2-2.5'	SB-SGI-2	9/19/2014	2.5	NA	280 H <sup>1</sup>	600 H <sup>1</sup>	--	--	--	--	6.4	120	240	100	1,700	--	--
SB-MW-12-4'	MW-12	9/19/2014	4	NA	44	200	<0.005	<0.005	<0.005	<0.01	--	--	--	--	--	--	--
SB-MW-12-14'	MW-12	9/19/2014	14	NA	<1.0	<50	<0.0044	<0.0044	<0.0044	<0.0088	--	--	--	--	--	--	--
SB-MW-10-1'	SB-MW-10	9/19/2014	1	--	--	--	--	--	--	--	--	--	--	--	--	1.0	<0.062
SB-MW-10-2.5'	SB-MW-10	9/19/2014	2.5	--	--	--	--	--	--	--	--	--	--	--	--	<0.0025	0.013
SB-MW-10-5'	SB-MW-10	9/19/2014	5	--	--	--	--	--	--	--	--	--	--	--	--	0.028	<0.0025
SB-MW-11-1'	SB-MW-11	9/19/2014	1	--	--	--	--	--	--	--	--	--	--	--	--	0.14	<0.012
SB-MW-11-2.5'	SB-MW-11	9/19/2014	2.5	--	--	--	--	--	--	--	--	--	--	--	--	0.72	<0.05
SB-MW-11-5'	SB-MW-11	9/19/2014	5	--	--	--	--	--	--	--	--	--	--	--	--	2.5	<0.12
Environmental Screening Level (ESL) - Commercial/Industrial Land Use <sup>2</sup>				770 <sup>3</sup>	570 <sup>3</sup>	100,000 <sup>4</sup>	0.044 <sup>3</sup>	3.3 <sup>3</sup>	2.9 <sup>3</sup>	2.3 <sup>3</sup>	1,000 <sup>4</sup>	2,500 <sup>5</sup>	320 <sup>4</sup>	2,500 <sup>5</sup>	2,500 <sup>5</sup>	0.74 <sup>4</sup>	0.74 <sup>4</sup>

**Notes:**

Detections are shown in **bold**.

ft bgs = feet below ground surface.

mg/kg = milligrams per kilogram.

<0.25 = not detected at or above the indicated laboratory reporting limit.

H = Sample was prepped or analyzed beyond the specified holding time.

-- = Constituent not analyzed

<sup>1</sup> = Sample analyzed following silica gel cleanup

<sup>2</sup> = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels, February 2013

<sup>3</sup> = ESL Table G: Soil Screening Levels for Leaching Concern

<sup>4</sup> = ESL Table K-2: Direct Exposure Soil Screening Levels, Commercial/Industrial Worker Exposure Scenario

<sup>5</sup> = ESL Table H-2: Components for Ceiling Levels in Shallow Soil

**Table 3**  
**Summary of Current Analytical Results for Groundwater - Quarter 3, 2014**  
Former Paco Pump Site  
9201 San Leandro Street  
Oakland, California

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	PCBs	Other Fuel Additives
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
<b>LFR Area 1 - Southwestern Corner of the Site, west of the "workshop building"</b>												
MW-2	16-Oct-14	5.25-20.25	<b>134</b>	<b>195</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>LFR Area 2 - Area South of the Warehouse Storage Area Building Adjacent to the Southern Property Boundary</b>												
MW-1	16-Oct-14	5.25-20.25	<b>71.5</b>	<b>83.2</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>LFR Area 4 - Former UST near Groundwater Monitoring Well MW-3</b>												
MW-5	16-Oct-14	5.25-20.25	<b>157</b>	<b>94.4</b>	NA	NA	NA	NA	NA	NA	NA	NA
MW-6	16-Oct-14	10-17	<b>1,130</b>	<b>200</b>	<b>2,460</b>	<b>469</b>	<b>19.8</b>	<b>57.2</b>	<b>14.8 J</b>	<2.0	NA	<b>41.8 (1,2-DCA) 57.1 J (TBA)</b>
MW-7	16-Oct-14	20-28	<b>70.6</b>	<b>140</b>	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	16-Oct-14	12-17	<b>24.5</b>	<b>58.2</b>	<25	<0.20	<0.20	<0.20	<0.46	<b>0.91 J</b>	NA	
MW-10	16-Oct-14	10-20	<b>80.7</b>	<b>78.9</b>	<25	<0.20	<0.20	<0.20	<0.46	<0.20	<0.097	
MW-11	16-Oct-14	10-20	<b>227</b>	<b>129</b>	<25	<0.20	<0.20	<0.20	<0.46	<0.20	<0.10	
MW-12	16-Oct-14	10-20	<b>39.9</b>	<b>63.1</b>	<25	<0.20	<0.20	<0.20	<0.46	<b>0.28 J</b>	NA	
AS-1D	16-Oct-14	31-34	<b>39.2</b>	<b>55.1</b>	<25	<b>0.34 J</b>	<1.0	<0.20	<0.46	<0.20	NA	
AS-1D DUP-1	16-Oct-14	31-34	<b>649</b>	<b>458</b>	<b>4,390</b>	<b>398</b>	<1.0	<b>180</b>	<b>145</b>	<2.0	NA	
E2	16-Oct-14	8-18	<b>780</b>	<b>1,080</b>	NA	NA	NA	NA	NA	NA	NA	NA
E3	16-Oct-14	8-18	<b>106,000</b>	<b>153,000</b>	<b>355</b>	<b>3.3</b>	<1.0	<0.20	<2.0	<b>0.46 J</b>	NA	<b>4.5 J (TBA)</b>
E5	16-Oct-14	8-18	<b>25,300</b>	<b>32,500</b>	<25	<0.20	<0.20	<0.20	<0.46	<b>0.42 J</b>	NA	
E6	16-Oct-14	8-18	<b>1,660</b>	<b>1,850</b>	<b>135</b>	<b>0.30 J</b>	<0.20	<b>0.24 J</b>	<0.46	<b>0.45 J</b>	NA	
E7	16-Oct-14	8-18	<b>7,920</b>	<b>14,100</b>	<b>724</b>	<b>86.4</b>	<b>17.7</b>	<b>12.2</b>	<b>33.7</b>	<b>1.4</b>	NA	<b>1.3 (1,2-DCA)</b>
E8	16-Oct-14	8-18	<b>1,120</b>	<b>1,030</b>	<b>4,090</b>	<b>385</b>	<b>8.2 J</b>	<b>172</b>	<b>139</b>	<2.0	NA	
E9	16-Oct-14	8-18	<b>4,910</b>	<b>490</b>	<b>39,300</b>	<b>2,460</b>	<b>2,250</b>	<b>595</b>	<b>3,110</b>	<20	NA	<b>0.85 J (1,2-DCA)</b>
E12	16-Oct-14	8-18	<b>31.4</b>	<b>48.5</b>	<b>113</b>	<b>9.0</b>	<b>0.24 J</b>	<b>1.4</b>	<0.46	<0.20	NA	<b>0.40 J (1,2-DCA)</b>
<b>LFR Area 5 - Suspected Former UST near Groundwater Monitoring Well MW-4</b>												
MW-4	16-Oct-14	5.25-20.25	<b>28.6</b>	<b>72</b>	<b>66.2</b>	<b>6.3</b>	<b>0.29 J</b>	<b>0.49 J</b>	<2.0	<0.46	NA	
<b>ESL's Groundwater is current or potential drinking water source</b>			<b>100</b>	<b>100</b>	<b>100</b>	<b>1.0</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5.0</b>	<b>5.0</b>	<b>0.5 (1,2-DCA), 12 (TBA)</b>

**Notes:**

bgs = below ground surface

µg/L = micrograms per liter

**Bold Font** denotes concentration was greater than the ESL.

NA = parameter not analyzed

ND = parameter not present above laboratory reporting limits

(D) = duplicate sample

<6.0 = not detected at or above the laboratory reporting limit.

E = Indicates value exceeds calibration range

J = Estimated value above method detection limit but below laboratory reporting limit.

ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels Table F-1a and Table F-1b RWQCB

February 2013.

TPHd = total petroleum hydrocarbons as diesel

TPHmo = total petroleum hydrocarbons as motor oil

TPHg = total petroleum hydrocarbons as gasoline

MTBE = methyl tert butyl ether

PCBs = polychlorinated biphenyls

1,2-DCA = 1,2-dichloroethane

TBA = tertiary butyl alcohol

**Table 4**  
**Summary of Historical Analytical Results for Groundwater**  
Former Paco Pump Site  
9201 San Leandro Street  
Oakland, California

Sample Location	Date Collected	Depth	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Other Fuel Additives
		(feet bgs)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
<b>LFR Area 1 - Southwestern Corner of the Site, west of the "workshop building"</b>											
MW-2	16-Nov-92	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	9-Mar-93	5.25-20.25	<b>430</b>	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	21-Jul-93	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	29-Jan-94	5.25-20.25	<50	NA	<50	<2.0	<2.0	<2.0	<2.0	NA	NA
MW-2	26-May-94	5.25-20.25	<50	NA	<50	<b>2.3</b>	0.8	<0.5	<0.5	NA	NA
MW-2	24-Aug-94	5.25-20.25	<50	NA	<50	<b>3.1</b>	1.4	0.5	0.6	NA	NA
MW-2	22-Nov-94	5.25-20.25	<50	NA	<50	<b>3.4</b>	1.8	<0.5	0.5	NA	NA
MW-2	8-Feb-95	5.25-20.25	<50	NA	<50	<b>4.5</b>	1.3	<0.5	0.5	NA	NA
MW-2	31-May-95	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	8-Aug-95	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	29-Nov-95	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	29-Feb-96	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	23-May-96	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	4-Nov-96	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	ND
MW-2	13-Nov-03	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<2.0	NA	ND
MW-2	17-Jun-08	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	1.1	ND
MW-2	6-Nov-09	5.25-20.25	<b>360</b>	NA	<50	<0.5	<0.5	<0.5	<1.0	0.63	ND
MW-2	28-Jun-10	5.25-20.25	53.4J	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-2	30-Dec-10	5.25-20.25	<280	<b>3,240</b>	29.2 J <sup>a</sup>	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-2	8-Jun-11	5.25-20.25	NA	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-2	15-Dec-11	5.25-20.25	95/<94*	<b>422/311*</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-2	13-Sep-12	5.25-20.25	<b>301</b>	<190	<50	<1.0	<1.0	<1.0	<2.0	0.20	ND
MW-2	5-Apr-13	5.25-20.25	<95	<b>434</b>	42	<1.0	<1.0	<1.0	<2.0	0.35	ND
MW-2	1-Oct-13	5.25-20.25	<b>102</b>	<b>171 J</b>	<50	<1.0	<1.0	<1.0	0.58	<1.0	ND
MW-2	16-Jan-14	5.25-20.25	<b>134</b>	<b>195</b>	NA	NA	NA	NA	NA	NA	NA
<b>LFR Area 2 - Area South of the Warehouse Storage Area Building Adjacent to the Southern Property Boundary</b>											
MW-1	15-Nov-92	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	9-Mar-93	5.25-20.25	<b>140</b>	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	21-Jul-93	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	29-Jan-94	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	26-May-94	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	24-Aug-94	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	22-Nov-94	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	8-Feb-95	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	31-May-95	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	23-May-96	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	27-Oct-00	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
MW-1	14-Nov-07	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<2.0	NA
MW-1	17-Jun-08	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	0.67	NA
MW-1	6-Nov-09	5.25-20.25	<51	NA	<50	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-1	28-Jun-10	5.25-20.25	56.8J	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-1	30-Dec-10	5.25-20.25	<94	<b>114 J</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-1	16-Dec-11	5.25-20.25	<94*	<b>522*</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-1	28-Mar-12	5.25-20.25	<94*	<190*	NA	NA	NA	NA	NA	NA	NA
MW-1	13-Sep-12	5.25-20.25	<b>187</b>	<190	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-1	5-Apr-13	5.25-20.25	<97	<b>323</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-1	1-Oct-13	5.25-20.25	71.9 J	97.9 J	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-1	16-Oct-14	5.25-20.25	71.5	83.2	NA	NA	NA	NA	NA	NA	NA
<b>LFR Area 4 - Former UST near Groundwater Monitoring Well MW-3</b>											
B-1	3-Feb-97	15-20	NA	NA	<b>31,000</b>	<b>7,100</b>	<b>4,100</b>	<b>520</b>	<b>1,400</b>	NA	NA
B-2	3-Feb-97	15-20	NA	NA	<b>41,000</b>	<b>14,000</b>	<b>2,600</b>	<b>740</b>	<b>1,700</b>	NA	NA
B-3	3-Feb-97	15-20	NA	NA	<b>1,400</b>	<b>310</b>	9.9	27	56	NA	NA
B-4	3-Feb-97	15-20	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-3	16-Nov-92	5.25-20.25	<50	NA	<b>40,000</b>	<b>2,900</b>	<b>6,100</b>	<b>550</b>	<b>1,700</b>	NA	NA
MW-3	9-Mar-93	5.25-20.25	<b>290</b>	NA	<b>12,000</b>	<b>1,000</b>	<b>300</b>	<b>110</b>	<b>170</b>	NA	NA
MW-3	21-Jul-93	5.25-20.25	<50	NA	<b>3,400</b>	<b>420</b>	<b>63</b>	<b>36</b>	<b>37</b>	NA	NA

**Table 4**  
**Summary of Historical Analytical Results for Groundwater**  
Former Paco Pump Site  
9201 San Leandro Street  
Oakland, California

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Other Fuel Additives
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-3	29-Jan-94	5.25-20.25	<50	NA	5,600	910	220	47	36	NA	NA
MW-3	26-May-94	5.25-20.25	<50	NA	5,200	890	180	45	43	NA	NA
MW-3	24-Aug-94	5.25-20.25	<50	NA	5,200	580	76	29	22	NA	NA
MW-3	22-Nov-94	5.25-20.25	<50	NA	2,200	670	130	31	28	NA	NA
MW-3	8-Feb-95	5.25-20.25	<50	NA	2,900	780	120	31	33	NA	NA
MW-3	31-May-95	5.25-20.25	NA	NA	9,100	2,800	160	91	72	NA	NA
MW-3 (D)	31-May-95	5.25-20.25	NA	NA	5,300	1,300	170	37	44	NA	NA
MW-3	28-Aug-95	5.25-20.25	NA	NA	1,400	<0.5	<0.5	1.7	8.9	NA	NA
MW-3 (D)	28-Aug-95	5.25-20.25	NA	NA	4,800	2,500	150	53	44	NA	NA
MW-3	29-Nov-95	5.25-20.25	NA	NA	3,000	780	43	32	32	NA	NA
MW-3 (D)	29-Nov-95	5.25-20.25	NA	NA	2,400	830	38	21	16	NA	NA
MW-3	29-Feb-96	5.25-20.25	NA	NA	3,800	1,200	130	36	35	NA	NA
MW-3 (D)	29-Feb-96	5.25-20.25	NA	NA	8,000	3,400	430	100	99	NA	NA
MW-3	23-May-96	5.25-20.25	NA	NA	6,900	3,300	340	71	74	NA	NA
MW-3 (D)	23-May-96	5.25-20.25	NA	NA	4,300	3,200	350	72	74	NA	NA
MW-3	4-Nov-96	5.25-20.25	NA	NA	4,900	2,100	110	70	44	NA	NA
MW-3 (D)	4-Nov-96	5.25-20.25	NA	NA	4,500	2,100	130	61	39	NA	NA
MW-3	13-May-97	5.25-20.25	NA	NA	10,000	4,800	530	100	92	<100	NA
MW-3	26-Jan-98	5.25-20.25	NA	NA	12,000	5,000	250	91	100	NA	NA
MW-3	27-Oct-00	5.25-20.25	NA	NA	19,000	9,000	1,000	250	130	NA	NA
MW-3	3-Nov-03	5.25-20.25	NA	NA	13,000	3,900	370	300	130	<40	NA
MW-3	17-Jun-08	5.25-20.25	NA	NA	13,000	4,400	600	300	150	<100	NA
MW-3	6-Nov-09	5.25-20.25	710	NA	13,000	3,400	400	310	220	<2.5	4.1 (1,2-DCA)
MW-3	28-Jun-10	5.25-20.25	699	NA	22,200	1,740	2,100	318	1,060	<50	ND
MW-3 (D)	28-Jun-10	5.25-20.25	722	NA	31,000	1,560	2,210	380	1,240	<50	ND
MW-3	10-Aug-10	5.25-20.25	NA	NA	12,000	1,400	1,200	190	540	<13	ND
MW-3	30-Dec-10	5.25-20.25	36,500	3,900	22,200	1,730	2,030	406	1,530	<50	ND
MW-3	8-Jun-11	5.25-20.25	NA	NA	20,400	2,180	2,040	273	765	<25	ND
MW-3	16-Dec-11	5.25-20.25	1,710/832*	312 J/<190*	9,000	1,220	1,290	163	518	<25	ND
MW-3 (D)	16-Dec-11	5.25-20.25	1,530/2,530*	<570/<750*	13,200	1,590	1,680	207	671	<50	ND
MW-3	13-Sep-12	5.25-20.25	5,040	4,710	12,800	677	607	161	445	<25	ND
MW-3	5-Apr-13	5.25-20.25	1,960	<950	14,200	1,030	547	152	374	<20	ND
MW-3 (D)	5-Apr-13	5.25-20.25	2,210	<1,900	9,970	835	454	142	363	<10	2.9 J (1,2-DCA)
MW-3	1-Oct-13	5.25-20.25	1,600	261	3,420	317	92.8	43.7	96.0	<20	ND
MW-3 (D)	1-Oct-13	5.25-20.25	1,030	136 J	6,030 E	430	145	64.5	156	<10	ND
MW-5	24-Aug-94	5.25-20.25	130	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5 (D)	22-Nov-94	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	8-Feb-95	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	31-May-95	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	8-Aug-95	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	29-Feb-96	5.25-20.25	NA	NA	<50	0.6	<0.5	<0.5	<0.5	NA	NA
MW-5	13-May-97	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	27-Oct-00	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	13-Nov-03	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<2.0	NA
MW-5	17-Jun-08	5.25-20.25	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-5	6-Nov-09	5.25-20.25	1,300	NA	<50	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-5	28-Jun-10	5.25-20.25	289	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-5	30-Dec-10	5.25-20.25	<94	808	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-5	16-Dec-11	5.25-20.25	<94/<95*	681/547*	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-5	28-Mar-12	5.25-20.25	196*	212*	NA	NA	NA	NA	NA	NA	NA
MW-5	13-Sep-12	5.25-20.25	376	<190	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-5	5-Apr-13	5.25-20.25	<96	1,220	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-5	1-Oct-13	5.25-20.25	235	289	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-5	16-Oct-14	5.25-20.25	157	94.4	NA	NA	NA	NA	NA	NA	NA
MW-6	14-Jan-09	10-17	NA	NA	740	66	48	6.3	23	1.2	17 (1,2-DCA)
MW-6	6-Nov-09	10-17	1,200	NA	4,500	1,300	270	110	44	<2.5	39 (1,2-DCA)
MW-6	28-Jun-10	10-17	474	NA	3,810	484	284	78.7	233	<10	20.8 (1,2-DCA)

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9201 San Leandro Street  
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Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Other Fuel Additives
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	10-Aug-10	10-17	NA	NA	4,600	800	160	160	210	<6.3	12 (1,2-DCA)
MW-6	30-Dec-10	10-17	2,470	<380	9,720	1,130	469	364	1,360	<20	20.7 (1,2-DCA)
MW-6	8-Jun-11	10-17	NA	NA	8,140	1,460	377	206	515	<20	15.4 (1,2-DCA)
MW-6	16-Dec-11	10-17	2,200/874*	2,350/1,670	5,920	1,500	74.9	135	254	<25	12.4 (1,2-DCA)
MW-6	28-Mar-12	10-17	380*	<190*	2,180	347	20.5	36	56	<5.0	6.8 (1,2-DCA)
MW-6	13-Sep-12	10-17	930	<190	3,550	557	45	59.9	126	<10	5.8 (1,2-DCA)
MW-6	5-Apr-13	10-17	350	<190	5,090	750	67.1	57.3	127	<10	6.4 (1,2-DCA)
MW-6	1-Oct-13	10-17	1,630	126 J	6,550 E	922	77.8	84.4	168	<10	6.1 J (1,2-DCA) 84.5 J (TBA)
MW-6	16-Oct-14	10-17	1,130	200	2,460	469	19.8	57.2	14.8 J	<2.0	41.8 (1,2-DCA) 57.1 J (Tert-Butyl Alcohol)
MW-9	5-Apr-13	12-17	<110	<220	<50	<1.0	<1.0	<1.0	<2.0	1.1	0.67 (1,2-DCA)
MW-9	1-Oct-13	12-17	121	219	<50	<1.0	<1.0	<1.0	<2.0	1.1	0.70 J (1,2-DCA)
MW-9	16-Oct-14	12-17	24.5	58.2	<25	<0.20	<0.20	<0.20	<0.46	0.91 J	
MW-10	5-Apr-13	10-20	<110	690	<50	<1.0	<1.0	<1.0	<2.0	0.20	0.26 (1,2-DCA)
MW-10	1-Oct-13	10-20	239	339	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-10	16-Oct-14	10-20	80.7	78.9	<25	<0.20	<0.20	<0.20	<0.46	<0.20	ND
MW-11	5-Apr-13	10-20	<94	718	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-11	1-Oct-13	10-20	472	490	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-11	16-Oct-14	10-20	227	129	<25	<0.20	<0.20	<0.20	<0.46	<0.20	
MW-12	16-Oct-14		39.9	63.1	<25	<0.20	<0.20	<0.20	<0.46	0.28 J	
AS-1S	13-Jan-09	14-17	NA	NA	41,000	4,100	2,700	510	1,000	<25	ND
AS-1S	6-Nov-09	14-17	1,300	NA	3,800	950	7.3	76	42	<0.5	3.1 (1,2-DCA)
AS-1S	28-Jun-10	14-17	214	NA	1,630	202	26.2	9.1	25.4	2.1	3.1 (1,2-DCA)
AS-1S	10-Aug-10	14-17	NA	NA	1,200	370	44	34	34	<2.5	2.6 (1,2 DCA)
AS-1S	30-Dec-10	14-17	2,790	<570	30,000	4,530	4,040	538	1,100	<100	ND
AS-1S	15-Dec-11	14-17	1,340*	582*	7,640	772	788	290	590	<20	ND
ASMW-2S	13-Jan-09	10-17	NA	NA	9,100	2,800	430	140	230	<10	25 (1,2-DCA)
ASMW-2S	6-Nov-09	10-17	2,400	NA	18,000	4,700	540	330	530	<2.5	50 (1,2-DCA), 46 (TBA)
ASMW-2S	28-Jun-10	10-17	479	NA	8,330	416	434	151	583	<33	ND
ASMW-2S	10-Aug-10	10-17	NA	NA	3,200	420	69	61	130	<3.1	3.4 (1,2 DCA)
ASMW-2S	30-Dec-10	10-17	3,440	<2,000	5,300	447	80.1	95.0	181	ND<10	5.7 (1,2 DCA)
ASMW-2S	15-Dec-11	10-17	998*	148*	2,250	253	19.8	49.9	77.4	<10	ND
MW-7	14-Jan-09	20-28	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	1.1	ND
MW-7	6-Nov-09	20-28	<52	NA	<50	<0.5	<0.5	<0.5	<1.0	1.3	ND
MW-7	30-Dec-10	20-28	<96	<190	<50	<1.0	<1.0	<1.0	<2.0	1.1	ND
MW-7	8-Jun-11	20-28	NA	NA	<50	<1.0	<1.0	<1.0	<2.0	1.0	ND
MW-7	16-Dec-11	20-28	<94*	832*	<50	0.67	<1.0	0.35 J	<2.0	0.88 J	ND
MW-7 (D)	16-Dec-11	20-28	<94*	1,730*	<50	0.62 J	<1.0	0.33 J	<2.0	0.91 J	ND
MW-7	28-Mar-12	20-28	<94*	<190*	NA	NA	NA	NA	NA	NA	NA
MW-7	13-Sep-12	20-28	<190	3,510	<50	<1.0	<1.0	<1.0	<2.0	0.41	ND
MW-7	5-Apr-13	20-28	<100	<200	<50	<1.0	<1.0	<1.0	<2.0	0.58	ND
MW-7	1-Oct-13	20-28	87.1 J	207	<50	<1.0	<1.0	<1.0	<2.0	0.40 J	ND
MW-7	16-Oct-14	20-28	70.6	140	NA	NA	NA	NA	NA	NA	NA
MW-8	28-Jun-10	8-18	<100	NA	<50	0.81J	1.3	0.41J	1.6 J	0.62J	ND
MW-8	30-Dec-10	8-18	<95	<190	<50	<1.0	<1.0	<1.0	<2.0	0.53J	ND
MW-8	8-Jun-11	8-18	NA	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-8	16-Dec-11	8-18	<95*	155 J*	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-8	13-Sep-12	8-18	304	<190	<50	0.37	0.28	<1.0	<2.0	0.29	ND
AS-1D	13-Jan-09	31-34	NA	NA	<50	0.69	0.54	<0.5	<0.5	<0.5	ND
AS-1D	6-Nov-09	31-34	<53	NA	<50	<0.5	<0.5	<0.5	<1.0	<0.5	ND
AS-1D	28-Jun-10	31-34	<94	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
AS-1D	30-Dec-10	31-34	<94	<190	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
AS-1D	15-Dec-11	31-34	86.2 J*	<190*	27.6	1.7	3.1	0.54	2.3	<1.0	ND
AS-1D	13-Sep-12	31-34	161	<190	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
AS-1D	5-Apr-13	31-34	<94	<190	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
AS-1D	1-Oct-13	31-34	<96	138 J	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
AS-1D	16-Oct-14	31-34	39	55.1	<25	0.34 J	<1.0	<0.20	<0.46	<0.20	
AS-1D Dup	16-Oct-14	31-34	649	458	4,390	398	<1.0	180	145	<2.0	

**Table 4**  
**Summary of Historical Analytical Results for Groundwater**  
Former Paco Pump Site  
9201 San Leandro Street  
Oakland, California

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Other Fuel Additives
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ASMW-2D	13-Jan-09	24-34	NA	NA	<50	0.80	0.78	<0.5	<0.5	0.56	ND
ASMW-2D	6-Nov-09	24-34	<51	NA	<50	<0.5	<0.5	<0.5	<1.0	0.58	ND
ASMW-2D	28-Jun-10	24-34	<94	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
ASMW-2D	30-Dec-10	24-34	<100	<200	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
ASMW-2D	15-Dec-11	24-34	96.1*	<190*	<50	0.76 J	0.99	<1.0	1.1	<1.0	ND
E1	16-Jun-10	8-18	NA	NA	<b>36,000</b>	<b>3,200</b>	<b>2,300</b>	<b>750</b>	<b>2,170</b>	<25	<25
E1	30-Jun-10	8-18	NA	NA	<b>124</b>	<b>11.7</b>	<b>9.4</b>	<b>1.5</b>	<b>7.7</b>	<1	0.31 (1,2-DCA)
E1	16-Dec-11	8-18	<b>323*</b>	<190*	<b>1,700</b>	<b>55.5</b>	22.1	16.1	<b>27.6</b>	<5.0	ND
E2	16-Jun-10	8-18	NA	NA	72	<b>5.3</b>	5.9	0.89	4.9	2.1	<b>0.68</b> (1,2-DCA)
E2	30-Jun-10	8-18	NA	NA	<50	<1.0	<1.0	<1.0	<2.0	2.0	<b>0.5</b> (1,2-DCA)
E2	30-Dec-10	8-18	<190	<b>3,740</b>	<50	<1.0	<1.0	<1.0	<2.0	1.8	0.41 (1,2-DCA)
E2	8-Jun-11	8-18	NA	NA	<50	<1.0	<1.0	<1.0	<2.0	1.7	0.45 (1,2-DCA)
E2	15-Dec-11	8-18	<95/<96*	<b>1,570/1,270*</b>	<50	<1.0	<1.0	<1.0	<2.0	1.2	ND
E2	28-Mar-12	8-18	<b>245*</b>	<b>387*</b>	NA	NA	NA	NA	NA	NA	NA
E2	13-Sep-12	8-18	<190	<b>2,990</b>	<50	<1.0	<1.0	<1.0	<2.0	0.57 J	<b>0.36 J</b> (1,2-DCA)
E2	5-Apr-13	8-18	<470	<b>5,100</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
E2	1-Oct-13	8-18	<b>444</b>	<b>870</b>	<50	<1.0	<1.0	<1.0	<2.0	0.57 J	<b>0.24 J</b> (1,2-DCA)
E2	16-Oct-14	8-18	<b>780</b>	<b>1,080</b>	NA	NA	NA	NA	NA	NA	NA
E3	16-Dec-11	8-18	<b>13,900*</b>	<b>15,600*</b>	<b>185</b>	<b>1.2</b>	<1.0	<1.0	<2.0	0.74 J	<b>1.0</b> (1,2-DCA)
E3	28-Mar-12	8-18	<b>1,060*</b>	<b>1,860*</b>	<b>151</b>	<b>1.4</b>	<1.0	<1.0	<2.0	0.53 J	<b>0.76 J</b> (1,2-DCA)
E3	13-Sep-12	8-18	<b>62,500</b>	<b>93,700</b>	46.8	0.56	<1.0	<1.0	<2.0	0.55 J	<b>0.99 J</b> (1,2-DCA)
E3	5-Apr-13	8-18	<24,000	<b>357,000</b>	<b>161</b>	<b>1.0</b>	<1.0	<1.0	<2.0	0.43 J	<b>0.71 J</b> (1,2-DCA)
E3	1-Oct-13	8-18	<b>20,700</b>	<b>34,500</b>	82.6	<b>1.6</b>	<1.0	<1.0	<2.0	0.46 J	<b>0.73 J</b> (1,2-DCA)
E3	16-Oct-14	8-18	<b>106,000</b>	<b>153,000</b>	<b>355</b>	<b>3.3</b>	<1.0	<0.20	<2.0	0.46 J	<b>4.5 J</b> (Tert-Butyl Alcohol)
E4	16-Dec-11	8-18	<b>264*</b>	<b>447*</b>	<b>1,580</b>	<b>240</b>	9.9	18.3	5.8 J	<5.0	<b>2.7</b> (1,2-DCA)
E5	15-Dec-11	8-18	<b>11,100*</b>	<b>11,500*</b>	27.1 J	<1.0	<1.0	<1.0	<2.0	0.83 J	ND
E5	16-Oct-14	8-18	<b>25,300</b>	<b>32,500</b>	<25	<0.20	<0.20	<0.20	<0.46	0.42 J	ND
E6	15-Dec-11	8-18	<b>1,460*</b>	<b>931*</b>	<b>617</b>	<b>17.6</b>	<2.0	3.3	<4.0	<2.0	ND
E6	28-Mar-12	8-18	93.9 J*	<b>191*</b>	<b>273</b>	<b>4.4</b>	<1.0	2.8	<2.0	0.78 J	ND
E6	13-Sep-12	8-18	<190	<b>2,440</b>	<b>427</b>	<b>2.8</b>	<1.0	2.3	<2.0	0.85	ND
E6	5-Apr-13	8-18	<480	<b>3,210</b>	<b>529</b>	<b>2.2</b>	<1.0	4.3	<2.0	0.69	ND
E6	1-Oct-13	8-18	<b>262</b>	<b>617</b>	<b>520</b>	<b>3.6</b>	<1.0	4.5	<2.0	0.63 J	ND
E6	16-Oct-14	8-18	<b>1,660</b>	<b>1,850</b>	<b>135</b>	0.30 J	<0.20	0.24 J	<0.46	0.45 J	ND
E7	16-Jun-10	8-18	NA	NA	<b>780</b>	<b>100</b>	<b>73</b>	20	<b>80</b>	<b>5.2</b>	<b>1.9</b> (1,2-DCA)
E7	30-Jun-10	8-18	NA	NA	<b>3,460</b>	<b>207</b>	<b>258</b>	<25	<b>360</b>	3.8	<b>2.5</b> (1,2-DCA)
E7	30-Dec-10	8-18	<b>1,360</b>	<190	<b>3,380</b>	<b>339</b>	20.0	<b>83.3</b>	<b>23.9</b>	<b>5.4</b>	<b>3.5</b> (1,2-DCA)
E7	8-Jun-11	8-18	NA	NA	<b>1,580</b>	<b>143</b>	17.4	26.9	<b>21.7</b>	4.3	<b>2.2</b> (1,2-DCA)
E7	15-Dec-11	8-18	<b>373/287*</b>	<190/<190*	<b>1,070</b>	<b>144</b>	29.5	16	<b>27.2</b>	4.4	<b>3.1</b> (1,2-DCA)
E7	28-Mar-12	8-18	53.8 J*	<190*	<b>806</b>	<b>97</b>	11.9	12.9	18.4	3.2	<b>1.6 J</b> (1,2-DCA)
E7	13-Sep-12	8-18	<b>214</b>	<200	<b>1,790</b>	<b>169</b>	<b>67.3</b>	27.8	<b>82.3</b>	3.5	<b>2.6</b> (1,2-DCA)
E7	5-Apr-13	8-18	75.1	<190	<b>1,060</b>	<b>125</b>	20.9	17.4	<b>28.7</b>	3.3	<b>1.9 J</b> (1,2-DCA)
E7	1-Oct-13	8-18	<b>1,490</b>	<b>2,220</b>	<b>917</b>	<b>143</b>	23.2	16.0	<b>29.7</b>	1.2 J	<b>1.8 J</b> (1,2-DCA)
E7	16-Oct-14	8-18	<b>7,920</b>	<b>14,100</b>	<b>724</b>	<b>86.4</b>	17.7	12.2	<b>33.7</b>	1.4	<b>1.3</b> (1,2-DCA)
E8	30-Dec-10	8-18	<b>1,220</b>	<190	<b>8,930</b>	<b>480</b>	19.1	<b>164</b>	<b>51.8</b>	<10	<b>4.8</b> (1,2-DCA)
E8	8-Jun-11	8-18	NA	NA	<b>3,520</b>	<b>178</b>	9.6	<b>55.7</b>	<b>49.5</b>	<5	<b>2.7</b> (1,2-DCA)
E8	15-Dec-11	8-18	<b>508*</b>	<190*	<b>2,000</b>	<b>208</b>	4.0	<b>42.9</b>	14.0	<5.0	ND
E8	28-Mar-12	8-18	64 J*	<190*	<b>1,380</b>	<b>92</b>	4.0	20.3	<b>26.5</b>	<4.0	<b>13 J</b> (TBA)
E8	13-Sep-12	8-18	<b>314</b>	<200	<b>2,450</b>	<b>2.0</b>	<5.0	<5.0	<10	2.8	ND
E8	5-Apr-13	8-18	<b>1,420</b>	<b>1,010</b>	<b>4,750</b>	<b>707</b>	<b>61</b>	<b>118</b>	<b>119</b>	<5.0	<b>3.6</b> (1,2-DCA)
E8	1-Oct-13	8-18	<b>529</b>	<b>569</b>	<b>1,500</b>	<b>178</b>	6.0	<b>32.3</b>	<b>29.8</b>	0.49 J	<b>3.6</b> (1,2-DCA)
E8	16-Oct-14	8-18	<b>1,120</b>	<b>1,030</b>	<b>4,090</b>	<b>385</b>	8.2 J	<b>172</b>	<b>139</b>	<2.0	<b>12.7 J</b> (TBA)
E9	15-Dec-11	8-18	<b>7,950*</b>	<190*	<b>35,100</b>	<b>4,810</b>	<b>5,710</b>	<b>768</b>	<b>3,260</b>	<100	ND
E9	28-Mar-12	8-18	<b>894*</b>	<190*	<b>24,200</b>	<b>2,440</b>	<b>2,550</b>	<b>396</b>	<b>1,810</b>	<100	ND
E9	16-Oct-14	8-18	<b>4,910</b>	<b>490</b>	<b>39,300</b>	<b>2,460</b>	<b>2,250</b>	<b>595</b>	<b>3,110</b>	<20	<b>0.85 J</b> (1,2-DCA)
E10	15-Dec-11	8-18	<b>10,400*</b>	<190*	<b>32,800</b>	<b>4,350</b>	<b>6,450</b>	<b>667</b>	<b>2,880</b>	<100	<b>37</b> (1,2-DCA)
E10	28-Mar-12	8-18	<b>1,630*</b>	<190*	<b>30,000</b>	<b>3,090</b>	<b>4,140</b>	<b>515</b>	<b>2,310</b>	<100	<b>20.6 J</b> (1,2-DCA)



**Table 4**  
**Summary of Historical Analytical Results for Groundwater**  
Former Paco Pump Site  
9201 San Leandro Street  
Oakland, California

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Other Fuel Additives
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
E11	16-Jun-10	8-18	NA	NA	<b>25,000</b>	<b>1,800</b>	<b>1,500</b>	<b>480</b>	<b>980</b>	<13	<13
E11	30-Jun-10	8-18	NA	NA	<b>15,300</b>	<b>268</b>	<b>509</b>	<b>473</b>	<b>1,140</b>	<40	<40
E11	16-Dec-11	8-18	<b>3,920*</b>	<970*	<b>17,200</b>	<b>634</b>	<b>916</b>	<b>384</b>	<b>934</b>	<50	ND
E11	28-Mar-12	8-18	<b>960*</b>	<190*	<b>15,700</b>	<b>377</b>	<b>544</b>	<b>237</b>	<b>902</b>	<50	ND
E12	16-Jun-10	8-18	NA	NA	<b>4,300</b>	<b>190</b>	15	43	<b>49</b>	<2	<b>2.0</b> (1,2 DCA)
E12	30-Jun-10	8-18	NA	NA	<b>1,570</b>	<b>130</b>	6.6	<3	<b>24.2</b>	<3	<3
E12	16-Dec-11	8-18	69.9 J*	<190*	<b>297</b>	<b>27.5</b>	1.1 J	3.2	<4.0	<2.0	ND
E12	13-Sep-12	8-18	88.8	<190	<b>633</b>	<b>50.8</b>	2.6	7.2	2.7	<1.0	<b>18.9</b> (TBA)
E12	5-Apr-13	8-18	62.4	<190	<b>496</b>	<b>64.1</b>	3.3	8.1	3.0	<1.0	ND
E12	1-Oct-13	8-18	<96	<b>142 J</b>	<b>347</b>	<b>28.4</b>	1.2	4.8	1.3 J	<1.0	ND
E12	16-Oct-14	8-18	31.4	48.5	<b>113</b>	<b>9.0</b>	0.24 J	1.4	<0.46	<0.20	<b>0.40 J</b> (1,2-DCA)
<b>LFR Area 5 - Suspected Former UST near Groundwater Monitoring Well MW-4</b>											
MW-4	16-Nov-92	5.25-20.25	<50	NA	<b>560</b>	<b>66</b>	<b>73</b>	16	<b>130</b>	NA	NA
MW-4 (D)	16-Nov-92	5.25-20.25	<50	NA	<b>520</b>	<b>63</b>	<b>67</b>	15	<b>140</b>	NA	NA
MW-4	9-Mar-93	5.25-20.25	<50	NA	<b>750</b>	<b>67</b>	12	29	<b>62</b>	NA	NA
MW-4	21-Jul-93	5.25-20.25	<50	NA	<b>250</b>	<b>21</b>	4.2	8.4	11	NA	NA
MW-4	29-Jan-94	5.25-20.25	<50	NA	<b>180</b>	<b>28</b>	2.2	6.2	10	NA	NA
MW-4	26-May-94	5.25-20.25	NA	NA	<b>130</b>	<b>14</b>	3.2	6.1	4.7	NA	NA
MW-4	24-Aug-94	5.25-20.25	NA	NA	70	<b>6.7</b>	0.9	2.8	2.6	NA	NA
MW-4	22-Nov-94	5.25-20.25	NA	NA	90	<b>16</b>	1.7	5.6	3.4	NA	NA
MW-4	8-Feb-95	5.25-20.25	NA	NA	90	<b>17</b>	1.3	5.5	3.0	NA	NA
MW-4	31-May-95	5.25-20.25	NA	NA	90	<b>13</b>	0.6	2.3	1.2	NA	NA
MW-4	8-Aug-95	5.25-20.25	NA	NA	80	<b>3.6</b>	<0.5	1.4	0.6	NA	NA
MW-4	29-Nov-95	5.25-20.25	NA	NA	<50	<b>4.5</b>	0.7	1.0	0.7	NA	NA
MW-4	29-Feb-96	5.25-20.25	NA	NA	<50	<b>7.4</b>	1.0	3.2	2.4	NA	NA
MW-4	23-May-96	5.25-20.25	NA	NA	80	<b>11</b>	2.0	2.3	1.0	NA	NA
MW-4	3-Nov-03	5.25-20.25	<50	NA	<50	<b>6.3</b>	0.56	3.4	1.0	<2.0	NA
MW-4	18-Jun-08	5.25-20.25	<50	NA	81	<b>11</b>	0.51	4.7	1.6	<0.5	ND
MW-4	6-Nov-09	5.25-20.25	<50	NA	<50	<b>4.0</b>	<0.5	1.3	<1.0	<0.5	ND
MW-4	28-Jun-10	5.25-20.25	<100	NA	<b>186</b>	<b>12.3</b>	0.85	5.9	2.3	<1.0	ND
MW-4	30-Dec-10	5.25-20.25	<94	<190	77.4	<b>7.4</b>	<1.0	2.6	0.98	<1.0	ND
MW-4	8-Jun-11	5.25-20.25	NA	NA	94.2	<b>10.2</b>	0.59	3.4	1.60	<1.0	ND
MW-4	16-Dec-11	5.25-20.25	<97*	<b>130 J*</b>	<50	<b>2.6</b>	<1.0	<1.0	<2.0	<1.0	ND
MW-4	13-Sep-12	5.25-20.25	83 J	<190	34.3 J	<b>5.4</b>	0.51 J	0.82 J	0.73 J	<1.0	ND
MW-4	5-Apr-13	5.25-20.25	<95	<190	97.9	<b>11</b>	0.57 J	1.3	0.98 J	<1.0	ND
MW-4	1-Oct-13	5.25-20.25	<98	<200	<50	<b>3.5</b>	<1.0	0.58 J	<2.0	<1.0	ND
MW-4	16-Oct-14	5.25-20.25	28.6	72	66.2	<b>6.3</b>	0.29 J	0.49 J	<2.0	<0.46	
<b>ESL's Groundwater is current or potential drinking water source</b>			<b>100</b>	<b>100</b>	<b>100</b>	<b>1.0</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5.0</b>	<b>0.5 (1,2-DCA), 12 (TBA)</b>

**Notes:**

bgs = below ground surface

µg/L = micrograms per liter

**Bold Font** denotes concentration was greater than the ESL.

NA = parameter not analyzed

ND = parameter not present above laboratory reporting limits

(D) = duplicate sample

<6.0 = not detected at or above the laboratory reporting limit.

E = Indicates value exceeds calibration range

J = Estimated value above method detection limit but below laboratory reporting limit.

ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels Table F-1a and Table F-1b RWQCB February 2013.

TPHd = total petroleum hydrocarbons as diesel

TPHmo = total petroleum hydrocarbons as motor oil

TPHg = total petroleum hydrocarbons as gasoline

MTBE = methyl tert butyl ether

1,2-DCA = 1,2-dichloroethane

TBA = tertiary butyl alcohol

**APPENDIX A**  
**UPDATED RESPONSE TO COMMENTS**

**APPENDIX A**  
**Updated Response to County Letter March 7, 2014, and to Observations of April 22, 2014 Site Inspection**

Former Paco Pump Site9201 San Leandro, Oakland

SGI Reference	County Concerns		Response/ Comment	Recommendation	Updated Response/Comments (December 2014)	Attachment
1	1 Area 1	PCBs present in Area 1?	Previous reports on site usage do not indicate the potential for PCBs in this area. If PCBs were present in association with the oil, the removal of petroleum hydrocarbons conducted as part of the 2009 removal would also have removed the PCBs, and therefore this area can be assumed to contain no residual PCBs in soil.	No Further Action		
2 & 4	1 Area 2	Potential PCBs in Area 2?	Previous (2008) report indicates that the PCBs are likely due to leaky transformer north of the site. 18 soil samples in Area 2 were tested for PCBs, with 13 non-detected and 5 samples with detected PCB concentrations from ND to <0.74 mg/kg (Current USEPA RSL, Industrial site). 2008 LFR Workplan proposes no action. One historical sample at 5 ft depth (B-7) with 530 ppm TPHmo had PCBs at 0.29mg/kg. Recent soil contained up to 8,800 mg/kg TPHmo.	Potential Data Gap: sample 2013 location with high TPHmo shallow soil for PCBs; MW-10 2.5 ft (8,800 TPH mo) and MW-11 2.5 ft ( 2,100 TPH mo). See Data Gaps Investigation Work Plan.	Results of Data Gaps Investigation indicate that PCBs are present in 2 of 6 shallow soil samples above ESL for direct contact. Area is covered by asphalt. Concentrations are well below ESL for leaching concerns. GW samples from adjacent wells confirm that PCBs have not impacted GW.	
3	1 Area 2	Arsenic in Area 2?	One Pit 3 sample at 3 ft contained 14 ppm As-no other data from 1987, but 3 samples in that alley in 1992: B 8, B9 and B10 at 1 ft : ND arsenic. Other soil samples were also analyzed for metals throughout the site. This area's future use will also be controlled by the proposed Deed Restriction.	SGI conducted a review of As concentrations in soil for the site (see attachment 1), and this risk evaluation indicates that arsenic is not a concern at the site		Attachment 1
4	1 Area 3	Low PCBs?- See Comment 2	See Comment 2	See Comment 2		
Areas of Concern	Areas 1, 2, 3	County proposes that separate site issues be separated into distinct Area of Concern, separate cases	Unnecessary: all issues can be addressed by data gaps investigation and deed restriction.	Maintain one case under County oversight		
5A	2 Area 4	LNAPL present?	SGI agrees that the dissolved hydrocabons values are locally high, similar to concentrations at sites with LNAPL, The well screens in wells in the source area are screened such that LNAPL would have been measured. This site has a very high density of wells: extraction wells are 10-30 ft apart. None have recorded LNAPL over multiple gauging events. No evidence of free-phase hydrocarbons was noted in soil samples during drilling.	Monitor for LNAPL during subsequent sampling events. While concentrations are within LNAPL range and LNAPL could be present in localized areas, fine-grained soil would limit migration	LNAPL was not detected in any of the wells that were monitored in October 2014. Wells will be monitored during next semi-annual sampling event in April 2015.	
5B	2 Area 4	MW 8, 9, 10, 11 - screen interval starting at 10-12 ft, water found at 8 ft.	The lithology encountered indicates a confined first groundwater, with dry clay extending to the depth to first water (10-12 ft), and water levels rising in the well after installation. In any case, the downgradient wells have no detectable Benzene, TPHg or TPHd. If LNAPL were present, the samples would contain dissolved hydrocarbons.	The downgradient wells have TPHd and TPHmo detections consistent with adjacent well MW-5. If LNAPL were present, the samples would contain dissolved hydrocarbons at much higher concentrations.		

**APPENDIX A**  
**Updated Response to County Letter March 7, 2014, and to Observations of April 22, 2014 Site Inspection**

Former Paco Pump Site9201 San Leandro, Oakland

SGI Reference	County Concerns		Response/ Comment	Recommendation	Updated Response/Comments (December 2014)	Attachment
6	3 CSM	General comment: CSM insufficient	Data Gaps Investigation Workplan addresses data gaps to update CSM.	See Data Gaps Investigation Work Plan	An revised Conceptual Site Model is included as Appendix B.	
7	4 Area 4	Source removal incomplete?	According to ERAS 2008 & Jonas 1992, the suspected UST area has been thoroughly excavated, & the former site has been backfilled. No tank was found. It is clear that some soil excavation in the area known to be contaminated did occur, likely removing a significant mass of contamination (250 cubic yds). Geophysical utility clearance prior to installing well and vapor points did not identify any signs of a UST.	Further attempts to drill or geophysically search to determine if a UST was removed or if a waste oil tank may be present are not likely to be effective. Add note to the deed to check for UST upon building removal.		
8	4 Area 5	Source removal incomplete?	Reports point to the absence of a UST. Issue of potential UST may be unresolvable until building is removed. Multiple samples downgradient (GP-3, B-23, GGW-6, and MIP-6) indicate no significant downgradient groundwater migration, indicating the GW impacts at MW-4 have limited mobility. One single soil gas probe with benzene>CHHSL.	Recommend deed restriction that further excavation under that building may encounter soil with hydrocarbons- no further immediate work.		Attachment 2
9A	5 Area 4-a	Groundwater contamination to southwest undefined	As shown in rose diagram of previous gradient directions, historical data indicate groundwater gradient to the northwest, and downgradient wells in that direction are non-detect.	Benzene plume is small and groundwater gradient historically points to the location of the new wells. One additional well will be installed in the southwest corner of the Site.	Well MW-12 was installed in the southwest corner of the Site. An updated potentiometric map indicates that GW flows to the west, as previously posited. Sample contained low concentrations of TPHd, TPHmo, and a very low estimated concentration of MTBE.	Attachment 3
9B	5 Area 4-a	TPHd, TPH mo Not evaluated	Silica gel cleanup proposed	After installation of new well, conduct two rounds of quarterly groundwater monitoring, then request closure with deed restriction for potential hydrocarbons in future excavations. Silica gel cleanup proposed.	Concentrations in all wells are either decreasing, or stable (meaning concentrations do not show an increasing trend).	
10	5 Area 4-b	Plume stability not demonstrated	County will require more data including silica gel testing		All recent TPHd and TPHmo samples were analyzed with silica gel cleanup.	
11	5 Area 4-c	Private well 620 ft to the southwest	Noted: Data Gaps Investigation Work Plan includes a map showing location of well	See Data Gaps Investigation Work Plan	The suspect well in listed as an irrigation well. The total depth or screened interval of the well is not known. Regardless, current and historical groundwater flow direction is to the west, cross-gradient of the suspect well.	

**APPENDIX A**  
**Updated Response to County Letter March 7, 2014, and to Observations of April 22, 2014 Site Inspection**

Former Paco Pump Site9201 San Leandro, Oakland

SGI Reference	County Concerns		Response/ Comment	Recommendation	Updated Response/Comments (December 2014)	Attachment
12	5 Area 4-d	Unlined ditch 360 ft to the southwest	SGI conducted two visits to verify the suspected unlined ditch. No swale, ditch, or drainage feature was observed in the suspected area. Data Gaps Investigation Work Plan includes a map showing approximate location of surface water accumulation area.	See Data Gaps Investigation Work Plan	Current and historical groundwater flow direction is to the west, cross-gradient of the suspect drainage feature.	
13	5 Area 4-e	General comment: is deed restriction applicable?	Deed Restriction is applicable	RP has initiated discussions with current property owner.		
14	5 Area 5-a	Area 5 Plume length at unknown source incomplete (see SGI Reference #8)	Presence of a UST is unresolvable until building removed. See SGI Reference #8 above.	Recommend two quarters of groundwater sampling after new well installation and deed restriction that excavation under that building look for UST and hydrocarbons- no further immediate work.	See Updated Comment to SGI Reference #9A above.	Attachment 2
15	5 Area 5-b	Plume stability at unknown source incomplete (see SGI Reference #8)	See above			
Vapor Intrusion, Area 4	6 Area 4	Bioattenuation Zone too thin	Building is well ventilated by large rollup doors, high ceiling, and no air tight walls or roofing. No vapor accumulation expected. Additionally, under the building, only the southeastern well (MW-6) at the corner of the building has concentrations above the bioattenuation criteria (1,000 and 100 ug/L)- very localized concern.	Under current building conditions and usage, no further action.		
Vapor Intrusion, Area 4	6 Area 4	Some TPH in shallow soil	See above	Under current building conditions and usage, no further action.		
Vapor Intrusion, Area 4	6 Area 4	Benzene in groundwater > 1,000 µg/L	See above	Under current building conditions and usage, no further action.		
Vapor Intrusion, Area 4	6 Area 4	Low O2 and high benzene at SV-1 may indicate localized source. Benzene high near source (outside).	Presence of a source under building can not be ascertained.			
Vapor Intrusion, Area 4	6 Area 4	V.I concern is significant: backfill may be coarser grain, some gravel encountered.	All soil gas probe installation boreholes reported the presence of lean clay starting at a depth of a couple of feet. The clay lithology is appropriate in estimating the upwards flux of vapors from groundwater, the presumed main source of VOCs into the building. Vapor intrusion was evaluated by SGI Senior Toxicologist by Johnson & Ettinger modeling.			
Vapor Intrusion, Area 5	6 Area 5	Source unknown - vapor intrusion uncertain. Additional soil gas testing required.	Presence of a UST unresolvable until building removed. Building is well ventilated, with high ceilings and large rollup doors. No concerns of vapor accumulation under current usage.	Under current building conditions and usage, no further action.		
Direct Contact	7 Area 4	Not sufficiently characterized	Insignificant issue under current use. Only narrow strip in southern corner of Site consists of bare soil.	Deed Restriction would include provision for monitoring/mitigation during site excavation/construction.		

**APPENDIX A**  
**Updated Response to County Letter March 7, 2014, and to Observations of April 22, 2014 Site Inspection**

Former Paco Pump Site9201 San Leandro, Oakland

<b>SGI Reference</b>	<b>County Concerns</b>		<b>Response/ Comment</b>	<b>Recommendation</b>	<b>Updated Response/Comments (December 2014)</b>	<b>Attachment</b>
Direct Contact	7 Area 5	Not sufficiently characterized - unknown source	Insignificant issue under current use. Only narrow strip in southern corner of Site consists of bare soil.	Recommend deed restriction that excavation under that building look for UST- no immediate concern.		
General Site Conditions	Area 2	During April 22, 2014 site visit and meeting, asphalt, soil, oily rags, and spilled oil were observed piled on bare soil. Remove all debris and oily soil, collect soil sample.	SGI was unaware of debris piles and alerted property owner to the situation.	Soil samples will be collected once oily soil is removed.		
General Site Conditions	Area 5	During April 22, 2014 site visit and meeting, an open floor drain or vent pipe was observed adjacent to location of suspected former UST. The function of this feature is unknown.	Current property owner is not aware of the use of this feature. During Data Gaps Investigation activities, SGI will use PID to assess vapors in the pipe. If no significant (>50 ppm) vapors are detected, SGI will instruct owner to cover the inlet of feature. If vapors are detected greater than 50 ppm, the nearest soil vapor monitoring probe will be resampled.		PID monitoring of the open floor drain features did not detect any vapors. SGI will request the owner to cover the inlet of feature so as not to provide a potential preferential pathway to the subsurface.	
General Site Conditions	Site Wide	During April 22, 2014 site visit and meeting, some well boxes were observed to be in poor condition.	Well boxes appear to have been damaged by current tenant trucking activities.	Well boxes in poor condition will be repaired or replaced.	Data Gaps Investigation Report recommends repair of damaged well boxes, or destruction of the wells.	
<b>Data Gap Workplan</b>	<b>March 31</b>	<b>Notify of meeting/conduct meeting - workplan due 60 days after meeting</b>	Completed: Meeting at Site was held on April 22, 2014	Data Gaps Investigation Work Plan includes PCB soil sampling in west alley, well box repair, installation of one well, and two quarterly groundwater monitoring events.		
<b>Groundwater Monitoring</b>		<b>Semi-annual sampling report due May 16, Oct 31</b>	Extension requested and granted via email on May 15, 2014. Sampling will be completed after additional	Discuss schedule with County- pending on additional investigation		

**Attachments**

- Attachment 1: Arsenic data evaluation Technical Memo
- Attachment 2: Figure showing sampling locations and results in Area 5
- Attachment 3: Groundwater Gradient Rose Diagram

**ATTACHMENT 1**



June 10, 2014

Mr. Mark E. Detterman, PG, CEG  
Environmental Protection  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Subject: Data Evaluation for Arsenic in Soil  
Former Paco Pumps, Inc.  
9201 San Leandro Street  
Oakland, California**

Dear Mr. Detterman:

As discussed at the meeting on April 22, 2014 at the former Paco Pumps in Oakland California (the Site), The Source Group, Inc. (SGI) reviewed the historical arsenic data collected from soil at the Site. Based on the 1992 Site Characterization Report prepared by Jonas & Associates (Jonas, 1992), a total of 21 soil samples were collected and analyzed for arsenic. Three soil samples were collected on October 1, 1991, revealing non-detect concentrations (at a laboratory reporting limit of 0.25 milligrams per kilogram [mg/kg]) to 14 mg/kg of arsenic in the soil sampled collected from Pit 3 at 3 feet below ground surface (bgs). Subsequently, four soil samples were collected on April 9, 1992, revealing non-detect concentrations of arsenic. On April 13, 1992, 14 soil samples were collected. Of the 14 soil samples, arsenic was only detected in soil samples B20, B22, and B26 at concentrations of 3 mg/kg, 3.5 mg/kg, and 5.4 mg/kg, respectively. All soil samples collected in April 1992 were collected from 0 to 1.5 feet bgs. At a distribution of over four samples per acre, which were collected from bare soil and beneath the asphalt/concrete surface, this dataset adequately characterizes the arsenic in Site soil. The arsenic data in soil is summarized on Table 1.

Arsenic is a naturally occurring metal that is often present in Bay Area soil. Therefore, a comparison of maximum detected concentrations with background concentrations will identify if any non-site-related arsenic impacts exist at the Site. U.S. Environmental Protection Agency (USEPA, 1989), Department of Toxic Substances Control (DTSC, 2013), and California Regional Water Quality Control Board (CRWQCB, 2013) recommend that metals detected at background (ambient) levels should be eliminated as chemicals of potential concern COPCs at a site. The maximum detected arsenic concentration in soil was 14 mg/kg; however, the second highest maximum detected arsenic concentration was 5.4 mg/kg.



To further evaluate the arsenic data, a 95-percent upper confidence limit of the mean (95UCL) was estimated. It is unlikely that a potential receptor will spend the entire exposure duration (1 year for construction worker receptor, 25 years for commercial/industrial worker receptor, 30 years for resident receptor) residing over maximum detected concentrations in soil. Therefore, it is relevant and appropriate to statistically evaluate the soil data on an area-wide basis. Consistent with USEPA (1989) procedures, when evaluating a reasonable maximum exposure (RME) scenario the lesser of the maximum detected concentration and the 95UCL was selected as the appropriate EPC for comparison with background. The EPC represents the amount of a chemical to which a hypothetical receptor at the Site is assumed exposed. The EPC is a conservative estimate of the average chemical concentration in an environmental medium (e.g., soil). For exposure pathways involving direct contact with soil, the EPCs are estimated from measured soil concentrations. A USEPA software package, ProUCL Version 5.0.00, was used to estimate the 95UCL. The ProUCL and USEPA (2013) guidance make recommendations for estimating 95UCLs and were developed as tools to support risk assessment. The soil data used to estimate a 95UCL is summarized in Table 1. The 95UCL for arsenic in soil was 2.8 mg/kg (Table 2), which is less than the maximum detected concentration so the 95UCL was selected at the appropriate EPC.

The EPC for arsenic was compared with the CRWQCB San Francisco Bay Region arsenic background concentration of 11 mg/kg (Duverge, 2011). This value represents the upper estimate for background arsenic (99th percentile) within undifferentiated urbanized flatland soils.

Arsenic was only detected in 4 out of 21 soil samples (19-percent detection frequency). As shown in the following table, the arsenic EPC is well below the regional arsenic background concentration of 11 mg/kg.

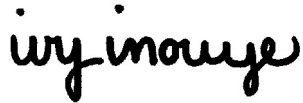
<b>Arsenic in Soil</b>			
<b>Maximum Detected Concentration</b>	<b>95UCL</b>	<b>EPC</b>	<b>Regional Background Concentration</b>
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
14	2.8	2.8	11

In summary, only one soil sample detected arsenic at a concentration exceeding the regional background concentration of 11 mg/kg. The remaining 20 soil samples for arsenic were either non-detect concentrations (at a laboratory reporting limit of 0.25 mg/kg) or well below the regional background concentration. As a result of further data evaluation, the 95UCL of the arsenic dataset was 2.8 mg/kg, which is well below the regional background concentration. Therefore, arsenic is not a COPC at the former Paco Pumps and does not need to be evaluated further.

Mr. Mark Detterman  
June 10, 2014  
Page 3 of 3

Sincerely,

**The Source Group, Inc.**



Ivy Inouye  
Senior Toxicologist

**Attachments:**

Table 1 Summary of Arsenic Data in Soil  
Table 2 ProUCL Statistical Evaluation of Arsenic in Soil

**References:**

California Regional Water Quality Control Board (CRWQCB). 2013. User's Guide: Derivation and Application of Environmental Screening Levels. Interim Final. California Environmental Protection Agency (CalEPA). December.

Department of Toxic Substance Control (DTSC). 2013. Preliminary Endangerment Assessment Guidance Manual. California Environmental Protection Agency (CalEPA). October.

Duverge, Dylan Jacques. 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. A thesis submitted to the faculty of San Francisco State University. December.

Jonas & Associates, Inc. 1992. Site Characterization Report. Paco Pumps, Inc. October 16.

U.S. Environmental Protection Agency (USEPA). 1989. Risk Assessment Guidance for Superfund, Human Health Evaluation Manual, Part A. Interim Final. Solid Waste and Emergency Response. December.

USEPA. 2013. ProUCL Version 5.0.00 [Software, accompanied by "ProUCL User's Guide."]. Prepared for USEPA by Lockheed Martin. September.

**Table 1**  
**Summary of Arsenic Data in Soil**  
Former Paco Pumps  
Oakland, California

<b>Boring</b>	<b>Date sampled</b>	<b>Matrix</b>	<b>Sample Depth (feet)</b>	<b>Arsenic (mg/kg)</b>
B6	10/01/91	Soil	0-0.5	ND<0.25
B7	10/01/91	Soil	0-0.5	ND<0.25
Pit 3	10/01/91	Soil	3	14
B11	04/09/92	Soil	0-0.5/1-1.5	ND<0.25
B12	04/09/92	Soil	0-0.5/1-1.5	ND<0.25
B13	04/09/92	Soil	0-0.5/1-1.5	ND<0.25
B14	04/09/92	Soil	0-0.5/1-1.5	ND<0.25
B8	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B9	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B10	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B16	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B17	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B18	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B19	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B20	04/13/92	Soil	0-0.5/1-1.5	3.5
B21	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B22	04/13/92	Soil	0-0.5/1-1.5	3
B23	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B24	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B25	04/13/92	Soil	0-0.5/1-1.5	ND<0.25
B26	04/13/92	Soil	0-0.5/1-1.5	5.4

**Notes:**

Data from 1992 Site Characterization Report by Jonas & Associates.  
mg/kg = milligram per kilogram.

ND = not detected above laboratory reporting limit indicated.

**Table 2**  
**ProUCL Statistical Evaluation of Arsenic in Soil**  
Former Paco Pumps  
Oakland, California

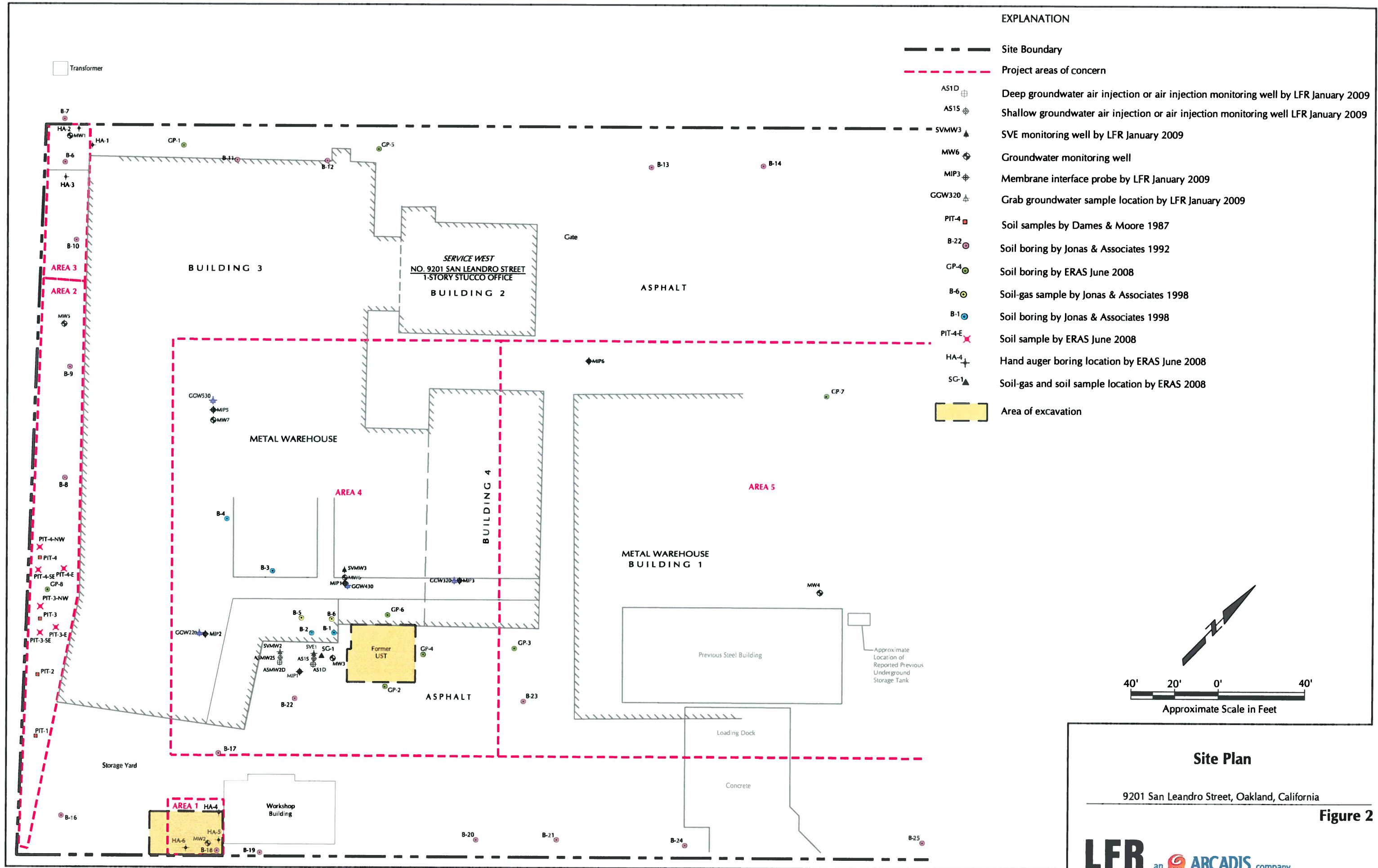
<b>General Statistics</b>			
Total Number of Observations	21	Number of Distinct Observations	5
Number of Detects	4	Number of Non-Detects	17
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	3	Minimum Non-Detect	0.25
Maximum Detect	14	Maximum Non-Detect	0.25
Variance Detects	26.24	Percent Non-Detects	80.95%
Mean Detects	6.475	SD Detects	5.122
Median Detects	4.45	CV Detects	0.791
Skewness Detects	1.769	Kurtosis Detects	3.12
Mean of Logged Detects	1.669	SD of Logged Detects	0.693
<b>Normal GOF Test on Detects Only</b>			
Shapiro Wilk Test Statistic	0.788	<b>Shapiro Wilk GOF Test</b>	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.333	<b>Lilliefors GOF Test</b>	
5% Lilliefors Critical Value	0.443	Detected Data appear Normal at 5% Significance Level	
<b>Detected Data appear Normal at 5% Significance Level</b>			
<b>Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs</b>			
Mean	1.436	Standard Error of Mean	0.786
SD	3.118	95% KM (BCA) UCL	N/A
95% KM (t) UCL	2.791	95% KM (Percentile Bootstrap) UCL	N/A
95% KM (z) UCL	2.728	95% KM Bootstrap t UCL	N/A
90% KM Chebyshev UCL	3.793	95% KM Chebyshev UCL	4.861
97.5% KM Chebyshev UCL	6.342	99% KM Chebyshev UCL	9.253
<b>Gamma GOF Tests on Detected Observations Only</b>			
A-D Test Statistic	0.447	<b>Anderson-Darling GOF Test</b>	
5% A-D Critical Value	0.66	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.282	<b>Kolmogrov-Smirnov GOF</b>	
5% K-S Critical Value	0.397	Detected data appear Gamma Distributed at 5% Significance Level	
<b>Detected data appear Gamma Distributed at 5% Significance Level</b>			
<b>Gamma Statistics on Detected Data Only</b>			
k hat (MLE)	2.671	k star (bias corrected MLE)	0.834
Theta hat (MLE)	2.424	Theta star (bias corrected MLE)	7.76
nu hat (MLE)	21.37	nu star (bias corrected)	6.675
MLE Mean (bias corrected)	6.475	MLE Sd (bias corrected)	7.089
<b>Gamma Kaplan-Meier (KM) Statistics</b>			
k hat (KM)	0.212	nu hat (KM)	8.904
Approximate Chi Square Value (8.90, $\alpha$ )	3.269	Adjusted Chi Square Value (8.90, $\beta$ )	3.011
95% Gamma Approximate KM-UCL (use when $n \geq 50$ )	3.911	95% Gamma Adjusted KM-UCL (use when $n < 50$ )	4.245
<b>Gamma ROS Statistics using Imputed Non-Detects</b>			
GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs			
GROS may not be used when kstar of detected data is small such as < 0.1			
For such situations, GROS method tends to yield inflated values of UCLs and BTVs			
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates			
Minimum	0.01	Mean	1.241
Maximum	14	Median	0.01
SD	3.271	CV	2.635
k hat (MLE)	0.203	k star (bias corrected MLE)	0.205
Theta hat (MLE)	6.129	Theta star (bias corrected MLE)	6.045
nu hat (MLE)	8.507	nu star (bias corrected)	8.625
MLE Mean (bias corrected)	1.241	MLE Sd (bias corrected)	2.74
		Adjusted Level of Significance ( $\beta$ )	0.0383
Approximate Chi Square Value (8.62, $\alpha$ )	3.102	Adjusted Chi Square Value (8.62, $\beta$ )	2.852
95% Gamma Approximate UCL (use when $n \geq 50$ )	3.452	95% Gamma Adjusted UCL (use when $n < 50$ )	N/A
<b>Lognormal GOF Test on Detected Observations Only</b>			
Shapiro Wilk Test Statistic	0.889	<b>Shapiro Wilk GOF Test</b>	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.24	<b>Lilliefors GOF Test</b>	
5% Lilliefors Critical Value	0.443	Detected Data appear Lognormal at 5% Significance Level	
<b>Detected Data appear Lognormal at 5% Significance Level</b>			

**Table 2**  
**ProUCL Statistical Evaluation of Arsenic in Soil**  
Former Paco Pumps  
Oakland, California

<b>Lognormal ROS Statistics Using Imputed Non-Detects</b>			
Mean in Original Scale	1.512	Mean in Log Scale	-1.179
SD in Original Scale	3.185	SD in Log Scale	1.948
95% t UCL (assumes normality of ROS data)	2.711	95% Percentile Bootstrap UCL	2.727
95% BCA Bootstrap UCL	3.385	95% Bootstrap t UCL	4.815
95% H-UCL (Log ROS)	11.99		
<b>UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed</b>			
KM Mean (logged)	-0.804	95% H-UCL (KM -Log)	2.103
KM SD (logged)	1.228	95% Critical H Value (KM-Log)	2.89
KM Standard Error of Mean (logged)	0.309		
<b>DL/2 Statistics</b>			
<b>DL/2 Normal</b>		<b>DL/2 Log-Transformed</b>	
Mean in Original Scale	1.335	Mean in Log Scale	-1.365
SD in Original Scale	3.235	SD in Log Scale	1.532
95% t UCL (Assumes normality)	2.552	95% H-Stat UCL	2.612
<b>DL/2 is not a recommended method, provided for comparisons and historical reasons</b>			
<b>Nonparametric Distribution Free UCL Statistics</b>			
<b>Detected Data appear Normal Distributed at 5% Significance Level</b>			
<b>Suggested UCL to Use</b>			
95% KM (t) UCL	2.791	95% KM (Percentile Bootstrap) UCL	N/A

**ATTACHMENT 2**

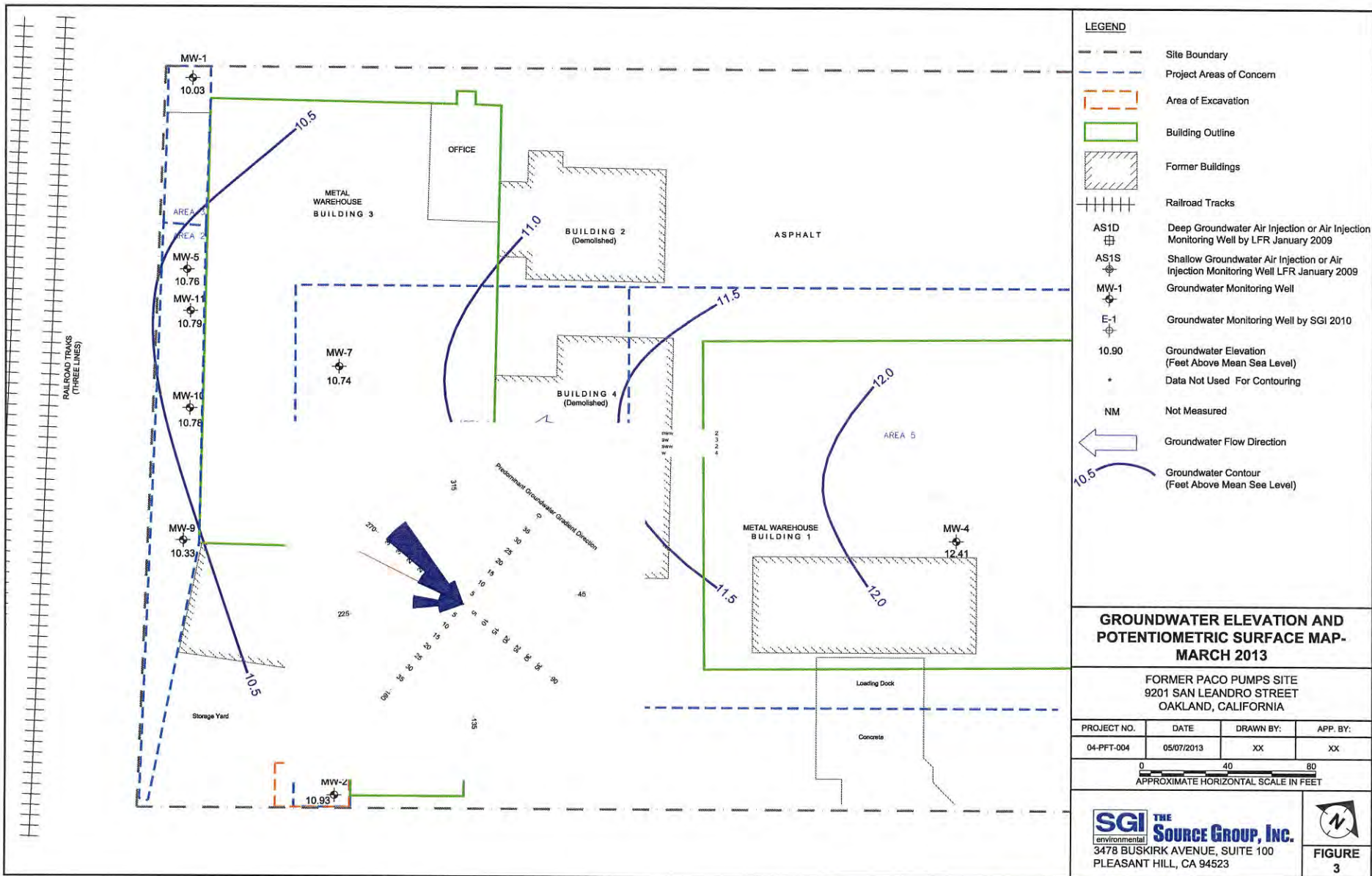
# ATTACHMENT 2



**ATTACHMENT 3**



# ATTACHMENT 3



GROUNDWATER GRADIENT ROSE  
DIAGRAM (11 AVAILABLE DATA)

**APPENDIX B**  
**REVISED CONCEPTUAL SITE MODEL**

**APPENDIX B**  
**Revised Conceptual Site Model**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

CSM Element	CSM Sub-Element	Description	Supporting Data/Figure References
Exposure Setting and Land Use		The former PACO Pumps facility is an approximately 4.6 acre parcel located at 9201 San Leandro Street in Oakland, California. The Site was historically used as a manufacturing facility since 1945, and as a foundry (Jonas, 1991) and is now used for warehousing. Currently, the entire Site is covered with either asphalt, concrete, or buildings constructed on concrete slabs. Two large warehouse buildings occupy the western and eastern areas of the Site. Both buildings have large, roll-up doors. An office has been constructed inside the northern corner of Building 3. The Site is generally bounded by a mix of industrial and heavy industrial use (manufacturing) and transportation right-of-ways (i.e., BART, active railroad tracks, and city streets).	A Site Location Map and a Site Plan are presented as Figures 1 and 2, respectively.
Geology/ Hydrogeology	Regional	<p>The Site is located near the northern edge of an area known as the San Leandro Cone, which is in the Fremont of the Santa Clara Valley Groundwater Basin. The San Leandro Cone generally consists of thick permeable units separated by thick impermeable units. These sediments act as a groundwater recharge area of the Santa Clara Valley Groundwater Basin. Groundwater in the vicinity occurs in thin discontinuous water bearing strata. The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional groundwater flow direction in the area of the Site has been determined to be to the southwest toward San Francisco Bay.</p> <p>The sediments in the vicinity of the Site are fine-grained alluvial sediments that represent distal deposits of alluvial fans that were deposited by rivers draining upland surfaces to the west and east of the Site. These sediments were deposited in a low energy environment on the margins of San Francisco Bay. At shallow depths beneath these sediments are a series of Recent-age (&lt;10,000 years) blue clay layers that become increasingly thicker toward San Francisco Bay. These clay layers are known as the Bay Mud and were deposited in San Francisco Bay during higher stands of sea level. In the vicinity of the Site it is likely that several hundred feet of these sediments overlie sandstone and serpentine sedimentary and metamorphic rocks of the Jurassic-aged Franciscan Formation bedrock.</p>	<p>Discussions of the geologic and hydrogeologic setting are presented in:</p> <ul style="list-style-type: none"> <li>• Section 4.1 of the <i>Remedial Investigation Activities and Groundwater Monitoring Report</i> (SGI, 2013);</li> <li>• Section 2.2 of the <i>Investigation and Remediation Activities Report</i> (LFR, 2009); and</li> <li>• Section 1.2 of the <i>Subsurface Investigation and Groundwater Monitoring Report, Quarter 2, 2008</i> (ERAS, 2008).</li> </ul> <p>Historical groundwater elevation data are presented in Table 1 of this Report.</p> <p>Geologic cross sections have been presented as Figures 3, 4A, and 4B in the <i>Remediation Workplan – Area 4</i> (SGI, 2009).</p> <p>Well construction and soil boring logs showing geologic and hydrogeologic conditions beneath the Site are presented in:</p> <ul style="list-style-type: none"> <li>• Appendix C of this Report;</li> <li>• Appendix B of the <i>Remedial Investigation Activities and Groundwater Monitoring Report</i> (SGI, 2013);</li> <li>• Appendix C of the <i>Investigation/Remediation (Area 4), Post-Remediation Sampling and First Semi-Annual Monitoring Report</i> (SGI, 2010);</li> <li>• Appendix C of the <i>Investigation and Remediation Activities Report</i> (LFR, 2009);</li> <li>• Appendix E of the <i>Subsurface Investigation and Groundwater Monitoring Report, Quarter 2, 2008</i> (ERAS, 2008);</li> <li>• <i>Completion of Monitoring Well 9MW5</i> (Jonas, 1994); and</li> <li>• Appendix D of the <i>First Quarterly Status Report</i> (Jonas, 1993).</li> </ul>
	Local	In general, the site lithology appears to consist of clay to a depths ranging from approximately nine to 13 feet bgs, where clay with an increased percentage of coarse grains contains the first encountered groundwater. More clay extends to approximately 23 feet bgs, where a deeper groundwater zone has been observed. During Quarter 3, 2014, shallow zone groundwater flowed in a westerly direction at a gradient of approximately 0.0038 foot/foot in Areas 4 and 5. The westerly gradient is consistent with historical groundwater flow patterns, and was confirmed with the recent construction of well MW-12.	
Hydrology	Regional/Local	The nearest surface water body is San Leandro Creek, which is located approximately 5,000 feet southwest of the Site. Alameda County Environmental Health (ACEH)	

**APPENDIX B**  
**Revised Conceptual Site Model**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

CSM Element	CSM Sub-Element	Description	Supporting Data/Figure References
		suggested a drainage feature was present approximately 360 feet southwest of the Site. Two visits were conducted to verify presence of the suspected unlined ditch. No swale, ditch, or drainage feature was observed in the suspected area. Additionally, current and historical groundwater flow direction is to the west, cross-gradient of the suspect drainage feature.	
Release History		<p>The potential source(s) of constituents released into the environment are interpreted to be leaks associated with the operation of an underground storage tank (UST) at the Site in Area 4, and a suspected UST in Area 5 (Figure 2). The UST in Area 4 is reported to have been removed in 1992. Following UST removal, soil was over-excavated and removed under and in the vicinity of the former UST, but residual hydrocarbons remained due to limited access in the area. The location of the suspected UST in Area 5 has never been confirmed, and is assumed to have been removed during building construction. Additionally, shallow soil is impacted with total extractable petroleum hydrocarbons (TEPH) under the southern portion of Building 3, and between the building and the property boundary fence.</p> <p>The migration of petroleum hydrocarbons and related constituents at the Site is interpreted to occur as a result of groundwater flow. However, natural attenuation via adsorption, dispersion, and natural degradation, and Site lithology has limited the horizontal and vertical distribution of constituents. The primary source of the constituents, leaks associated with discharges from the USTs, have been terminated. Therefore, the only potential sources remaining are interpreted to be the affected soil in the vicinity of the USTs, and shallow soil in the southwestern portion of the Site.</p>	
Affected Media and Contaminant Distribution	Soil	Elevated concentrations of hydrocarbon constituents/additives in soil is present in the vicinity of the former gasoline USTs at Building 1 and 3, and shallow soil in the southwestern area of the Site. Additionally, elevated concentrations of polychlorinated biphenyls (PCBs) in shallow soil are present in the area along the western portion of Building 3.	Laboratory analytical data for soil samples collected at the Site are presented in: <ul style="list-style-type: none"> <li>• Table 2 of this Report;</li> <li>• Table 2 of the <i>Remedial Investigation Activities and Groundwater Monitoring Report</i> (SGI, 2013);</li> <li>• Table 2 of the <i>Investigation/Remediation (Area 4), Post-Remediation Sampling and First Semi-Annual Monitoring Report</i> (SGI, 2010); and</li> <li>• Table 1 of the <i>Investigation and Remediation Activities Report (LFR, 2009)</i>.</li> </ul>
	Groundwater	Elevated concentrations of hydrocarbon constituents/additives in groundwater appear to be associated with a gravelly clay layer, observed in soil borings and by geophysical methods during the MIP investigation (LFR, 2009). Recent analytical results from six downgradient boundary wells indicate that only very low concentrations of TEPH are present at the Site boundary. Based on the dramatic decrease in TEPH concentrations between the source area and the Site boundary, it is estimated that impacted groundwater	All historical laboratory analytical data for groundwater samples collected at the Site are presented in Table 5 of this Report.

**APPENDIX B**  
**Revised Conceptual Site Model**  
Former Paco Pumps Site  
9201 San Leandro Street  
Oakland, California

CSM Element	CSM Sub-Element	Description	Supporting Data/Figure References
		<p>extends less than 100 feet off-Site.</p> <p>While the dissolved hydrocarbon concentrations are locally high, similar to concentrations at sites with light non-aqueous phase liquid (LNAPL), the well screens in wells in the source area are screened such that LNAPL would have been measured. This site has a very high density of wells: wells are 10-30 feet apart in source area. None have recorded LNAPL over multiple gauging events. No evidence of free-phase hydrocarbons has been noted in soil samples during drilling.</p> <p>The lithology encountered indicates a confined first groundwater, with dry clay extending to the depth to first water (10-12 feet bgs), and water levels rising in the well after installation. In any case, the downgradient boundary wells have no detectable benzene or total petroleum hydrocarbon as gasoline (TPHg), and very low concentration of TPH as diesel (TPHd). If LNAPL were present at the Site boundary, the wells would contain much higher concentrations of dissolved hydrocarbons.</p>	
	Soil Vapor	Elevated concentrations of hydrocarbon constituents/additives in soil vapor are present in the vicinity of the former gasoline USTs at Buildings 1 and 3.	Laboratory analytical data for soil vapor samples collected at the Site are presented in: <ul style="list-style-type: none"> <li>• Table 3 of the <i>Remedial Investigation Activities and Groundwater Monitoring Report</i> (SGI, 2013);</li> <li>• Table 4 of the <i>Investigation/Remediation (Area 4), Post-Remediation Sampling and First Semi-Annual Monitoring Report</i> (SGI, 2010);</li> <li>• Table 7 of the <i>Investigation and Remediation Activities Report (LFR, 2009)</i>; and</li> <li>• Table 4 of the <i>Subsurface Investigation and Groundwater Monitoring Report, Quarter 2, 2008 (ERAS, 2008)</i>.</li> </ul>
Contaminant Transport and Fate		<p>Chemical properties of the detected constituents and the physical characteristics of the Site were reviewed to identify factors that might allow the release and transport of a chemical from soil, soil vapor, or groundwater. Currently, the entire Site is covered with either asphalt, concrete, or buildings constructed on concrete slabs. Two large warehouse buildings occupy the western and eastern areas of the Site. The former UST in Area 4 is located outside Building 3 (western portion of Site), and the suspected UST in Area 5 is located beneath Building 1 (eastern portion of Site).</p> <p>Future conditions of Site cover are unknown, however the current owners have no plans to alter current conditions. Therefore, future receptors may be directly exposed to soil on Site. Release of chemicals can potentially occur through volatilization, wind and/or mechanical erosion (i.e., during construction), or migration of chemicals into the groundwater or surface water. These potential release mechanisms are discussed in more detail below.</p>	Contaminant migration along preferential pathways (e.g., utility corridors) was evaluated in Section 3.1 of the RI Work Plan (SGI, 2012a). Utility corridors identified in Area 4 of the Site are shown on Figure 3 in the RI Work Plan.

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Oakland, California

CSM Element	CSM Sub-Element	Description	Supporting Data/Figure References
		<p>Based on previous investigations, some of the Site-related constituents include volatile organic hydrocarbons (VOCs). These chemicals typically have a low organic carbon partition coefficient (K<sub>oc</sub>), a low molecular weight, and a high Henry's Law constant, indicating that these chemicals may volatilize. Therefore, volatilization of VOCs is considered a potential transport mechanism.</p> <p>Some of the chemicals detected at the Site adsorb readily to dust particles. Chemicals adsorbed to soil particles can be blown into air. This is referred to as fugitive dust. Therefore, exposure to constituents in soil via fugitive dust emissions is considered a potential transport mechanism.</p> <p>The potential for chemicals to leach from soil or migrate laterally in soil vapor depends on the physical and chemical properties of the chemicals, the chemical concentration, soil type, and other site-specific conditions. For example, chemicals with high water solubilities tend to leach more readily than chemicals with lower solubilities. In addition, a chemical's K<sub>oc</sub> is important for assessing the degree of chemical sorption to soil particles; chemicals with a high sorption potential do not tend to leach as readily. Site-specific conditions are also important for assessing whether leaching may occur, such as soil type (leaching occurs more readily in sandy soils than in clayey or silty soils), amount of rainfall, gradient, etc. In addition, other competing migration pathways can affect the tendency of a chemical to leach. Site-related constituents (e.g., gasoline-range petroleum hydrocarbons) may migrate downward from shallow soils to deeper soils and/or groundwater through leaching. Therefore, potential leaching to groundwater is considered a transport mechanism.</p>	
Confirmed and Potential Exposure Points and Receptors		<p>Under current Site conditions, the direct contact with soil is prevented by the asphalt/concrete cover. Under future Site conditions, where the condition of the cover is unknown, receptors at the Site may be directly exposed to soil. Therefore, under future Site conditions, the exposure point for soil is defined as the area within the Site.</p> <p>As recommended by the Department of Toxic Substances Control (DTSC; 2011a,b), for the volatilization pathway into indoor air, exposure to subsurface contamination is best characterized through the collection of soil vapor samples. Therefore, soil vapor data are used in the evaluation of potential indoor air impacts. Currently, two buildings exist onsite. Under future Site conditions, the exposure point for soil vapor is defined as the entire area within the Site (assuming a future building may be located anywhere on the Site).</p> <p>Although the exposure point for groundwater is defined as the groundwater within the Site, no point of direct contact with groundwater was identified for the Site. There are no known active drinking water supply wells pumping from shallow aquifers for beneficial use</p>	A Human Health Risk Evaluation is presented in Section 6.0 of the <i>Remedial Investigation Activities and Groundwater Monitoring Report</i> (SGI, 2013).

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Oakland, California

CSM Element	CSM Sub-Element	Description	Supporting Data/Figure References
		<p>within an approximate 1,300-foot radius of the Site. A suspected irrigation well is listed in the Alameda County Public Works Wells database as being located approximately 620 feet southwest of the Site. The total depth or screened interval of the well is not known. Regardless, current and historical groundwater flow direction is to the west, cross-gradient of the suspect well. The shallow water-bearing zone is generally not considered a drinking water source due to inadequate yields and other water quality issues (e.g., bacteria, total dissolved solids). Therefore, no point of direct contact with groundwater as a beneficial water resource was identified for the hypothetical receptors. Based on the historic depth to groundwater of approximately 10 feet bgs, a hypothetical outdoor construction worker receptor could potentially contact groundwater during deep excavation, this contact is expected to be very infrequent and involve only minor contact, if any, with contaminated groundwater. In general, any hypothetical construction worker receptor will be performing activities consistent with a Site health and safety plan (HASP). This HASP and best management practices (BMPs) would likely require engineering controls (e.g., dewatering) to preclude any direct contact with groundwater for workers at the Site.</p> <p>Volatile compounds can be released from the subsurface into indoor and outdoor air resulting in an indirect exposure to constituents in soil, soil vapor, and groundwater. Soil, soil vapor, and groundwater samples have been collected from the same general areas of the Site. As recommended by U.S. Environmental Protection Agency (USEPA; 1996 and 2002), soil concentrations are used for evaluating soil vapor emissions from soil to outdoor air. As recommended by the DTSC (2011a,b), for the vapor intrusion pathway into indoor air, exposure to subsurface contamination is best characterized through the collection of soil vapor samples. Therefore, concentrations detected in soil were used in evaluation of potential outdoor air impacts, as presented in the LTCP. Detected concentrations of soil vapor were used in the evaluation of potential indoor air impacts.</p> <p>In addition to exposure points, potential hypothetical receptors are necessary for an exposure pathway to be complete. Hypothetical human receptors were identified on the basis of proximity to the Site, proposed activities that could possibly result in direct or indirect contact with Site-related constituents, and Site use. The Site is located in an industrial area, which is expected to remain industrial in the future. The following hypothetical human receptors were identified:</p> <ul style="list-style-type: none"> <li>• Hypothetical On-Site Outdoor Commercial/Industrial Worker Receptor (current and future exposure scenario);</li> <li>• Hypothetical On-Site Indoor Commercial/Industrial Worker Receptor (current and future exposure scenario); and</li> <li>• Hypothetical On-Site Construction Worker Receptor (future exposure scenario).</li> </ul>	

**APPENDIX B**  
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Former Paco Pumps Site  
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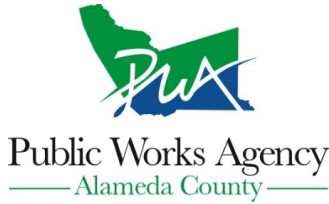
CSM Element	CSM Sub-Element	Description	Supporting Data/Figure References
		<p>The nearest surface water body is San Leandro Creek, which is located approximately 5,000 feet southwest of the Site (Figure 1). San Leandro Creek is channeled through urban areas including engineered underground conveyances and drains stormwater into San Leandro Bay (approximately 1 mile west of the Site). Due to the distance from the Site to the point of potential interception, interaction between constituents in surface water runoff or groundwater and regional surface water features is not expected.</p>	
<p><b>References:</b></p> <p>California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2011a. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). October.</p> <p>DTSC. 2011b. Human Health Risk Assessment Note Number: 4, Screening Level Human Health Risk Assessments. June 9.</p> <p>ERAS Environmental Inc. (ERAS). 2008. Subsurface Investigation and Groundwater Monitoring Report, Quarter 2, 2008, Former PACO Pumps Facility, 9201 San Leandro Street, Oakland, California. July 31.</p> <p>Jonas and Associates Inc. (Jonas). 1991. Soil Characterization Report, Soil Excavation Area. October 30.</p> <p>Jonas. 1993. First Quarterly Status Report, PACO Pumps Facility, 9201 San Leandro Street in Oakland, California. February 24.</p> <p>Levine Fricke Recon Inc. (LFR). 2009. Investigation and Remediation Activities Report. May 15.</p> <p>The Source Group, Inc. (SGI). 2009. Remediation Work Plan - Area 4, Former PACO Pumps Site, 9201 San Leandro Street, Oakland, California. October 30.</p> <p>SGI. 2010. Investigation/Remediation (Area 4), Post-Remediation Sampling and First Semi-Annual Monitoring Report, Former PACO Pumps Site, 9201 San Leandro Street, Oakland, California. October.</p> <p>SGI. 2013. Remedial Investigation Activities and Groundwater Monitoring Report, Former PACO Pumps Site, 9201 San Leandro Street, Oakland, California. July 25.</p> <p>U.S. Environmental Protection Agency (USEPA). 1996. Soil Screening Guidance: User's Guide. Office of Solid Waste and Emergency Response. July.</p> <p>USEPA. 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. Solid Waste and Emergency Response. December.</p>			



**APPENDIX C**

**ALAMEDA COUNTY ENVIRONMENTAL HEALTH (ACEH) DRILLING PERMIT**

# 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: 06/09/2014 By jamesy**

**Permit Numbers: W2014-0574 to W2014-0575**  
**Permits Valid from 06/25/2014 to 06/25/2014**

**Application Id:** 1401304028307  
**Site Location:** 9201 San Leandro Street  
**Project Start Date:** 06/25/2014  
**Assigned Inspector:** Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

**City of Project Site:**Oakland  
**Completion Date:**06/25/2014

**Applicant:** The Source Group, Inc - Paisha Jorgensen  
3478 Buskirk Ave, Suite 100, Pleasant Hill, CA 94523  
**Property Owner:** Richard Padovani  
9201 San Leandro Street, Oakland, CA 94603  
**Client:** Dave Murray  
4650 SW Macadam Ave, Suite 400, Portland, OR 97239

**Phone:** 510-847-9217  
**Phone:** --  
**Phone:** --

	<b>Total Due:</b>	\$662.00
<b>Receipt Number: WR2014-0235</b>	<b>Total Amount Paid:</b>	\$662.00
<b>Payer Name : Paisha Jorgensen</b>	<b>Paid By: VISA</b>	<b>PAID IN FULL</b>

**Works Requesting Permits:**

Well Construction-Monitoring-Monitoring - 1 Wells  
Driller: Gregg Drilling and Testing, Inc. - Lic #: 485165 - Method: hstem

**Work Total: \$397.00**

**Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2014-0574	06/09/2014	09/23/2014	MW-12	8.00 in.	2.00 in.	8.00 ft	20.00 ft

**Specific Work Permit Conditions**

1. 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.
  
2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
  
3. 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.
  
4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and

## Alameda County Public Works Agency - Water Resources Well Permit

mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
8. Minimum surface seal thickness is two inches of cement grout placed by tremie.
9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.
10. 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.

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Borehole(s) for Investigation-Environmental/Monitoring Study - 4 Boreholes

Driller: Gregg Drilling and Testing, Inc. - Lic #: 485165 - Method: hstem

**Work Total: \$265.00**

### Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2014-0575	06/09/2014	09/23/2014	4	2.00 in.	5.00 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. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. 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.

## Alameda County Public Works Agency - Water Resources Well Permit

6. 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.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a 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.

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.

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**APPENDIX D**  
**MW-12 BORING LOG**



**THE SOURCE GROUP, INC.**

BORING/WELL ID:

**MW-12**

<b>PROJECT NAME AND ADDRESS:</b>	Former Paco Pumps, 9201 San Leandro Street, Oakland, CA	<b>Project No.</b> 04-PFT-005
<b>BORING LOCATION (AT SITE):</b>	Southwest corner of Site	<b>Logged By:</b> C. Collins
<b>CONTRACTOR AND EQUIPMENT:</b>	Gregg/Drill Rig DV-8	<b>P.G. Approval:</b> P. Jorgensen #7806
<b>SAMPLING METHOD:</b>	Hand auger/Direct push	<b>MONITORING DEVICE:</b> MiniRae 2000
<b>START DATE/TIME:</b>	9/19/14 7:30am	<b>FINISH DATE/TIME:</b> 9/19/14 10:30am
<b>FIRST/STATIC WATER LEVEL (BGS):</b>	14 feet/8.5 feet	<b>CASING DEPTH(S):</b> 20 feet bgs
<b>SURFACE/TOC ELEVATION (MSL):</b>	20.23/19.41	<b>SCREEN INTERVAL(S) (BGS):</b> 10 - 20 feet bgs
<b>TOTAL BORING DIAMETER/DEPTH:</b>	8 inches/20 feet bgs	<b>SCREEN SLOT SIZE/TYPE:</b> 0.020 inches/PVC

Time	PID reading (ppm)	Samples Collected	Sample Recovery	Depth (feet)	USCS Classification	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size/plasticity, other) ALL PERCENTAGES and PERMEABILITY ARE APPROXIMATE UNLESS OTHERWISE STATED	Well construction details
8:30				0	SM	0-6" Asphalt; 0-5 feet bgs - hand auggered, soil logged from cuttings	
				1		↓ Base Rock	
		SB-MW-12-4		2	SM	↓ SILTY SAND: very dark greyish brown (10 YR 3/2), 5% gravel, 75% sand, 20% silt, 0% clay	
8:45	0.0			3	CL	↓ LEAN CLAY: black (10YR 2/1), 0% gravel, 0% sand, 5% silt, 95% clay, organic odor	
				4		neat cement grout	
				5		2-inch, Sch 40 PVC blank casing	
				6		bentonite	
				7			
	0.0			8	CL	↓ LEAN CLAY: greenish black (GLE Y 1 2.5/10Y), 0% gravel, 0% sand, 5% silt, 95%	
				9			
				10			
				11		↓ brown (7.5YR 4/3)	
		SB-MW-12-14		12			
8:55	0.0			13	SM	↓ SILTY SAND: dark yellowish brown (10YR 4/4), 0% gravel, 40% 40% silt, 50% sand, 10% clay	#2/12 Monterey sand
				14		↓ wet	2-inch, Sch 40 PVC, 0.020-inch slot screen
				15			
				16		↓ dark yellowish brown (10YR 3/4)	
				17		↓ dark yellowish brown (10YR 4/4)	
				18			
				19			
				20			

Bottom of Boring at 20 feet bgs

**APPENDIX E**

**WELL DEVELOPMENT FIELD FORMS**

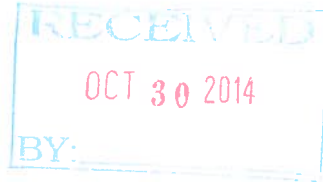




**APPENDIX F**  
**SURVEYOR'S REPORT**

**Virgil Chavez Land Surveying**

721 Tuolumne Street  
Vallejo, California 94590  
(707) 553-2476 • Fax (707) 553-8698



October 24, 2014  
Project No.: 2999-06

Paisha Jorgensen  
The Source Group, Inc.  
3478 Buskirk Ave., Suite 100  
Pleasant Hill, CA 94523

Subject: Monitoring Well Survey  
9201 San Leandro Street  
Oakland, CA

Dear Paisha:

This is to confirm that we have proceeded at your request to survey the new wells add borings at the above referenced location. The survey was completed on October 2, 2014. The benchmark for this survey was a PK nail and shiner in the median island on Hegenberger Ave., approximately 100 feet south of Coliseum Way. The latitude, longitude and coordinates are for top of casings and are based on the Calif. State Coordinate System, Zone III (NAD83). Benchmark Elev. =13.455 feet (NAVD 88).

<u>Latitude</u>	<u>Longitude</u>	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Desc.</u>
				20.23	RIM MW-12
37.7416643	-122.1857005	2096908.45	6074270.83	19.41	TOC MW-12
37.7417493	-122.1858635	2096940.25	6074224.27	18.54	SB-SGI-1
37.7416579	-122.1857760	2096906.54	6074248.97	18.69	SB-SGI-2
37.7418885	-122.1860306	2096991.81	6074176.87	18.59	SB-MW-10
37.7419886	-122.1861448	2097028.83	6074144.50	18.61	SB-MW-11



Sincerely,

*Virgil D. Chavez*  
Virgil D. Chavez, PLS 6323

**APPENDIX G**  
**GROUNDWATER SAMPLING FIELD FORMS**

## WELL GAUGING DATA

Project # HL016-001 Date 10-16-14 Client SGI

Site 9201 San Leandro St. Oakland CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	0930	4					7.53	20.00		
MW-2	0952	4					8.05	20.15		
MW-3				well filled with DIA						
MW-4	1250	4					7.54	20.02		
MW-5	0932	4					7.30	20.05		
MW-6	0940	2					6.95	16.33		
MW-7	0935	2					8.70	27.12		
MW-8				unable to locate						
MW-9	0941	2					7.89	16.87		
MW-10	0937	2					7.00	21.35		
MW-11	0944	2					7.33	19.38		
MW-12	0949	2					8.50	19.50		
E-1	0944	2					8.40	17.85		
E-2	0947	2					8.59	19.25		
E-3	0955	2					9.80	18.30		
E-4	0959	2					8.29	18.21		
E-5	0950	2					8.53	17.97		

# WELL GAUGING DATA

Project # 101614-01 Date 10-16-14 Client SLI

Site 9201 San Leandro St Oakland CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
E-6	1000	2					8.47	28.25		
E-7	1010	2				8.58	28.15			
E-8	1014	2				8.60	17.94 <del>17.00</del>			
E-9	1012	2				8.57	19.10 <del>18.10</del>			
E-10				Unable	to locate					
E-11				unable	to locate					
E-12	1009						7.82	17.76		
AS-15	0956	2					8.35	16.58		
AS-1D	0959	2					8.37	32.94		
AS-MWZ	1002	2					8.60	16.92		
AS-MWZD	1005	2					8.53	33.70		





# WELL MONITORING DATA SHEET

Project #: <u>141016-JB1</u>	Client: <u>The Source Group</u>
Sampler: <u>MM</u>	Date: <u>10-16-14</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD): <u>20.02</u>	Depth to Water (DTW): <u>7.59</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.07</u>	

Purge Method: <u>Bailer</u>	Watrera	Sampling Method: <u>Bailer</u>
<u>Disposable Bailer</u>	Peristaltic	<u>Disposable Bailer</u>
<u>Positive Air Displacement</u>	Extraction Pump	Extraction Port
<u>Electric Submersible</u>	Other _____	Dedicated Tubing
		Other: _____

$\frac{8.1 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{24.3}{\text{Calculated Volume}} \text{ Gals.}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1258</u>	<u>19.6</u>	<u>7.44</u>	<u>1105</u>	<u>73</u>	<u>8.1</u>	<u>cloudy</u>
<u>1300</u>	<u>19.2</u>	<u>7.27</u>	<u>945</u>	<u>278</u>	<u>16.2</u>	<u>↓</u>
	<u>WELL DEWATERED</u>					
<u>1310</u>	<u>18.7</u>	<u>7.83</u>	<u>909</u>	<u>146</u>	<u>GRAB</u>	

Did well dewater? (Yes) No      Gallons actually evacuated: 20.5

Sampling Date: 10-16-14      Sampling Time: 1310      Depth to Water: 8.46

Sample I.D.: MW-4      Laboratory: Kiff CalScience Other Accutest

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see coe

EB I.D. (if applicable): @ \_\_\_\_\_ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	<u>0.76</u> mg/L	Post-purge:	<u>0.60</u> mg/L
O.R.P. (if req'd):	Pre-purge:	<u>198</u> mV	Post-purge:	<u>162</u> mV





# WELL MONITORING DATA SHEET

Project #: 141016 Jol	Client: The Source Group
Sampler: ND	Date: 10/16/14
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 16.33	Depth to Water (DTW): 6.95
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.82	

Purge Method: Bailer      Waterra      Sampling Method: Bailer

Disposable Bailer       Peristaltic  
 Positive Air Displacement       Extraction Pump  
 Electric Submersible      Other: \_\_\_\_\_

Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

1.5 (Gals.) X 3 = 4.5 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1430	21.4	6.98	1260	97	1.5	
1435	21.3	6.89	1314	94	3.0	
1440	21.3	6.88	1300	92	4.5	

Did well dewater?    Yes     No      Gallons actually evacuated: 4.5

Sampling Date: 10/16/14      Sampling Time: 1445      Depth to Water: 7.99

Sample I.D.: MW-6      Laboratory: Kiff CalScience      Other: ACU-test

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see COC

EB I.D. (if applicable): @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:  

D.O. (if req'd):	(Pre-purge): 1.01 mg/L	(Post-purge): 1.38 mg/L	
O.R.P. (if req'd):	(Pre-purge): -10 mV	(Post-purge): -14 mV	

# WELL MONITORING DATA SHEET

Project #: 141016 J01	Client: The Source Group
Sampler: ND	Date: 10/16/14
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 27.12	Depth to Water (DTW): 9.70
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.38	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing
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$3.0 \text{ (Gals.)} \times 3 = 9.0 \text{ Gals.}$ I Case Volume                      Specified Volumes                      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1115	20.9	7.37	891	271	3.0	
1125	21.0	7.25	889	>1000	6.0	
1133	21.0	7.26	890	>1000	9.0	

Did well dewater?    Yes    No                      Gallons actually evacuated:    9.6

Sampling Date: 10/16/14                      Sampling Time: 1140                      Depth to Water: 10.00

Sample I.D.: MW-7                      Laboratory: Kiff    CalScience    Other AcuvTest

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see COC

EB I.D. (if applicable):                      @                      Duplicate I.D. (if applicable):

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:                      :

D.O. (if req'd):	<u>Pre-purge</u>	0.88    mg/L	<u>Post-purge</u>	0.78    mg/L
O.R.P. (if req'd):	<u>Pre-purge</u>	150    mV	<u>Post-purge</u>	160    mV

## WELL MONITORING DATA SHEET

Project #: 141016-5d	Client: SGT
Sampler: JD	Date: 10-16-14
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 16.87	Depth to Water (DTW): 7.89
Depth to Free Product: —	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.68	

Purge Method: Bailer      Waterra      Sampling Method: Bailer

Disposable Bailer       Peristaltic       Disposable Bailer  
 Positive Air Displacement       Extraction Pump       Extraction Port  
 Electric Submersible       Other \_\_\_\_\_       Dedicated Tubing

Other: \_\_\_\_\_

1 Case Volume 1.4 (Gals.) X 3 Specified Volumes = 4.2 Gals. Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1200	20.1	7.24	1077	>1000	1.4	
1203	20.2	7.22	1084	>1000	2.8	
1206	20.2	7.21	1087	>1000	4.2	

Did well dewater? Yes  No      Gallons actually evacuated: 4.2

Sampling Date: 10-16-14      Sampling Time: 1210      Depth to Water: 7.94

Sample I.D.: MW-9      Laboratory: Kiff CalScience Other Accotest

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See Cox

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	0.70 mg/L	Post-purge:	0.69 mg/L
O.R.P. (if req'd):	Pre-purge:	36 mV	Post-purge:	21 mV



## WELL MONITORING DATA SHEET

Project #: 141016-501	Client: SGT
Sampler: Jo	Date: 10-16-14
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.38	Depth to Water (DTW): 7.33
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YS) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.74	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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2.0 (Gals.) X	3	= 6.0 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1020	20.7	7.30	562	726	2.0	
1023	20.6	7.31	569	>1000	6.0	
1026	20.6	7.32	570	>1000	6.0	

Did well dewater? Yes  No  Gallons actually evacuated: 6.0

Sampling Date: 10-16-14 Sampling Time: 1030 Depth to Water: 7.88

Sample I.D.: MW- Laboratory: Kiff CalScience Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See cal

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd): Pre-purge: 1.00 mg/L Post-purge: 0.87 mg/L

O.R.P. (if req'd): Pre-purge: -29 mV Post-purge: -33 mV

## WELL MONITORING DATA SHEET

Project #: 141016-J01	Client: SGI
Sampler: Jo	Date: 10-16-14
Well I.D.: MW-12	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth (TD): 19.50	Depth to Water (DTW): 8.50
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.70	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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1.8 (Gals.) X 3 = 5.4 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1220	21.4	7.64	1369	71000	1.8	
1223	21.2	7.57	1370	71006	3.6	
1226	21.2	7.54	1377	71000	5.4	

Did well dewater? Yes  No  Gallons actually evacuated: 5.4

Sampling Date: 10-16-14      Sampling Time: 1230      Depth to Water: 8.62

Sample I.D.: MW-12      Laboratory: Kiff CalScience Other Acutest

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See 101

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd): (Pre-purge): 1.00 mg/L	(Post-purge): 0.96 mg/L
O.R.P. (if req'd): (Pre-purge): 76 mV	(Post-purge): 64 mV

## WELL MONITORING DATA SHEET

Project #: 141016 J01	Client: The Source Group
Sampler: ND	Date: 10/16/14
Well I.D.: E-2	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 18.25	Depth to Water (DTW): 8.59
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.83	

Purge Method: Bailer (Disposable Bailer) Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer (Disposable Bailer) Extraction Port Dedicated Tubing Other: _____
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$1.6 \text{ (Gals.)} \times 3 = 4.8 \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1200	21.1	7.01	1416	469	1.6	
1210	21.1	6.97	1531	490	3.2	
1218	21.2	6.90	1377	498	4.8	

Did well dewater?    Yes    No                      Gallons actually evacuated: 4.8

Sampling Date: 10/16/14      Sampling Time: 1225      Depth to Water: 9.76

Sample I.D.: E-2                      Laboratory: Kiff    CalScience    Other: ACUtest

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see COC

EB I.D. (if applicable): @ Time                      Duplicate I.D. (if applicable):

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:

D.O. (if req'd): (Pre-purge)	0.70	mg/L	(Post-purge)	0.74	mg/L
O.R.P. (if req'd): (Pre-purge)	-71	mV	(Post-purge)	-55	mV



## WELL MONITORING DATA SHEET

Project #: 141016 J01	Client: The Source Group
Sampler: ND	Date: 10/16/14
Well I.D.: E-3	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 18.30	Depth to Water (DTW): 9.80
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.35	

Purge Method: Bailer (Disposable Bailer) Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: (Bailer) (Disposable Bailer) Extraction Port Dedicated Tubing Other: _____
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$1.5 \text{ (Gals.)} \times 3 = 4.5 \text{ Gals.}$ 1 Case Volume                      Specified Volumes                      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1359	21.2	7.03	1279	>1000	1.5	
1410	21.1	6.91	1264	>1000	3.0	
1419	21.1	6.91	1258	>1000	4.5	

Did well dewater?    Yes    (No)                      Gallons actually evacuated: 4.5

Sampling Date: 10/16/14                      Sampling Time: 1425                      Depth to Water: 10.70

Sample I.D.: E-3                      Laboratory: Kiff    CalScience    Other: AcuTest

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see COC

EB I.D. (if applicable):                      @                      Duplicate I.D. (if applicable):

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:                      :

D.O. (if req'd):	(Pre-purge) 0.92 mg/L	(Post-purge) 0.91 mg/L	
O.R.P. (if req'd):	(Pre-purge) -61 mV	(Post-purge) -64 mV	

## WELL MONITORING DATA SHEET

Project #: 141016-J01	Client: The Source Group
Sampler: ND	Date: 10/16/14
Well I.D.: E-5	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 17.97	Depth to Water (DTW): 8.53
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.41	

Purge Method: <u>Bailer</u> Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
---	--	--

$1.6 \text{ (Gals.)} \times 3 = 4.8 \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1315	21.1	6.92	1181	595	1.6	
1325	21.2	6.91	1196	586	3.2	
1335	21.2	6.91	1199	602	4.8	

Did well dewater?    Yes    No                      Gallons actually evacuated:    4.8

Sampling Date: 10/16/14      Sampling Time: 1345      Depth to Water: 10.09

Sample I.D.: E-5                      Laboratory:    Kiff    CalScience    Other: AcuTest

Analyzed for:    TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:    see COC

EB I.D. (if applicable):                      @                      Duplicate I.D. (if applicable):

Analyzed for:    TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:     

D.O. (if req'd): <u>Pre-purge</u>	1.06    mg/L	D.O. (if req'd): <u>Post-purge</u>	1.27    mg/L
O.R.P. (if req'd): <u>Pre-purge</u>	-59    mV	O.R.P. (if req'd): <u>Post-purge</u>	-40    mV

## WELL MONITORING DATA SHEET

Project #: 141016-J01	Client: The Source Group
Sampler: ND	Date: 10/16/14
Well I.D.: E-6	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 18.25	Depth to Water (DTW): 8.47
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.42	

Purge Method: Bailer (Disposable Bailer) Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer (Disposable Bailer) Extraction Port Dedicated Tubing Other: _____
--	--	---

$1.6 \text{ (Gals.)} \times 3 = 4.8 \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1235	21.1	7.20	1162	477	1.6	
1245	21.1	7.09	1155	856	3.2	
1255	21.2	7.03	1159	860	4.8	

Did well dewater?    Yes    No                      Gallons actually evacuated: 4.8

Sampling Date: 10/16/14      Sampling Time: 1300      Depth to Water: 9.90

Sample I.D.: E-6                      Laboratory: Kiff    CalScience    Other: Acv test

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see COC

EB I.D. (if applicable): @ Time                      Duplicate I.D. (if applicable):

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:

D.O. (if req'd): (Pre-purge)	1.34	mg/L	(Post-purge)	1.09	mg/L
O.R.P. (if req'd): (Pre-purge)	-66	mV	(Post-purge)	-72	mV

# WELL MONITORING DATA SHEET

Project #: 141016-10	Client: SGE
Sampler: S2	Date: 10-16-14
Well I.D.: E-7	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 10.15	Depth to Water (DTW): 8.58
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.49	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other: <u>  </u>	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: <u>  </u>
---	---	---

1.5	(Gals.) X	3	=	4.5	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1345	21.2	6.77	904	627	1.5	odor
1348	21.6	6.76	900	636	3.0	" "
1351	21.5	6.74	897	646	4.5	" "

Did well dewater? Yes  No  Gallons actually evacuated: 4.5

Sampling Date: 10-16-14 Sampling Time: 1355 Depth to Water:   

Sample I.D.: E-7 Laboratory: Kiff CalScience Other: Accutest

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:   

D.O. (if req'd):	<u>Pre-purge:</u> 0.64 mg/L	<u>Post-purge:</u> 0.52 mg/L	
O.R.P. (if req'd):	<u>Pre-purge:</u> -117 mV	<u>Post-purge:</u> -86 mV	

# WELL MONITORING DATA SHEET

Project #: 141016-SD1	Client: SGI
Sampler: SD	Date: 10-16-14
Well I.D.: E-8	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 17.94	Depth to Water (DTW): 8.60
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.46	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
                          Disposable Bailer      Peristaltic      Disposable Bailer  
                          Positive Air Displacement      Extraction Pump      Extraction Port  
                          Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

1.5 (Gals.) X 3 = 4.5 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1320	20.9	6.69	1492	426	1.5	
1322	21.2	6.68	1497	626	3.0	
1326	21.4	6.67	1499	670	4.5	

Did well dewater?    Yes    No      Gallons actually evacuated: 4.5

Sampling Date: 10-16-14    Sampling Time: 1330    Depth to Water: 8.77

Sample I.D.: E-8      Laboratory: Kiff    CalScience    Other: AcuteTest

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: See cap

EB I.D. (if applicable): @ \_\_\_\_\_      Duplicate I.D. (if applicable): Dup-1 @ 1335

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd): <u>Pre-purge:</u> 0.77 mg/L	D.O. (if req'd): <u>Post-purge:</u> 0.76 mg/L
O.R.P. (if req'd): <u>Pre-purge:</u> -112 mV	O.R.P. (if req'd): <u>Post-purge:</u> -100 mV



## WELL MONITORING DATA SHEET

Project #: 141016-301	Client: The Sarc Group
Sampler: MM	Date: 10-16-14
Well I.D.: E-12	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 17.70	Depth to Water (DTW): 7.82
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.79	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

1.6 (Gals.) X	3	= 4.8 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1326	22.2	7.48	962	584	1.6	cloudy
1328	21.9	7.32	962	>1000	3.2	↓
1331	21.6	7.27	961	>1000	4.8	↓

Did well dewater? Yes  No      Gallons actually evacuated: 5

Sampling Date: 10-16-14      Sampling Time: 1333      Depth to Water: 8.03

Sample I.D.: E-12      Laboratory: Kiff CalScience Other Accutest

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see coc

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	1.06 mg/L	Post-purge:	1.25 mg/L
O.R.P. (if req'd):	Pre-purge:	-9 mV	Post-purge:	11 mV

## WELL MONITORING DATA SHEET

Project #: <i>41010-301</i>	Client: <i>The Sorce Group</i>
Sampler: <i>MM</i>	Date: <i>10-16-14</i>
Well I.D.: <i>AS-10</i>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <i>32.94</i>	Depth to Water (DTW): <i>8.37</i>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <i>13.28</i>	

Purge Method:  Bailer       Waterra      Sampling Method:  Bailer  
 Disposable Bailer       Peristaltic       Disposable Bailer  
 Positive Air Displacement       Extraction Pump       Extraction Port  
 Electric Submersible       Other \_\_\_\_\_       Dedicated Tubing

Other: \_\_\_\_\_

<i>4</i> (Gals.) X	<i>3</i> Specified Volumes	= <i>12</i> Gals. Calculated Volume
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
<i>1223</i>	<i>21.3</i>	<i>7.07</i>	<i>4285</i>	<i>46</i>	<i>4</i>	<i>slightly cloudy</i>
<i>1227</i>	<i>20.9</i>	<i>7.17</i>	<i>2446</i>	<i>56</i>	<i>8</i>	
<i>1232</i>	<i>20.7</i>	<i>7.20</i>	<i>2412</i>	<i>59</i>	<i>12</i>	↓

Did well dewater? Yes  No Gallons actually evacuated: *12*

Sampling Date: *10-16-14* Sampling Time: *1235* Depth to Water: *8.49*

Sample I.D.: *AS-10* Laboratory: Kiff CalScience Other *Accutest*

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: *see col*

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	<i>1.06</i> mg/L	Post-purge:	<i>1.70</i> mg/L
O.R.P. (if req'd):	Pre-purge:	<i>183</i> mV	Post-purge:	<i>171</i> mV



# WELLHEAD INSPECTION CHECKLIST

Client SGE Date 10-16-14

Site Address 9201 San Leandro St Oakland CA.

Job Number 141016-J01 Technician JO/ND/MRI

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
E-5	X							
E-6	X							
E-7	X					X		
E-8						X		
E-9						X		
E-10		unable to locate						
E-11		unable to locate						
E-12						X		
AS-15						X		
AS-10						X		
ASMWZS						X		
ASMWZD						X		

NOTES: E-8 - 2/2 Bolts, E-9 1/2 tabs, -1/2 tabs, E-12  
2/2 Bolts, ASMWZS - 2/2 Bolts, ASMWZD - 2/2 Bolts, AS-15 1/2  
broken, AS-10 - 1/2 Bolts.

# WELLHEAD INSPECTION CHECKLIST

Client SGT Date 10-16-14

Site Address 9201 San Leandro St Oakland ca

Job Number 141016-501 Technician JRIND/MM

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1								
MW-2								
MW-3						X		
MW-4								
MW-5						X		
MW-6	X							
MW-7	X							
MW-8						Unable to locate		
MW-9	X							
MW-10	X							
MW-11	X							
MW-12	X							
E-1						X		
E-2						X		
E-3						X		
E-4	X							

NOTES: MW-5 No well lid MW-3 No well lid, well filled w/ dirt.  
E-1 - 212 Bolts E-2 - 1/2 Tabs Stopped, E-3 1/2 Tabs stopped

# BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE  
 SAN JOSE, CALIFORNIA 95112-1105  
 FAX (408) 573-7771  
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB ACCUTEST DHS #  
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND  
 EPA  RWQCB REGION  
 LIA  
 OTHER

CHAIN OF CUSTODY  
 BTS # 14166-301  
 CLIENT The Source Group  
 SITE Paco Pumps  
 9201 San Leandro St.  
 Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPH-g (8260B)	VOC's (8260B)	TPH-d / TPH-mo w/SGC (8015M)	PCB's (8082)						
		X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							

SPECIAL INSTRUCTIONS  
 Invoice and Report to : The Source Group  
 Attn: Paul Parmentier pparmentier@thesourcegroup.net  
 (562)597-1055 ext106  
 PO #: 04-PFT-001  
 Geotracker EDD files required

SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS		C	TPH-g (8260B)	VOC's (8260B)	TPH-d / TPH-mo w/SGC (8015M)	PCB's (8082)						
			S=SOIL W=H <sub>2</sub> O	TOTAL												
E-2	10-16-14	1225	W	2	AL Ag B				X							
E-3		1425		5	Mixed		X	X	X							
E-5		1345					X	X	X							
E-6		1300					X	X	X							
E-7		1355					X	X	X							
E-8		1330					X	X	X							
E-9		1405					X	X	X							
<del>E-10</del>		1333					X	X	X							
AS-10		1235					X	X	X							
Dup-1		1335					X	X	X							

ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #

SAMPLING COMPLETED 10-16-14 1530 SAMPLING PERFORMED BY J. CRT RESULTS NEEDED NO LATER THAN Standard TAT

RELEASED BY [Signature] DATE 10-16-14 TIME 1620 RECEIVED BY [Signature] DATE 10/16/14 TIME 1620

RELEASED BY [Signature] DATE [ ] TIME [ ] RECEIVED BY [Signature] DATE [ ] TIME [ ]

RELEASED BY [Signature] DATE [ ] TIME [ ] RECEIVED BY [Signature] DATE [ ] TIME [ ]

SHIPPED VIA DATE SENT TIME SENT COOLER #





**APPENDIX H**  
**LABORATORY ANALYTICAL DATA**

**Technical Report for**

**The Source Group - Pleasant Hill**

**T0600101592 - Paco Pumps**

**Accutest Job Number: C36561**

**Sampling Date: 10/16/14**

**Report to:**

**The Source Group**  
**pparmentier@thesourcegroup.net; pjorgensen@thesourcegroup.net**

**ATTN: Paul Parmentier**

**Total number of pages in report: 108**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



**James J. Rhudy**  
**Lab Director**

**Client Service contact: Tony Vega 408-588-0200**

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)  
DoD ELAP (L-A-B L2242)

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Test results relate only to samples analyzed.

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## Sample Summary

The Source Group - Pleasant Hill

Job No: C36561

T0600101592 - Paco Pumps

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C36561-1	10/16/14	10:40 JO	10/16/14	AQ	Ground Water	MW-1
C36561-2	10/16/14	13:00 JO	10/16/14	AQ	Ground Water	MW-2
C36561-3	10/16/14	13:16 JO	10/16/14	AQ	Ground Water	MW-4
C36561-4	10/16/14	11:15 JO	10/16/14	AQ	Ground Water	MW-5
C36561-5	10/16/14	14:45 JO	10/16/14	AQ	Ground Water	MW-6
C36561-6	10/16/14	11:40 JO	10/16/14	AQ	Ground Water	MW-7
C36561-7	10/16/14	12:10 JO	10/16/14	AQ	Ground Water	MW-9
C36561-8	10/16/14	10:55 JO	10/16/14	AQ	Ground Water	MW-10
C36561-9	10/16/14	10:30 JO	10/16/14	AQ	Ground Water	MW-11
C36561-10	10/16/14	12:30 JO	10/16/14	AQ	Ground Water	MW-12
C36561-11	10/16/14	12:25 JO	10/16/14	AQ	Ground Water	E-2
C36561-12	10/16/14	14:25 JO	10/16/14	AQ	Ground Water	E-3
C36561-13	10/16/14	13:45 JO	10/16/14	AQ	Ground Water	E-5



## Sample Summary

(continued)

The Source Group - Pleasant Hill

**Job No:** C36561

T0600101592 - Paco Pumps

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C36561-14	10/16/14	13:00 JO	10/16/14	AQ	Ground Water	E-6
C36561-15	10/16/14	13:55 JO	10/16/14	AQ	Ground Water	E-7
C36561-16	10/16/14	13:30 JO	10/16/14	AQ	Ground Water	E-8
C36561-17	10/16/14	14:05 JO	10/16/14	AQ	Ground Water	E-9
C36561-18	10/16/14	13:33 JO	10/16/14	AQ	Ground Water	E-12
C36561-19	10/16/14	12:35 JO	10/16/14	AQ	Ground Water	AS-10
C36561-20	10/16/14	13:35 JO	10/16/14	AQ	Ground Water	DUP-1

## Summary of Hits

**Job Number:** C36561  
**Account:** The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps  
**Collected:** 10/16/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>C36561-1</b>	<b>MW-1</b>					
TPH (C10-C28)		0.0715 J	0.094	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0832 J	0.19	0.047	mg/l	SW846 8015B M
<b>C36561-2</b>	<b>MW-2</b>					
TPH (C10-C28)		0.134	0.097	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.195	0.19	0.049	mg/l	SW846 8015B M
<b>C36561-3</b>	<b>MW-4</b>					
Benzene		6.3	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene		0.49 J	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene		0.32 J	1.0	0.20	ug/l	SW846 8260B
Naphthalene		0.51 J	5.0	0.50	ug/l	SW846 8260B
n-Propylbenzene		0.87 J	2.0	0.20	ug/l	SW846 8260B
Toluene		0.29 J	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		66.2	50	25	ug/l	SW846 8260B
TPH (C10-C28)		0.0286 J	0.094	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0720 J	0.19	0.047	mg/l	SW846 8015B M
<b>C36561-4</b>	<b>MW-5</b>					
TPH (C10-C28)		0.157	0.10	0.025	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0944 J	0.20	0.050	mg/l	SW846 8015B M
<b>C36561-5</b>	<b>MW-6</b>					
Benzene		469	10	2.0	ug/l	SW846 8260B
sec-Butylbenzene		4.1 J	20	2.0	ug/l	SW846 8260B
tert-Butylbenzene		4.7 J	20	2.8	ug/l	SW846 8260B
1,2-Dichloroethane		41.8	10	2.0	ug/l	SW846 8260B
Ethylbenzene		57.2	10	2.0	ug/l	SW846 8260B
Isopropylbenzene		10.9	10	2.0	ug/l	SW846 8260B
p-Isopropyltoluene		2.4 J	20	2.0	ug/l	SW846 8260B
Methylene chloride		22.8 J	100	20	ug/l	SW846 8260B
Naphthalene		9.8 J	50	5.0	ug/l	SW846 8260B
n-Propylbenzene		28.3	20	2.0	ug/l	SW846 8260B
Tert-Butyl Alcohol		57.1 J	100	24	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		47.5	20	2.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		3.5 J	20	2.0	ug/l	SW846 8260B
Toluene		19.8	10	2.0	ug/l	SW846 8260B
Xylene (total)		14.8 J	20	4.6	ug/l	SW846 8260B
TPH-GRO (C6-C10)		2460	500	250	ug/l	SW846 8260B

## Summary of Hits

**Job Number:** C36561  
**Account:** The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps  
**Collected:** 10/16/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TPH (C10-C28)		1.13	0.094	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.200	0.19	0.047	mg/l	SW846 8015B M
<b>C36561-6 MW-7</b>						
TPH (C10-C28)		0.0706 J	0.095	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.140 J	0.19	0.048	mg/l	SW846 8015B M
<b>C36561-7 MW-9</b>						
1,2-Dichloroethane		0.85 J	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether		0.91 J	1.0	0.20	ug/l	SW846 8260B
TPH (C10-C28)		0.0245 J	0.096	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0582 J	0.19	0.048	mg/l	SW846 8015B M
<b>C36561-8 MW-10</b>						
TPH (C10-C28)		0.0807 J	0.094	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0789 J	0.19	0.047	mg/l	SW846 8015B M
<b>C36561-9 MW-11</b>						
TPH (C10-C28)		0.227	0.10	0.025	mg/l	SW846 8015B M
TPH (> C28-C40)		0.129 J	0.20	0.050	mg/l	SW846 8015B M
<b>C36561-10 MW-12</b>						
1,2-Dichloroethane		0.40 J	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether		0.28 J	1.0	0.20	ug/l	SW846 8260B
TPH (C10-C28)		0.0399 J	0.10	0.025	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0631 J	0.20	0.050	mg/l	SW846 8015B M
<b>C36561-11 E-2</b>						
TPH (C10-C28)		0.780	0.094	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)		1.08	0.19	0.047	mg/l	SW846 8015B M
<b>C36561-12 E-3</b>						
Acetone		8.6 J	20	4.0	ug/l	SW846 8260B
Benzene		3.3	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene		0.61 J	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		1.4 J	2.0	0.20	ug/l	SW846 8260B
Tert-Butyl Alcohol		4.5 J	10	2.4	ug/l	SW846 8260B
TPH-GRO (C6-C10)		355	50	25	ug/l	SW846 8260B

## Summary of Hits

**Job Number:** C36561  
**Account:** The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps  
**Collected:** 10/16/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TPH (C10-C28)		106	19	4.7	mg/l	SW846 8015B M
TPH (> C28-C40)		153	38	9.4	mg/l	SW846 8015B M

**C36561-13 E-5**

Acetone		4.8 J	20	4.0	ug/l	SW846 8260B
Methyl Tert Butyl Ether		0.42 J	1.0	0.20	ug/l	SW846 8260B
TPH (C10-C28)		25.3	3.8	0.94	mg/l	SW846 8015B M
TPH (> C28-C40)		32.5	7.5	1.9	mg/l	SW846 8015B M

**C36561-14 E-6**

Acetone		5.9 J	20	4.0	ug/l	SW846 8260B
Benzene		0.30 J	1.0	0.20	ug/l	SW846 8260B
tert-Butylbenzene		1.6 J	2.0	0.28	ug/l	SW846 8260B
Ethylbenzene		0.24 J	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether		0.45 J	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		0.24 J	2.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		135	50	25	ug/l	SW846 8260B
TPH (C10-C28)		1.66	0.47	0.12	mg/l	SW846 8015B M
TPH (> C28-C40)		1.85	0.94	0.24	mg/l	SW846 8015B M

**C36561-15 E-7**

Acetone <sup>a</sup>		15.6 J	20	4.0	ug/l	SW846 8260B
Benzene <sup>a</sup>		86.4	1.0	0.20	ug/l	SW846 8260B
n-Butylbenzene <sup>a</sup>		0.72 J	2.0	0.20	ug/l	SW846 8260B
sec-Butylbenzene <sup>a</sup>		0.41 J	2.0	0.20	ug/l	SW846 8260B
1,2-Dichloroethane <sup>a</sup>		1.3	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene <sup>a</sup>		12.2	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene <sup>a</sup>		2.7	1.0	0.20	ug/l	SW846 8260B
p-Isopropyltoluene <sup>a</sup>		0.21 J	2.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether <sup>a</sup>		1.4	1.0	0.20	ug/l	SW846 8260B
Naphthalene <sup>a</sup>		6.1	5.0	0.50	ug/l	SW846 8260B
n-Propylbenzene <sup>a</sup>		5.8	2.0	0.20	ug/l	SW846 8260B
1,2,4-Trimethylbenzene <sup>a</sup>		15.8	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene <sup>a</sup>		0.89 J	2.0	0.20	ug/l	SW846 8260B
Toluene <sup>a</sup>		17.7	1.0	0.20	ug/l	SW846 8260B
Xylene (total) <sup>a</sup>		33.7	2.0	0.46	ug/l	SW846 8260B
TPH-GRO (C6-C10) <sup>a</sup>		724	50	25	ug/l	SW846 8260B
TPH (C10-C28)		7.92	1.9	0.48	mg/l	SW846 8015B M
TPH (> C28-C40)		14.1	3.8	0.96	mg/l	SW846 8015B M

## Summary of Hits

**Job Number:** C36561  
**Account:** The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps  
**Collected:** 10/16/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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**C36561-16 E-8**

Benzene	385	10	2.0	ug/l	SW846 8260B
sec-Butylbenzene	2.2 J	20	2.0	ug/l	SW846 8260B
Ethylbenzene	172	10	2.0	ug/l	SW846 8260B
Isopropylbenzene	17.3	10	2.0	ug/l	SW846 8260B
Naphthalene	44.1 J	50	5.0	ug/l	SW846 8260B
n-Propylbenzene	38.6	20	2.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	112	20	2.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	20.1	20	2.0	ug/l	SW846 8260B
Toluene	8.2 J	10	2.0	ug/l	SW846 8260B
Xylene (total)	139	20	4.6	ug/l	SW846 8260B
TPH-GRO (C6-C10)	4090	500	250	ug/l	SW846 8260B
TPH (C10-C28)	1.12	0.29	0.074	mg/l	SW846 8015B M
TPH (> C28-C40)	1.03	0.59	0.15	mg/l	SW846 8015B M

**C36561-17 E-9**

Benzene	2460	100	20	ug/l	SW846 8260B
Ethylbenzene	595	100	20	ug/l	SW846 8260B
Isopropylbenzene	78.7 J	100	20	ug/l	SW846 8260B
Naphthalene	628	500	50	ug/l	SW846 8260B
n-Propylbenzene	220	200	20	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	3110	200	20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	734	200	20	ug/l	SW846 8260B
Toluene	2250	100	20	ug/l	SW846 8260B
Xylene (total)	3110	200	46	ug/l	SW846 8260B
TPH-GRO (C6-C10)	39300	5000	2500	ug/l	SW846 8260B
TPH (C10-C28)	4.91	0.48	0.12	mg/l	SW846 8015B M
TPH (> C28-C40)	0.490 J	0.96	0.24	mg/l	SW846 8015B M

**C36561-18 E-12**

Benzene	9.0	1.0	0.20	ug/l	SW846 8260B
n-Butylbenzene	0.29 J	2.0	0.20	ug/l	SW846 8260B
Ethylbenzene	1.4	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene	0.64 J	1.0	0.20	ug/l	SW846 8260B
Naphthalene	0.76 J	5.0	0.50	ug/l	SW846 8260B
n-Propylbenzene	1.7 J	2.0	0.20	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	0.24 J	2.0	0.20	ug/l	SW846 8260B
Toluene	0.24 J	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)	113	50	25	ug/l	SW846 8260B
TPH (C10-C28)	0.0314 J	0.096	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)	0.0485 J	0.19	0.048	mg/l	SW846 8015B M

## Summary of Hits

**Job Number:** C36561  
**Account:** The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps  
**Collected:** 10/16/14

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Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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**C36561-19 AS-10**

Benzene	0.34 J	1.0	0.20	ug/l	SW846 8260B
TPH (C10-C28)	0.0392 J	0.094	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)	0.0551 J	0.19	0.047	mg/l	SW846 8015B M

**C36561-20 DUP-1**

Benzene	398	10	2.0	ug/l	SW846 8260B
sec-Butylbenzene	2.2 J	20	2.0	ug/l	SW846 8260B
Ethylbenzene	180	10	2.0	ug/l	SW846 8260B
Isopropylbenzene	18.1	10	2.0	ug/l	SW846 8260B
Naphthalene	47.5 J	50	5.0	ug/l	SW846 8260B
n-Propylbenzene	41.0	20	2.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	119	20	2.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	21.7	20	2.0	ug/l	SW846 8260B
Toluene	8.7 J	10	2.0	ug/l	SW846 8260B
Xylene (total)	145	20	4.6	ug/l	SW846 8260B
TPH-GRO (C6-C10)	4390	500	250	ug/l	SW846 8260B
TPH (C10-C28)	0.649	0.095	0.024	mg/l	SW846 8015B M
TPH (> C28-C40)	0.458	0.19	0.048	mg/l	SW846 8015B M

(a) Sample vial contained more than 0.5cm of sediment.



Sample Results

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Report of Analysis

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## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> MW-1	
<b>Lab Sample ID:</b> C36561-1	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317976.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0715	0.094	0.024	mg/l	J
	TPH (> C28-C40)	0.0832	0.19	0.047	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	83%		32-124%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> MW-2	
<b>Lab Sample ID:</b> C36561-2	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317977.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.134	0.097	0.024	mg/l	
	TPH (> C28-C40)	0.195	0.19	0.049	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		32-124%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MW-4		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-3		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29693.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	6.3	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-3		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.49	1.0	0.20	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	0.32	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	0.51	5.0	0.50	ug/l	J
103-65-1	n-Propylbenzene	0.87	2.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	0.29	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	66.2	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4 <b>Lab Sample ID:</b> C36561-3 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> T0600101592 - Paco Pumps	<b>Date Sampled:</b> 10/16/14 <b>Date Received:</b> 10/16/14 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-4	<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-3	<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317978.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0286	0.094	0.024	mg/l	J
	TPH (> C28-C40)	0.0720	0.19	0.047	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		32-124%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.4  
3

<b>Client Sample ID:</b> MW-5	
<b>Lab Sample ID:</b> C36561-4	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317979.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.157	0.10	0.025	mg/l	
	TPH (> C28-C40)	0.0944	0.20	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	100%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-5		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q24637.D	10	10/23/14	BQ	n/a	n/a	VQ1039
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	40	ug/l	
71-43-2	Benzene	469	10	2.0	ug/l	
108-86-1	Bromobenzene	ND	10	2.0	ug/l	
74-97-5	Bromochloromethane	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.0	ug/l	
75-25-2	Bromoform	ND	10	2.2	ug/l	
104-51-8	n-Butylbenzene	ND	20	2.0	ug/l	
135-98-8	sec-Butylbenzene	4.1	20	2.0	ug/l	J
98-06-6	tert-Butylbenzene	4.7	20	2.8	ug/l	J
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	10	2.0	ug/l	
67-66-3	Chloroform	ND	10	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	2.0	ug/l	
106-43-4	p-Chlorotoluene	ND	20	2.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	4.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	41.8	10	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	2.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	20	2.2	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	10	2.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	10	2.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	10	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> MW-6		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-5		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	57.2	10	2.0	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	20	2.2	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	2.0	ug/l	
98-82-8	Isopropylbenzene	10.9	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	2.4	20	2.0	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	100	10	ug/l	
74-83-9	Methyl bromide	ND	20	2.0	ug/l	
74-87-3	Methyl chloride	ND	10	3.0	ug/l	
74-95-3	Methylene bromide	ND	10	2.0	ug/l	
75-09-2	Methylene chloride	22.8	100	20	ug/l	J
78-93-3	Methyl ethyl ketone	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.0	ug/l	
91-20-3	Naphthalene	9.8	50	5.0	ug/l	J
103-65-1	n-Propylbenzene	28.3	20	2.0	ug/l	
100-42-5	Styrene	ND	10	2.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	20	4.0	ug/l	
75-65-0	Tert-Butyl Alcohol	57.1	100	24	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.2	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	47.5	20	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	3.5	20	2.0	ug/l	J
127-18-4	Tetrachloroethylene	ND	10	3.0	ug/l	
108-88-3	Toluene	19.8	10	2.0	ug/l	
79-01-6	Trichloroethylene	ND	10	2.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
75-01-4	Vinyl chloride	ND	10	2.0	ug/l	
1330-20-7	Xylene (total)	14.8	20	4.6	ug/l	J
	TPH-GRO (C6-C10)	2460	500	250	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-5		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6	
<b>Lab Sample ID:</b> C36561-5	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317981.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.13	0.094	0.024	mg/l	
	TPH (> C28-C40)	0.200	0.19	0.047	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	93%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

3.6  
3

<b>Client Sample ID:</b> MW-7	
<b>Lab Sample ID:</b> C36561-6	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317982.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0706	0.095	0.024	mg/l	J
	TPH (> C28-C40)	0.140	0.19	0.048	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-9		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-7		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29695.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	0.85	1.0	0.20	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MW-9		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-7		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.91	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-9		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-7		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-9		
<b>Lab Sample ID:</b> C36561-7		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317983.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0245	0.096	0.024	mg/l	J
	TPH (> C28-C40)	0.0582	0.19	0.048	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	76%		32-124%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> MW-10	<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-8	<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29696.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> MW-10		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-8		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MW-10		
<b>Lab Sample ID:</b> C36561-8		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8082 SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP038492.D	1	10/20/14	RV	10/20/14	OP11009	GPP1240
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

### PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.097	0.019	ug/l	
11104-28-2	Aroclor 1221	ND	0.097	0.049	ug/l	
11141-16-5	Aroclor 1232	ND	0.097	0.049	ug/l	
53469-21-9	Aroclor 1242	ND	0.097	0.049	ug/l	
12672-29-6	Aroclor 1248	ND	0.097	0.049	ug/l	
11097-69-1	Aroclor 1254	ND	0.097	0.049	ug/l	
11096-82-5	Aroclor 1260	ND	0.097	0.029	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		27-112%
877-09-8	Tetrachloro-m-xylene	59%		27-112%
2051-24-3	Decachlorobiphenyl	74%		32-136%
2051-24-3	Decachlorobiphenyl	86%		32-136%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-10	<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-8	<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317984.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0807	0.094	0.024	mg/l	J
	TPH (> C28-C40)	0.0789	0.19	0.047	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	72%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-11		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-9		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29697.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> MW-11		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-9		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> MW-11		
<b>Lab Sample ID:</b> C36561-9		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8082 SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP038493.D	1	10/20/14	RV	10/20/14	OP11009	GPP1240
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

**PCB List**

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.10	0.020	ug/l	
11104-28-2	Aroclor 1221	ND	0.10	0.050	ug/l	
11141-16-5	Aroclor 1232	ND	0.10	0.050	ug/l	
53469-21-9	Aroclor 1242	ND	0.10	0.050	ug/l	
12672-29-6	Aroclor 1248	ND	0.10	0.050	ug/l	
11097-69-1	Aroclor 1254	ND	0.10	0.050	ug/l	
11096-82-5	Aroclor 1260	ND	0.10	0.030	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	60%		27-112%
877-09-8	Tetrachloro-m-xylene	56%		27-112%
2051-24-3	Decachlorobiphenyl	67%		32-136%
2051-24-3	Decachlorobiphenyl	71%		32-136%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> MW-11	
<b>Lab Sample ID:</b> C36561-9	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317985.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.227	0.10	0.025	mg/l	
	TPH (> C28-C40)	0.129	0.20	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	65%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-12		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-10		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29698.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	0.40	1.0	0.20	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-12		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-10		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.28	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-12		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-10		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-12	<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-10	<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317986.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0399	0.10	0.025	mg/l	J
	TPH (> C28-C40)	0.0631	0.20	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	88%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-2	
<b>Lab Sample ID:</b> C36561-11	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH317987.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.780	0.094	0.024	mg/l	
	TPH (> C28-C40)	1.08	0.19	0.047	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	71%		32-124%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-3		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-12		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q24638.D	1	10/23/14	BQ	n/a	n/a	VQ1039
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.6	20	4.0	ug/l	J
71-43-2	Benzene	3.3	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> E-3		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-12		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	0.61	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	1.4	2.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	4.5	10	2.4	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	355	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-3		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-12		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-3		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-12		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318015.D	200	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	106	19	4.7	mg/l	
	TPH (> C28-C40)	153	38	9.4	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	98%		32-124%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-5		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-13		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29700.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.8	20	4.0	ug/l	J
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-5		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-13		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.42	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-5 <b>Lab Sample ID:</b> C36561-13 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> T0600101592 - Paco Pumps	<b>Date Sampled:</b> 10/16/14 <b>Date Received:</b> 10/16/14 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-5	<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-13	<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318016.D	40	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	25.3	3.8	0.94	mg/l	
	TPH (> C28-C40)	32.5	7.5	1.9	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	66%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-6		
<b>Lab Sample ID:</b> C36561-14		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29701.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.9	20	4.0	ug/l	J
71-43-2	Benzene	0.30	1.0	0.20	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	1.6	2.0	0.28	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> E-6		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-14		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.24	1.0	0.20	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.45	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	0.24	2.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	135	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-6 <b>Lab Sample ID:</b> C36561-14 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> T0600101592 - Paco Pumps	<b>Date Sampled:</b> 10/16/14 <b>Date Received:</b> 10/16/14 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-6		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-14		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318017.D	5	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.66	0.47	0.12	mg/l	
	TPH (> C28-C40)	1.85	0.94	0.24	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	72%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-7		
<b>Lab Sample ID:</b> C36561-15		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	R29702.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	15.6	20	4.0	ug/l	J
71-43-2	Benzene	86.4	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	0.72	2.0	0.20	ug/l	J
135-98-8	sec-Butylbenzene	0.41	2.0	0.20	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	1.3	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> E-7 <b>Lab Sample ID:</b> C36561-15 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> T0600101592 - Paco Pumps	<b>Date Sampled:</b> 10/16/14 <b>Date Received:</b> 10/16/14 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

- (a) Sample vial contained more than 0.5cm of sediment.
- (b) CCV outside of control limits (biased high); not detected in sample.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-7	
<b>Lab Sample ID:</b> C36561-15	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318018.D	20	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	7.92	1.9	0.48	mg/l	
	TPH (> C28-C40)	14.1	3.8	0.96	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	63%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> E-8		
<b>Lab Sample ID:</b> C36561-16		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29704.D	10	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	40	ug/l	
71-43-2	Benzene	385	10	2.0	ug/l	
108-86-1	Bromobenzene	ND	10	2.0	ug/l	
74-97-5	Bromochloromethane	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.0	ug/l	
75-25-2	Bromoform	ND	10	2.2	ug/l	
104-51-8	n-Butylbenzene	ND	20	2.0	ug/l	
135-98-8	sec-Butylbenzene	2.2	20	2.0	ug/l	J
98-06-6	tert-Butylbenzene	ND	20	2.8	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	10	2.0	ug/l	
67-66-3	Chloroform	ND	10	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	2.0	ug/l	
106-43-4	p-Chlorotoluene	ND	20	2.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	20	4.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	2.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	20	2.2	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	10	2.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	10	2.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	10	2.0	ug/l	

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> E-8		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-16		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	172	10	2.0	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	20	2.2	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	2.0	ug/l	
98-82-8	Isopropylbenzene	17.3	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	100	10	ug/l	
74-83-9	Methyl bromide	ND	20	2.0	ug/l	
74-87-3	Methyl chloride	ND	10	3.0	ug/l	
74-95-3	Methylene bromide	ND	10	2.0	ug/l	
75-09-2	Methylene chloride	ND	100	20	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.0	ug/l	
91-20-3	Naphthalene	44.1	50	5.0	ug/l	J
103-65-1	n-Propylbenzene	38.6	20	2.0	ug/l	
100-42-5	Styrene	ND	10	2.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	20	4.0	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	100	24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.2	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	112	20	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	20.1	20	2.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	3.0	ug/l	
108-88-3	Toluene	8.2	10	2.0	ug/l	J
79-01-6	Trichloroethylene	ND	10	2.0	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	10	2.0	ug/l	
75-01-4	Vinyl chloride	ND	10	2.0	ug/l	
1330-20-7	Xylene (total)	139	20	4.6	ug/l	
	TPH-GRO (C6-C10)	4090	500	250	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-8 <b>Lab Sample ID:</b> C36561-16 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> T0600101592 - Paco Pumps	<b>Date Sampled:</b> 10/16/14 <b>Date Received:</b> 10/16/14 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-8	
<b>Lab Sample ID:</b> C36561-16	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318019.D	3	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.12	0.29	0.074	mg/l	
	TPH (> C28-C40)	1.03	0.59	0.15	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	64%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-9		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-17		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29707.D	100	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	400	ug/l	
71-43-2	Benzene	2460	100	20	ug/l	
108-86-1	Bromobenzene	ND	100	20	ug/l	
74-97-5	Bromochloromethane	ND	100	20	ug/l	
75-27-4	Bromodichloromethane	ND	100	20	ug/l	
75-25-2	Bromoform	ND	100	22	ug/l	
104-51-8	n-Butylbenzene	ND	200	20	ug/l	
135-98-8	sec-Butylbenzene	ND	200	20	ug/l	
98-06-6	tert-Butylbenzene	ND	200	28	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	100	20	ug/l	
67-66-3	Chloroform	ND	100	20	ug/l	
95-49-8	o-Chlorotoluene	ND	200	20	ug/l	
106-43-4	p-Chlorotoluene	ND	200	26	ug/l	
56-23-5	Carbon tetrachloride	ND	100	20	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	20	ug/l	
563-58-6	1,1-Dichloropropene	ND	100	20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	200	40	ug/l	
106-93-4	1,2-Dibromoethane	ND	100	20	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	20	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	20	ug/l	
142-28-9	1,3-Dichloropropane	ND	100	20	ug/l	
108-20-3	Di-Isopropyl ether	ND	200	22	ug/l	
594-20-7	2,2-Dichloropropane	ND	100	20	ug/l	
124-48-1	Dibromochloromethane	ND	100	20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	100	20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	20	ug/l	
541-73-1	m-Dichlorobenzene	ND	100	20	ug/l	
95-50-1	o-Dichlorobenzene	ND	100	20	ug/l	
106-46-7	p-Dichlorobenzene	ND	100	20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-9		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-17		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	100	20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	30	ug/l	
100-41-4	Ethylbenzene	595	100	20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	200	22	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
87-68-3	Hexachlorobutadiene	ND	200	20	ug/l	
98-82-8	Isopropylbenzene	78.7	100	20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	200	20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	1000	100	ug/l	
74-83-9	Methyl bromide	ND	200	20	ug/l	
74-87-3	Methyl chloride	ND	100	30	ug/l	
74-95-3	Methylene bromide	ND	100	20	ug/l	
75-09-2	Methylene chloride	ND	1000	200	ug/l	
78-93-3	Methyl ethyl ketone	ND	1000	200	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	20	ug/l	
91-20-3	Naphthalene	628	500	50	ug/l	
103-65-1	n-Propylbenzene	220	200	20	ug/l	
100-42-5	Styrene	ND	100	20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	200	40	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	1000	240	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	200	20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	200	20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	200	20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	3110	200	20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	734	200	20	ug/l	
127-18-4	Tetrachloroethylene	ND	100	30	ug/l	
108-88-3	Toluene	2250	100	20	ug/l	
79-01-6	Trichloroethylene	ND	100	20	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	100	20	ug/l	
75-01-4	Vinyl chloride	ND	100	20	ug/l	
1330-20-7	Xylene (total)	3110	200	46	ug/l	
	TPH-GRO (C6-C10)	39300	5000	2500	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-9		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-17		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-9	<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-17	<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318020.D	5	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	4.91	0.48	0.12	mg/l	
	TPH (> C28-C40)	0.490	0.96	0.24	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	62%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> E-12		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-18		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29705.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	9.0	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	0.29	2.0	0.20	ug/l	J
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





## Report of Analysis

<b>Client Sample ID:</b> E-12		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-18		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> E-12		
<b>Lab Sample ID:</b> C36561-18		<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318021.D	1	10/20/14	AG	10/16/14	OP10984	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0314	0.096	0.024	mg/l	J
	TPH (> C28-C40)	0.0485	0.19	0.048	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		32-124%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> AS-10		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-19		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29703.D	1	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	0.34	1.0	0.20	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> AS-10		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-19		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> DUP-1		<b>Date Sampled:</b> 10/16/14
<b>Lab Sample ID:</b> C36561-20		<b>Date Received:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592 - Paco Pumps		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R29706.D	10	10/22/14	BD	n/a	n/a	VR1106
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	40	ug/l	
71-43-2	Benzene	398	10	2.0	ug/l	
108-86-1	Bromobenzene	ND	10	2.0	ug/l	
74-97-5	Bromochloromethane	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.0	ug/l	
75-25-2	Bromoform	ND	10	2.2	ug/l	
104-51-8	n-Butylbenzene	ND	20	2.0	ug/l	
135-98-8	sec-Butylbenzene	2.2	20	2.0	ug/l	J
98-06-6	tert-Butylbenzene	ND	20	2.8	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	10	2.0	ug/l	
67-66-3	Chloroform	ND	10	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	2.0	ug/l	
106-43-4	p-Chlorotoluene	ND	20	2.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>a</sup>	ND	20	4.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	2.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	20	2.2	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	10	2.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	10	2.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	10	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	DUP-1	<b>Date Sampled:</b>	10/16/14
<b>Lab Sample ID:</b>	C36561-20	<b>Date Received:</b>	10/16/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600101592 - Paco Pumps		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	180	10	2.0	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	20	2.2	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	2.0	ug/l	
98-82-8	Isopropylbenzene	18.1	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	100	10	ug/l	
74-83-9	Methyl bromide	ND	20	2.0	ug/l	
74-87-3	Methyl chloride	ND	10	3.0	ug/l	
74-95-3	Methylene bromide	ND	10	2.0	ug/l	
75-09-2	Methylene chloride	ND	100	20	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.0	ug/l	
91-20-3	Naphthalene	47.5	50	5.0	ug/l	J
103-65-1	n-Propylbenzene	41.0	20	2.0	ug/l	
100-42-5	Styrene	ND	10	2.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	20	4.0	ug/l	
75-65-0	Tert-Butyl Alcohol <sup>a</sup>	ND	100	24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.2	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	119	20	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	21.7	20	2.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	3.0	ug/l	
108-88-3	Toluene	8.7	10	2.0	ug/l	J
79-01-6	Trichloroethylene	ND	10	2.0	ug/l	
75-69-4	Trichlorofluoromethane <sup>a</sup>	ND	10	2.0	ug/l	
75-01-4	Vinyl chloride	ND	10	2.0	ug/l	
1330-20-7	Xylene (total)	145	20	4.6	ug/l	
	TPH-GRO (C6-C10)	4390	500	250	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> DUP-1 <b>Lab Sample ID:</b> C36561-20 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> T0600101592 - Paco Pumps	<b>Date Sampled:</b> 10/16/14 <b>Date Received:</b> 10/16/14 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

(a) CCV outside of control limits (biased high); not detected in sample.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> DUP-1	
<b>Lab Sample ID:</b> C36561-20	<b>Date Sampled:</b> 10/16/14
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 10/16/14
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592 - Paco Pumps	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH318028.D	1	10/20/14	AG	10/20/14	OP11000	GHH1383
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.649	0.095	0.024	mg/l	
	TPH (> C28-C40)	0.458	0.19	0.048	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	51%		32-124%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555

## CONDUCT ANALYSIS TO DETECT

LAB ACCUTEST **C36561** | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
- LIA
- OTHER

RWQCB REGION

CHAIN OF CUSTODY  
BTS # 141016-201

CLIENT The Source Group

SITE Paco Pumps  
9201 San Leandro St.  
Oakland, CA

### SPECIAL INSTRUCTIONS

Invoice and Report to : The Source Group

Attn: Paul Parmentier pparmentier@thesourcegroup.net  
(562)597-1055 ext106

PO #: 04-PFT-001

Geotracker EDD files required

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W= H <sub>2</sub> O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS				ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
					TPH-g (8260B)	VOC's (8260B)	TPH-d / TPH-mo w/SGC (8015M)	PCB's (8082)				
1 MW-1	10-16-14	1040	L	2			X					
2 MW-2		1300		2			X					
3 MW-4		1310		84	X	X	X					
4 MW-5		1115		2			X					
5 MW-6		1445		5	X	X	X					
6 MW-7		1140		2			X					
7 MW-9		1210		5	X	X	X					
8 MW-10		1055		7	X	X	X	X				
9 MW-11		1030		7	X	X	X	X				
10 MW-12		1230		7	X	X	X	X				

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN	Standard TAT
	10-16-14	1530	JWZ		
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	10-16-15	1620	[Signature]	10/16/14	1620
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		

1 of 2

Temps: 4.3 - 0.1 = 4.2 / 3.3 - 0.1 = 3.2 / 4.6 - 0.1 = 4.5 / 3.9 - 0.1 = 3.8

C36561: Chain of Custody

Page 1 of 3

# BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1106  
FAX (408) 573-7771  
PHONE (408) 573-0555

## CONDUCT ANALYSIS TO DETECT

LAB ACCUTEST **C36561** DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
- LIA
- OTHER
- RWQCB REGION

### SPECIAL INSTRUCTIONS

Invoice and Report to : The Source Group

Attn: Paul Parmentier pparmentier@thesourcegroup.net  
(562)597-1055 ext106

PO #: 04-PFT-001

Geotracker EDD files required

CHAIN OF CUSTODY  
BTS # 141216-301

CLIENT The Source Group

SITE Paco Pumps  
9201 San Leandro St.  
Oakland, CA

C = COMPOSITE ALL CONTAINERS

- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W= H <sub>2</sub> O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT				ADDL INFORMATION	STATUS	CONDITION	LAB SAMPLE #
						TPH-g (8260B)	VOC's (8260B)	TPH-d / TPH-mo w/SGC (8015M)	PCB's (8082)				
E-2	10-16-14	1225	W	2	AL A+B			X					
E-3		1425		5	Mixed	X	X	X					
E-5		1345				X	X	X					
E-6		1300				X	X	X					
E-7		1355				X	X	X					
E-8		1330				X	X	X					
E-9		1405				X	X	X					
<del>E-10</del>		1333				X	X	X					
AS-10		1235				X	X	X					
Dup-1		1335				X	X	X					

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN	Standard TAT
	10-16-14	1530	J. Carter		
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	10-16-14	1620	<i>[Signature]</i>	10/16/14	1620
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		

2 of 2

Temp: 4.3-0.1 = 4.2    4.6-0.1 = 4.5  
3.3-0.1 = 3.2    3.9-0.1 = 3.8

4.1  
4

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C36561      **Client:** THE SOURCE GROUP      **Project:** PACO PUMPS  
**Date / Time Received:** 10/16/2014 4:20:00 PM      **Delivery Method:** Client      **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (4.3/4.2); #2: (3.3/3.2); #3: (4.6/4.5); #4: (3.9/3.8);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR2;	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	4	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments** Received 5 total bottles 2 ambers and 3 hcl vials for MW-12 9 (C36561-10)

4.1  
4

## GC/MS Volatiles

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5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-MB	R29689.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-MB	R29689.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-MB	R29689.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 70-130%
2037-26-5	Toluene-D8	98% 70-130%
460-00-4	4-Bromofluorobenzene	102% 70-130%

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-MB	Q24634.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-MB	Q24634.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-MB	Q24634.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 70-130%
2037-26-5	Toluene-D8	104% 70-130%
460-00-4	4-Bromofluorobenzene	103% 70-130%

5.1.2  
5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-BS	R29685.D	1	10/22/14	BD	n/a	n/a	VR1106
VR1106-BSD	R29686.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	76.6	96	75.7	95	1	38-159/24
71-43-2	Benzene	20	18.2	91	18.4	92	1	77-122/25
108-86-1	Bromobenzene	20	19.0	95	18.9	95	1	76-126/17
74-97-5	Bromochloromethane	20	18.5	93	18.8	94	2	77-130/17
75-27-4	Bromodichloromethane	20	21.3	107	21.6	108	1	75-127/16
75-25-2	Bromoform	20	19.4	97	19.6	98	1	69-141/17
104-51-8	n-Butylbenzene	20	20.3	102	19.8	99	2	72-129/18
135-98-8	sec-Butylbenzene	20	20.0	100	19.6	98	2	74-128/18
98-06-6	tert-Butylbenzene	20	20.2	101	19.9	100	1	73-127/18
108-90-7	Chlorobenzene	20	18.6	93	18.6	93	0	77-122/16
75-00-3	Chloroethane	20	20.5	103	20.7	104	1	69-133/18
67-66-3	Chloroform	20	19.8	99	20.2	101	2	74-126/17
95-49-8	o-Chlorotoluene	20	20.0	100	20.0	100	0	72-127/20
106-43-4	p-Chlorotoluene	20	20.4	102	20.0	100	2	68-127/18
56-23-5	Carbon tetrachloride	20	18.7	94	18.7	94	0	71-133/19
75-34-3	1,1-Dichloroethane	20	18.7	94	19.1	96	2	71-125/17
75-35-4	1,1-Dichloroethylene	20	15.8	79	16.2	81	2	66-125/20
563-58-6	1,1-Dichloropropene	20	18.2	91	18.3	92	1	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	20	24.2	121	24.5	123	1	65-131/20
106-93-4	1,2-Dibromoethane	20	20.1	101	20.3	102	1	75-135/17
107-06-2	1,2-Dichloroethane	20	21.2	106	21.6	108	2	71-131/17
78-87-5	1,2-Dichloropropane	20	18.8	94	18.9	95	1	78-124/16
142-28-9	1,3-Dichloropropane	20	19.5	98	19.8	99	2	78-123/16
108-20-3	Di-Isopropyl ether	20	19.2	96	19.7	99	3	68-129/17
594-20-7	2,2-Dichloropropane	20	20.7	104	21.0	105	1	70-131/19
124-48-1	Dibromochloromethane	20	21.3	107	21.7	109	2	76-132/16
75-71-8	Dichlorodifluoromethane	20	18.8	94	18.6	93	1	32-168/28
156-59-2	cis-1,2-Dichloroethylene	20	17.7	89	17.9	90	1	73-126/17
10061-01-5	cis-1,3-Dichloropropene	20	20.6	103	21.0	105	2	72-130/16
541-73-1	m-Dichlorobenzene	20	18.8	94	18.7	94	1	75-124/16
95-50-1	o-Dichlorobenzene	20	18.9	95	18.9	95	0	76-124/16
106-46-7	p-Dichlorobenzene	20	18.7	94	18.5	93	1	75-124/16
156-60-5	trans-1,2-Dichloroethylene	20	17.4	87	17.7	89	2	71-126/18
10061-02-6	trans-1,3-Dichloropropene	20	22.0	110	22.2	111	1	71-126/16
100-41-4	Ethylbenzene	20	19.7	99	19.6	98	1	76-126/17
637-92-3	Ethyl Tert Butyl Ether	20	20.9	105	21.5	108	3	75-134/17

\* = Outside of Control Limits.

5.2.1  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-BS	R29685.D	1	10/22/14	BD	n/a	n/a	VR1106
VR1106-BSD	R29686.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	90.7	113	92.7	116	2	67-150/22
87-68-3	Hexachlorobutadiene	20	20.9	105	20.4	102	2	69-135/20
98-82-8	Isopropylbenzene	20	20.1	101	20.1	101	0	61-125/17
99-87-6	p-Isopropyltoluene	20	20.4	102	20.2	101	1	68-127/18
108-10-1	4-Methyl-2-pentanone	80	86.7	108	89.8	112	4	71-142/21
74-83-9	Methyl bromide	20	20.9	105	21.3	107	2	68-132/18
74-87-3	Methyl chloride	20	18.7	94	19.4	97	4	39-150/28
74-95-3	Methylene bromide	20	20.2	101	20.6	103	2	77-127/16
75-09-2	Methylene chloride	20	18.9	95	19.4	97	3	67-128/18
78-93-3	Methyl ethyl ketone	80	86.7	108	88.2	110	2	56-155/23
1634-04-4	Methyl Tert Butyl Ether	20	21.3	107	22.0	110	3	73-132/17
91-20-3	Naphthalene	20	20.6	103	20.8	104	1	70-136/20
103-65-1	n-Propylbenzene	20	20.2	101	19.8	99	2	71-127/17
100-42-5	Styrene	20	20.2	101	20.2	101	0	72-134/16
994-05-8	Tert-Amyl Methyl Ether	20	20.8	104	21.6	108	4	73-133/17
75-65-0	Tert-Butyl Alcohol	100	129	129	126	126	2	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	20	19.9	100	20.2	101	1	77-130/16
71-55-6	1,1,1-Trichloroethane	20	19.8	99	20.1	101	2	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	20	19.8	99	20.0	100	1	77-129/17
79-00-5	1,1,2-Trichloroethane	20	19.1	96	19.5	98	2	77-125/16
87-61-6	1,2,3-Trichlorobenzene	20	19.5	98	19.7	99	1	70-133/18
96-18-4	1,2,3-Trichloropropane	20	20.1	101	20.7	104	3	69-126/18
120-82-1	1,2,4-Trichlorobenzene	20	19.7	99	19.7	99	0	68-129/17
95-63-6	1,2,4-Trimethylbenzene	20	20.6	103	20.4	102	1	74-129/17
108-67-8	1,3,5-Trimethylbenzene	20	20.9	105	20.7	104	1	77-129/17
127-18-4	Tetrachloroethylene	20	17.8	89	17.7	89	1	69-127/20
108-88-3	Toluene	20	19.1	96	18.9	95	1	75-122/17
79-01-6	Trichloroethylene	20	18.4	92	18.3	92	1	78-123/17
75-69-4	Trichlorofluoromethane	20	21.0	105	21.1	106	0	65-136/23
75-01-4	Vinyl chloride	20	20.6	103	21.1	106	2	57-146/22
1330-20-7	Xylene (total)	60	58.0	97	57.8	96	0	77-125/17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	101%	70-130%

\* = Outside of Control Limits.

5.2.1  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-BS	R29685.D	1	10/22/14	BD	n/a	n/a	VR1106
VR1106-BSD	R29686.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	98%	98%	70-130%
460-00-4	4-Bromofluorobenzene	104%	105%	70-130%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-BS	Q24631.D	1	10/23/14	BQ	n/a	n/a	VQ1039
VQ1039-BSD	Q24632.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	81.5	102	80.8	101	1	38-159/24
71-43-2	Benzene	20	19.6	98	19.8	99	1	77-122/25
108-86-1	Bromobenzene	20	21.7	109	18.5	93	16	76-126/17
74-97-5	Bromochloromethane	20	20.3	102	20.4	102	0	77-130/17
75-27-4	Bromodichloromethane	20	22.7	114	22.3	112	2	75-127/16
75-25-2	Bromoform	20	20.4	102	18.9	95	8	69-141/17
104-51-8	n-Butylbenzene	20	19.7	99	21.1	106	7	72-129/18
135-98-8	sec-Butylbenzene	20	20.3	102	22.1	111	8	74-128/18
98-06-6	tert-Butylbenzene	20	20.1	101	19.8	99	2	73-127/18
108-90-7	Chlorobenzene	20	20.4	102	20.4	102	0	77-122/16
75-00-3	Chloroethane	20	18.0	90	17.5	88	3	69-133/18
67-66-3	Chloroform	20	21.2	106	21.2	106	0	74-126/17
95-49-8	o-Chlorotoluene	20	22.8	114	19.8	99	14	72-127/20
106-43-4	p-Chlorotoluene	20	22.5	113	18.8	94	18	68-127/18
56-23-5	Carbon tetrachloride	20	20.7	104	22.7	114	9	71-133/19
75-34-3	1,1-Dichloroethane	20	19.4	97	19.6	98	1	71-125/17
75-35-4	1,1-Dichloroethylene	20	17.3	87	18.9	95	9	66-125/20
563-58-6	1,1-Dichloropropene	20	20.3	102	22.1	111	8	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	20	23.1	116	20.9	105	10	65-131/20
106-93-4	1,2-Dibromoethane	20	21.8	109	21.6	108	1	75-135/17
107-06-2	1,2-Dichloroethane	20	23.3	117	22.7	114	3	71-131/17
78-87-5	1,2-Dichloropropane	20	20.7	104	20.8	104	0	78-124/16
142-28-9	1,3-Dichloropropane	20	20.7	104	20.4	102	1	78-123/16
108-20-3	Di-Isopropyl ether	20	18.0	90	18.0	90	0	68-129/17
594-20-7	2,2-Dichloropropane	20	20.5	103	21.8	109	6	70-131/19
124-48-1	Dibromochloromethane	20	21.6	108	21.3	107	1	76-132/16
75-71-8	Dichlorodifluoromethane	20	18.2	91	16.7	84	9	32-168/28
156-59-2	cis-1,2-Dichloroethylene	20	19.7	99	19.9	100	1	73-126/17
10061-01-5	cis-1,3-Dichloropropene	20	22.9	115	22.6	113	1	72-130/16
541-73-1	m-Dichlorobenzene	20	20.6	103	20.8	104	1	75-124/16
95-50-1	o-Dichlorobenzene	20	20.6	103	20.6	103	0	76-124/16
106-46-7	p-Dichlorobenzene	20	19.7	99	19.7	99	0	75-124/16
156-60-5	trans-1,2-Dichloroethylene	20	18.5	93	19.2	96	4	71-126/18
10061-02-6	trans-1,3-Dichloropropene	20	21.7	109	21.3	107	2	71-126/16
100-41-4	Ethylbenzene	20	19.8	99	20.4	102	3	76-126/17
637-92-3	Ethyl Tert Butyl Ether	20	20.6	103	20.5	103	0	75-134/17

\* = Outside of Control Limits.

5.2.2  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-BS	Q24631.D	1	10/23/14	BQ	n/a	n/a	VQ1039
VQ1039-BSD	Q24632.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	93.3	117	91.5	114	2	67-150/22
87-68-3	Hexachlorobutadiene	20	20.7	104	20.2	101	2	69-135/20
98-82-8	Isopropylbenzene	20	22.9	115	21.7	109	5	61-125/17
99-87-6	p-Isopropyltoluene	20	20.2	101	21.1	106	4	68-127/18
108-10-1	4-Methyl-2-pentanone	80	84.5	106	83.7	105	1	71-142/21
74-83-9	Methyl bromide	20	16.2	81	15.9	80	2	68-132/18
74-87-3	Methyl chloride	20	18.9	95	17.8	89	6	39-150/28
74-95-3	Methylene bromide	20	22.5	113	22.1	111	2	77-127/16
75-09-2	Methylene chloride	20	25.0	125	22.4	112	11	67-128/18
78-93-3	Methyl ethyl ketone	80	89.3	112	88.3	110	1	56-155/23
1634-04-4	Methyl Tert Butyl Ether	20	20.1	101	19.9	100	1	73-132/17
91-20-3	Naphthalene	20	21.8	109	20.0	100	9	70-136/20
103-65-1	n-Propylbenzene	20	22.4	112	19.4	97	14	71-127/17
100-42-5	Styrene	20	23.4	117	21.9	110	7	72-134/16
994-05-8	Tert-Amyl Methyl Ether	20	19.7	99	19.8	99	1	73-133/17
75-65-0	Tert-Butyl Alcohol	100	97.0	97	94.3	94	3	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	20	21.6	108	21.4	107	1	77-130/16
71-55-6	1,1,1-Trichloroethane	20	20.4	102	22.1	111	8	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	20	23.9	120	18.9	95	23* a	77-129/17
79-00-5	1,1,2-Trichloroethane	20	20.6	103	20.4	102	1	77-125/16
87-61-6	1,2,3-Trichlorobenzene	20	21.1	106	19.6	98	7	70-133/18
96-18-4	1,2,3-Trichloropropane	20	22.2	111	19.3	97	14	69-126/18
120-82-1	1,2,4-Trichlorobenzene	20	20.7	104	19.2	96	8	68-129/17
95-63-6	1,2,4-Trimethylbenzene	20	20.1	101	20.6	103	2	74-129/17
108-67-8	1,3,5-Trimethylbenzene	20	22.8	114	19.9	100	14	77-129/17
127-18-4	Tetrachloroethylene	20	18.5	93	19.8	99	7	69-127/20
108-88-3	Toluene	20	19.2	96	19.7	99	3	75-122/17
79-01-6	Trichloroethylene	20	20.2	101	21.0	105	4	78-123/17
75-69-4	Trichlorofluoromethane	20	21.3	107	20.9	105	2	65-136/23
75-01-4	Vinyl chloride	20	20.9	105	20.8	104	0	57-146/22
1330-20-7	Xylene (total)	60	62.8	105	62.4	104	1	77-125/17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	106%	70-130%

\* = Outside of Control Limits.

5.2.2  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-BS	Q24631.D	1	10/23/14	BQ	n/a	n/a	VQ1039
VQ1039-BSD	Q24632.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	100%	100%	70-130%
460-00-4	4-Bromofluorobenzene	116%	106%	70-130%

(a) Outside laboratory control limits.

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1106-LCS	R29688.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	147	118	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	103%	70-130%

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ1039-LCS	Q24633.D	1	10/23/14	BQ	n/a	n/a	VQ1039

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-5, C36561-12

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	159	127	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	70-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C36561-3MS	R29708.D	1	10/22/14	BD	n/a	n/a	VR1106
C36561-3MSD	R29709.D	1	10/22/14	BD	n/a	n/a	VR1106
C36561-3	R29693.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	C36561-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	80	81.5	102	80	84.1	105	3	38-159/24
71-43-2	Benzene	6.3	20	23.4	86	20	23.3	85	0	77-122/16
108-86-1	Bromobenzene	ND	20	18.8	94	20	19.0	95	1	76-126/17
74-97-5	Bromochloromethane	ND	20	18.6	93	20	18.9	95	2	77-130/17
75-27-4	Bromodichloromethane	ND	20	21.2	106	20	21.3	107	0	75-127/16
75-25-2	Bromoform	ND	20	17.2	86	20	17.4	87	1	69-141/17
104-51-8	n-Butylbenzene	ND	20	18.9	95	20	18.9	95	0	72-129/18
135-98-8	sec-Butylbenzene	ND	20	19.0	95	20	19.0	95	0	74-128/18
98-06-6	tert-Butylbenzene	ND	20	18.9	95	20	18.9	95	0	73-127/18
108-90-7	Chlorobenzene	ND	20	18.7	94	20	18.6	93	1	77-122/16
75-00-3	Chloroethane	ND	20	20.7	104	20	20.9	105	1	69-133/18
67-66-3	Chloroform	ND	20	20.8	104	20	21.0	105	1	74-126/17
95-49-8	o-Chlorotoluene	ND	20	20.1	101	20	20.0	100	0	72-127/20
106-43-4	p-Chlorotoluene	ND	20	20.1	101	20	20.1	101	0	68-127/18
56-23-5	Carbon tetrachloride	ND	20	20.3	102	20	19.9	100	2	71-133/19
75-34-3	1,1-Dichloroethane	ND	20	19.5	98	20	19.7	99	1	71-125/17
75-35-4	1,1-Dichloroethylene	ND	20	16.8	84	20	16.8	84	0	66-125/20
563-58-6	1,1-Dichloropropene	ND	20	19.1	96	20	19.1	96	0	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	23.4	117	20	24.1	121	3	65-131/20
106-93-4	1,2-Dibromoethane	ND	20	19.8	99	20	19.9	100	1	75-135/17
107-06-2	1,2-Dichloroethane	ND	20	21.7	109	20	22.0	110	1	71-131/17
78-87-5	1,2-Dichloropropane	ND	20	18.6	93	20	19.0	95	2	78-124/16
142-28-9	1,3-Dichloropropane	ND	20	19.5	98	20	19.5	98	0	78-123/16
108-20-3	Di-Isopropyl ether	ND	20	19.3	97	20	19.8	99	3	68-129/17
594-20-7	2,2-Dichloropropane	ND	20	19.3	97	20	19.4	97	1	70-131/19
124-48-1	Dibromochloromethane	ND	20	20.1	101	20	20.0	100	0	76-132/16
75-71-8	Dichlorodifluoromethane	ND	20	20.9	105	20	20.2	101	3	32-168/28
156-59-2	cis-1,2-Dichloroethylene	ND	20	18.2	91	20	18.5	93	2	73-126/17
10061-01-5	cis-1,3-Dichloropropene	ND	20	19.5	98	20	19.7	99	1	72-130/16
541-73-1	m-Dichlorobenzene	ND	20	18.6	93	20	18.7	94	1	75-124/16
95-50-1	o-Dichlorobenzene	ND	20	18.7	94	20	18.9	95	1	76-124/16
106-46-7	p-Dichlorobenzene	ND	20	18.2	91	20	18.4	92	1	75-124/16
156-60-5	trans-1,2-Dichloroethylene	ND	20	17.9	90	20	17.9	90	0	71-126/18
10061-02-6	trans-1,3-Dichloropropene	ND	20	20.1	101	20	20.2	101	0	71-126/16
100-41-4	Ethylbenzene	0.49	J 20	20.3	99	20	20.0	98	1	76-126/17
637-92-3	Ethyl Tert Butyl Ether	ND	20	21.0	105	20	21.5	108	2	75-134/17

\* = Outside of Control Limits.

5.4.1  
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# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C36561-3MS	R29708.D	1	10/22/14	BD	n/a	n/a	VR1106
C36561-3MSD	R29709.D	1	10/22/14	BD	n/a	n/a	VR1106
C36561-3	R29693.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Compound	C36561-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
591-78-6	2-Hexanone	ND		80	88.4	111	80	89.5	112	1	67-150/22
87-68-3	Hexachlorobutadiene	ND		20	18.1	91	20	18.7	94	3	69-135/20
98-82-8	Isopropylbenzene	0.32	J	20	20.4	100	20	20.1	99	1	61-125/17
99-87-6	p-Isopropyltoluene	ND		20	19.1	96	20	19.0	95	1	68-127/18
108-10-1	4-Methyl-2-pentanone	ND		80	84.1	105	80	86.4	108	3	71-142/21
74-83-9	Methyl bromide	ND		20	20.6	103	20	20.6	103	0	68-132/18
74-87-3	Methyl chloride	ND		20	18.6	93	20	22.5	113	19	39-150/28
74-95-3	Methylene bromide	ND		20	20.3	102	20	20.6	103	1	77-127/16
75-09-2	Methylene chloride	ND		20	18.4	92	20	18.7	94	2	67-128/18
78-93-3	Methyl ethyl ketone	ND		80	86.7	108	80	89.9	112	4	56-155/23
1634-04-4	Methyl Tert Butyl Ether	ND		20	21.6	108	20	22.3	112	3	73-132/17
91-20-3	Naphthalene	0.51	J	20	19.8	96	20	20.6	100	4	70-136/20
103-65-1	n-Propylbenzene	0.87	J	20	20.3	97	20	20.2	97	0	71-127/17
100-42-5	Styrene	ND		20	15.1	76	20	14.4	72	5	72-134/16
994-05-8	Tert-Amyl Methyl Ether	ND		20	20.8	104	20	21.5	108	3	73-133/17
75-65-0	Tert-Butyl Alcohol	ND		100	151	151* a	100	159	159* a	5	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	ND		20	20.2	101	20	20.1	101	0	77-130/16
71-55-6	1,1,1-Trichloroethane	ND		20	21.2	106	20	21.3	107	0	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	19.4	97	20	19.7	99	2	77-129/17
79-00-5	1,1,2-Trichloroethane	ND		20	19.0	95	20	18.9	95	1	77-125/16
87-61-6	1,2,3-Trichlorobenzene	ND		20	17.5	88	20	18.7	94	7	70-133/18
96-18-4	1,2,3-Trichloropropane	ND		20	19.6	98	20	19.6	98	0	69-126/18
120-82-1	1,2,4-Trichlorobenzene	ND		20	17.9	90	20	18.7	94	4	68-129/17
95-63-6	1,2,4-Trimethylbenzene	ND		20	17.5	88	20	17.2	86	2	74-129/17
108-67-8	1,3,5-Trimethylbenzene	ND		20	19.3	97	20	19.1	96	1	77-129/17
127-18-4	Tetrachloroethylene	ND		20	17.7	89	20	17.4	87	2	69-127/20
108-88-3	Toluene	0.29	J	20	19.4	96	20	19.1	94	2	75-122/17
79-01-6	Trichloroethylene	ND		20	19.1	96	20	19.0	95	1	78-123/17
75-69-4	Trichlorofluoromethane	ND		20	23.4	117	20	22.9	115	2	65-136/23
75-01-4	Vinyl chloride	ND		20	18.9	95	20	18.9	95	0	57-146/22
1330-20-7	Xylene (total)	ND		60	56.9	95	60	56.4	94	1	77-125/17

CAS No.	Surrogate Recoveries	MS	MSD	C36561-3	Limits
1868-53-7	Dibromofluoromethane	101%	103%	95%	70-130%

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C36561-3MS	R29708.D	1	10/22/14	BD	n/a	n/a	VR1106
C36561-3MSD	R29709.D	1	10/22/14	BD	n/a	n/a	VR1106
C36561-3	R29693.D	1	10/22/14	BD	n/a	n/a	VR1106

The QC reported here applies to the following samples:

Method: SW846 8260B

C36561-3, C36561-7, C36561-8, C36561-9, C36561-10, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18, C36561-19, C36561-20

CAS No.	Surrogate Recoveries	MS	MSD	C36561-3	Limits
2037-26-5	Toluene-D8	99%	97%	99%	70-130%
460-00-4	4-Bromofluorobenzene	105%	105%	102%	70-130%

(a) Outside laboratory control limits.

\* = Outside of Control Limits.

## GC Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11009-MB	PP038494A.D	1	10/20/14	RV	10/20/14	OP11009	GPP1240

The QC reported here applies to the following samples:

Method: SW846 8082

C36561-8, C36561-9

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.10	0.020	ug/l	
11104-28-2	Aroclor 1221	ND	0.10	0.050	ug/l	
11141-16-5	Aroclor 1232	ND	0.10	0.050	ug/l	
53469-21-9	Aroclor 1242	ND	0.10	0.050	ug/l	
12672-29-6	Aroclor 1248	ND	0.10	0.050	ug/l	
11097-69-1	Aroclor 1254	ND	0.10	0.050	ug/l	
11096-82-5	Aroclor 1260	ND	0.10	0.030	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	76%	27-112%
877-09-8	Tetrachloro-m-xylene	69%	27-112%
2051-24-3	Decachlorobiphenyl	67%	32-136%
2051-24-3	Decachlorobiphenyl	66%	32-136%

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10984-MB	HH317951.D	1	10/16/14	AG	10/16/14	OP10984	GHH1380

The QC reported here applies to the following samples:

Method: SW846 8015B M

C36561-1, C36561-2, C36561-3, C36561-4, C36561-5, C36561-6, C36561-7, C36561-8, C36561-9, C36561-10, C36561-11, C36561-12, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	96% 32-124%

## Method Blank Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11000-MB	HH318033.D	1	10/21/14	AG	10/20/14	OP11000	GHH1383

The QC reported here applies to the following samples:

Method: SW846 8015B M

C36561-19, C36561-20

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	104% 32-124%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11009-BS	PP038495A.D	1	10/20/14	RV	10/20/14	OP11009	GPP1240
OP11009-BSD	PP038496A.D	1	10/20/14	RV	10/20/14	OP11009	GPP1240

The QC reported here applies to the following samples:

Method: SW846 8082

C36561-8, C36561-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	0.4	0.40	100	0.34	85	16	53-114/20
11096-82-5	Aroclor 1260	0.4	0.31	78	0.28	70	10	54-125/23

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	71%	60%	27-112%
877-09-8	Tetrachloro-m-xylene	72%	61%	27-112%
2051-24-3	Decachlorobiphenyl	67%	60%	32-136%
2051-24-3	Decachlorobiphenyl	67%	59%	32-136%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10984-BS	HH317949.D	1	10/16/14	AG	10/16/14	OP10984	GHH1380
OP10984-BSD	HH317950.D	1	10/16/14	AG	10/16/14	OP10984	GHH1380

The QC reported here applies to the following samples:

Method: SW846 8015B M

C36561-1, C36561-2, C36561-3, C36561-4, C36561-5, C36561-6, C36561-7, C36561-8, C36561-9, C36561-10, C36561-11, C36561-12, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.799	80	0.763	76	5	38-115/22
	TPH (> C28-C40)	1	0.961	96	0.918	92	5	45-114/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	90%	88%	32-124%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11000-BS	HH318031.D	1	10/20/14	AG	10/20/14	OP11000	GHH1383
OP11000-BSD	HH318032.D	1	10/21/14	AG	10/20/14	OP11000	GHH1383

The QC reported here applies to the following samples:

Method: SW846 8015B M

C36561-19, C36561-20

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.820	82	0.819	82	0	38-115/22
	TPH (> C28-C40)	1	0.886	89	0.875	88	1	45-114/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	96%	99%	32-124%

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10984-MS	HH318024.D	1	10/20/14	AG	10/16/14	OP10984	GHH1383
OP10984-MSD	HH318025.D	1	10/20/14	AG	10/16/14	OP10984	GHH1383
C36561-4	HH317979.D	1	10/17/14	AG	10/16/14	OP10984	GHH1382

The QC reported here applies to the following samples:

Method: SW846 8015B M

C36561-1, C36561-2, C36561-3, C36561-4, C36561-5, C36561-6, C36561-7, C36561-8, C36561-9, C36561-10, C36561-11, C36561-12, C36561-13, C36561-14, C36561-15, C36561-16, C36561-17, C36561-18

CAS No.	Compound	C36561-4 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	0.157	1.96	2.21	105	1.96	1.94	91	13	38-115/22
	TPH (> C28-C40)	0.0944	J 1.96	2.24	109	1.96	2.11	103	6	45-114/20

CAS No.	Surrogate Recoveries	MS	MSD	C36561-4	Limits
630-01-3	Hexacosane	105%	102%	100%	32-124%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C36561  
**Account:** TSGCAPH The Source Group - Pleasant Hill  
**Project:** T0600101592 - Paco Pumps

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11000-MS	HH318029.D	1	10/20/14	AG	10/20/14	OP11000	GHH1383
OP11000-MSD	HH318030.D	1	10/20/14	AG	10/20/14	OP11000	GHH1383
C36561-20	HH318028.D	1	10/20/14	AG	10/20/14	OP11000	GHH1383

The QC reported here applies to the following samples:

Method: SW846 8015B M

C36561-19, C36561-20

CAS No.	Compound	C36561-20 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	0.649	1.89	2.46	96	1.89	2.52	99	2	38-115/22
	TPH (> C28-C40)	0.458	1.89	2.32	99	1.89	2.60	114	11	45-114/20

CAS No.	Surrogate Recoveries	MS	MSD	C36561-20	Limits
630-01-3	Hexacosane	65%	65%	51%	32-124%

\* = Outside of Control Limits.

# 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: 720-60050-1  
Client Project/Site: Former Paco Pump Site

For:  
The Source Group  
3478 Buskirk Avenue, Suite 100  
Pleasant Hill, California 94523

Attn: Mr. Paisha Jorgensen



---

Authorized for release by:  
10/1/2014 5:20:25 PM

Afsaneh Salimpour, Senior Project Manager  
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### LINKS

Review your project  
results through  
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Have a Question?



Visit us at:  
[www.testamericainc.com](http://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: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	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: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Job ID: 720-60050-1**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-60050-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/19/2014 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.1° C.

Except:

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-12-4'. The container label lists the sample time at 08:45, while the COC lists the sample time at 08:30.

#### GC/MS VOA

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

#### GC VOA

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

#### GC Semi VOA

Method(s) 8015B: The following sample(s) required a dilution due to the nature of the sample matrix: SB-SGI-1-1' (720-60050-4), SB-SGI-2-1' (720-60050-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8082: Surrogate recovery for the following sample(s) was outside control limits: SB-MW-11-2.5' (720-60050-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The following sample(s) required a dilution due to the nature of the sample matrix: SB-MW-11-5' (720-60050-12). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8082: The following sample(s) contained more than one Aroclor with insufficient separation to quantify individually. The PCBs present are quantified as the predominant Aroclor: SB-MW-10-5' (720-60050-9).

Method(s) 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor 1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result. SB-MW-10-2.5' (720-60050-8)

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

#### Organic Prep

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

# Detection Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Client Sample ID: SB-SGI-2-1'

Lab Sample ID: 720-60050-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	580		20		mg/Kg	20		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	1800		1000		mg/Kg	20		8015B	Total/NA

## Client Sample ID: SB-SGI-1-1'

Lab Sample ID: 720-60050-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	280		9.9		mg/Kg	10		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	890		490		mg/Kg	10		8015B	Total/NA

## Client Sample ID: SB-MW-10-1'

Lab Sample ID: 720-60050-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	1000		62		ug/Kg	25		8082	Total/NA

## Client Sample ID: SB-MW-10-2.5'

Lab Sample ID: 720-60050-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	13		2.5		ug/Kg	1		8082	Total/NA

## Client Sample ID: SB-MW-10-5'

Lab Sample ID: 720-60050-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	28		2.5		ug/Kg	1		8082	Total/NA

## Client Sample ID: SB-MW-11-1'

Lab Sample ID: 720-60050-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	140		12		ug/Kg	5		8082	Total/NA

## Client Sample ID: SB-MW-11-2.5'

Lab Sample ID: 720-60050-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	720		50		ug/Kg	20		8082	Total/NA

## Client Sample ID: SB-MW-11-5'

Lab Sample ID: 720-60050-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	2500		120		ug/Kg	50		8082	Total/NA

## Client Sample ID: SB-MW-12-4'

Lab Sample ID: 720-60050-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	44		2.0		mg/Kg	2		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	200		99		mg/Kg	2		8015B	Total/NA

## Client Sample ID: SB-MW-12-14'

Lab Sample ID: 720-60050-14

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-SGI-2-1'**

**Lab Sample ID: 720-60050-1**

Date Collected: 09/19/14 10:11

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	580		20		mg/Kg		09/30/14 19:41	10/01/14 10:30	20
Motor Oil Range Organics [C24-C36]	1800		1000		mg/Kg		09/30/14 19:41	10/01/14 10:30	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	0	XD	40 - 130				09/30/14 19:41	10/01/14 10:30	20

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# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-SGI-1-1'**

**Lab Sample ID: 720-60050-4**

Date Collected: 09/19/14 10:28

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	280		9.9		mg/Kg		09/30/14 19:41	10/01/14 11:30	10
Motor Oil Range Organics [C24-C36]	890		490		mg/Kg		09/30/14 19:41	10/01/14 11:30	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	0	XD	40 - 130				09/30/14 19:41	10/01/14 11:30	10

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# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-10-1'**

**Lab Sample ID: 720-60050-7**

**Date Collected: 09/19/14 11:30**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		62		ug/Kg		09/24/14 13:30	09/26/14 14:50	25
PCB-1221	ND		120		ug/Kg		09/24/14 13:30	09/26/14 14:50	25
PCB-1232	ND		62		ug/Kg		09/24/14 13:30	09/26/14 14:50	25
PCB-1242	ND		62		ug/Kg		09/24/14 13:30	09/26/14 14:50	25
PCB-1248	ND		62		ug/Kg		09/24/14 13:30	09/26/14 14:50	25
<b>PCB-1254</b>	<b>1000</b>		62		ug/Kg		09/24/14 13:30	09/26/14 14:50	25
PCB-1260	ND		62		ug/Kg		09/24/14 13:30	09/26/14 14:50	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	144		15 - 150	09/24/14 13:30	09/26/14 14:50	25

# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-10-2.5'**

**Lab Sample ID: 720-60050-8**

**Date Collected: 09/19/14 11:33**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:14	1
PCB-1221	ND		5.0		ug/Kg		09/24/14 13:30	09/25/14 16:14	1
PCB-1232	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:14	1
PCB-1242	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:14	1
PCB-1248	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:14	1
PCB-1254	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:14	1
<b>PCB-1260</b>	<b>13</b>		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	115		15 - 150	09/24/14 13:30	09/25/14 16:14	1

# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-10-5'**

**Lab Sample ID: 720-60050-9**

Date Collected: 09/19/14 11:34

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:38	1
PCB-1221	ND		5.0		ug/Kg		09/24/14 13:30	09/25/14 16:38	1
PCB-1232	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:38	1
PCB-1242	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:38	1
PCB-1248	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:38	1
<b>PCB-1254</b>	<b>28</b>		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:38	1
PCB-1260	ND		2.5		ug/Kg		09/24/14 13:30	09/25/14 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	104		15 - 150	09/24/14 13:30	09/25/14 16:38	1

# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-11-1'**

**Lab Sample ID: 720-60050-10**

**Date Collected: 09/19/14 11:40**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12		ug/Kg		09/24/14 13:30	09/26/14 02:10	5
PCB-1221	ND		25		ug/Kg		09/24/14 13:30	09/26/14 02:10	5
PCB-1232	ND		12		ug/Kg		09/24/14 13:30	09/26/14 02:10	5
PCB-1242	ND		12		ug/Kg		09/24/14 13:30	09/26/14 02:10	5
PCB-1248	ND		12		ug/Kg		09/24/14 13:30	09/26/14 02:10	5
<b>PCB-1254</b>	<b>140</b>		12		ug/Kg		09/24/14 13:30	09/26/14 02:10	5
PCB-1260	ND		12		ug/Kg		09/24/14 13:30	09/26/14 02:10	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	141		15 - 150	09/24/14 13:30	09/26/14 02:10	5

# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-11-2.5'**

**Lab Sample ID: 720-60050-11**

Date Collected: 09/19/14 11:42

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/24/14 13:30	09/25/14 18:12	20
PCB-1221	ND		99		ug/Kg		09/24/14 13:30	09/25/14 18:12	20
PCB-1232	ND		50		ug/Kg		09/24/14 13:30	09/25/14 18:12	20
PCB-1242	ND		50		ug/Kg		09/24/14 13:30	09/25/14 18:12	20
PCB-1248	ND		50		ug/Kg		09/24/14 13:30	09/25/14 18:12	20
<b>PCB-1254</b>	<b>720</b>		50		ug/Kg		09/24/14 13:30	09/25/14 18:12	20
PCB-1260	ND		50		ug/Kg		09/24/14 13:30	09/25/14 18:12	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	158	X	15 - 150	09/24/14 13:30	09/25/14 18:12	20



# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-11-5'**

**Lab Sample ID: 720-60050-12**

Date Collected: 09/19/14 11:43

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		120		ug/Kg		09/24/14 13:30	09/25/14 18:36	50
PCB-1221	ND		250		ug/Kg		09/24/14 13:30	09/25/14 18:36	50
PCB-1232	ND		120		ug/Kg		09/24/14 13:30	09/25/14 18:36	50
PCB-1242	ND		120		ug/Kg		09/24/14 13:30	09/25/14 18:36	50
PCB-1248	ND		120		ug/Kg		09/24/14 13:30	09/25/14 18:36	50
<b>PCB-1254</b>	<b>2500</b>		120		ug/Kg		09/24/14 13:30	09/25/14 18:36	50
PCB-1260	ND		120		ug/Kg		09/24/14 13:30	09/25/14 18:36	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	200	X	15 - 150	09/24/14 13:30	09/25/14 18:36	50

# Client Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-12-4'**

**Lab Sample ID: 720-60050-13**

**Date Collected: 09/19/14 08:30**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Acetone	ND		50		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Benzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Dichlorobromomethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Bromobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Chlorobromomethane	ND		20		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Bromoform	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Bromomethane	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
2-Butanone (MEK)	ND		50		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
n-Butylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
sec-Butylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
tert-Butylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Carbon disulfide	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Carbon tetrachloride	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Chlorobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Chloroethane	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Chloroform	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Chloromethane	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
2-Chlorotoluene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
4-Chlorotoluene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Chlorodibromomethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,3-Dichloropropane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1-Dichloropropene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Ethylene Dibromide	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Dibromomethane	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Dichlorodifluoromethane	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1-Dichloroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2-Dichloroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1-Dichloroethene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2-Dichloropropane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Ethylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Hexachlorobutadiene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
2-Hexanone	ND		50		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Isopropylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
4-Isopropyltoluene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Methylene Chloride	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Naphthalene	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
N-Propylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Styrene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1

TestAmerica Pleasanton



# Client Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-12-4'**

**Lab Sample ID: 720-60050-13**

Date Collected: 09/19/14 08:30

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Tetrachloroethene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Toluene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Trichloroethene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Trichlorofluoromethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Vinyl acetate	ND		20		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Vinyl chloride	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Xylenes, Total	ND		10		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
2,2-Dichloropropane	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Gasoline Range Organics (GRO)	ND		250		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
-C5-C12									
TBA	ND		100		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
DIPE	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
TAME	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Ethyl t-butyl ether	ND		5.0		ug/Kg		09/26/14 09:58	09/26/14 14:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		45 - 131				09/26/14 09:58	09/26/14 14:22	1
1,2-Dichloroethane-d4 (Surr)	111		60 - 140				09/26/14 09:58	09/26/14 14:22	1
Toluene-d8 (Surr)	96		58 - 140				09/26/14 09:58	09/26/14 14:22	1

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	44		2.0		mg/Kg		09/29/14 14:50	09/30/14 20:20	2
Motor Oil Range Organics [C24-C36]	200		99		mg/Kg		09/29/14 14:50	09/30/14 20:20	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	81		40 - 130				09/29/14 14:50	09/30/14 20:20	2

# Client Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-12-14'**

**Lab Sample ID: 720-60050-14**

**Date Collected: 09/19/14 08:55**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Acetone	ND		44		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Benzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Dichlorobromomethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Bromobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Chlorobromomethane	ND		18		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Bromoform	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Bromomethane	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
2-Butanone (MEK)	ND		44		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
n-Butylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
sec-Butylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
tert-Butylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Carbon disulfide	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Carbon tetrachloride	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Chlorobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Chloroethane	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Chloroform	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Chloromethane	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
2-Chlorotoluene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
4-Chlorotoluene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Chlorodibromomethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2-Dichlorobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,3-Dichlorobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,4-Dichlorobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,3-Dichloropropane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1-Dichloropropene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2-Dibromo-3-Chloropropane	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Ethylene Dibromide	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Dibromomethane	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Dichlorodifluoromethane	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1-Dichloroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2-Dichloroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1-Dichloroethene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
cis-1,2-Dichloroethene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
trans-1,2-Dichloroethene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2-Dichloropropane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
cis-1,3-Dichloropropene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
trans-1,3-Dichloropropene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Ethylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Hexachlorobutadiene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
2-Hexanone	ND		44		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Isopropylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
4-Isopropyltoluene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Methylene Chloride	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
4-Methyl-2-pentanone (MIBK)	ND		44		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Naphthalene	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
N-Propylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Styrene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1,1,2-Tetrachloroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1

TestAmerica Pleasanton

# Client Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

**Client Sample ID: SB-MW-12-14'**

**Lab Sample ID: 720-60050-14**

Date Collected: 09/19/14 08:55

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Tetrachloroethene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Toluene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2,3-Trichlorobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2,4-Trichlorobenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1,1-Trichloroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1,2-Trichloroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Trichloroethene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Trichlorofluoromethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2,3-Trichloropropane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,2,4-Trimethylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
1,3,5-Trimethylbenzene	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Vinyl acetate	ND		18		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Vinyl chloride	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Xylenes, Total	ND		8.8		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
2,2-Dichloropropane	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Gasoline Range Organics (GRO)	ND		220		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
-C5-C12									
TBA	ND		88		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
DIPE	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
TAME	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1
Ethyl t-butyl ether	ND		4.4		ug/Kg		09/26/14 09:58	09/26/14 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		45 - 131	09/26/14 09:58	09/26/14 14:50	1
1,2-Dichloroethane-d4 (Surr)	106		60 - 140	09/26/14 09:58	09/26/14 14:50	1
Toluene-d8 (Surr)	93		58 - 140	09/26/14 09:58	09/26/14 14:50	1

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		09/29/14 14:50	09/30/14 16:39	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		09/29/14 14:50	09/30/14 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	85		40 - 130	09/29/14 14:50	09/30/14 16:39	1

# QC Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-167668/5**

**Matrix: Solid**

**Analysis Batch: 167668**

**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			09/26/14 08:33	1
Acetone	ND		50		ug/Kg			09/26/14 08:33	1
Benzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Dichlorobromomethane	ND		5.0		ug/Kg			09/26/14 08:33	1
Bromobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Chlorobromomethane	ND		20		ug/Kg			09/26/14 08:33	1
Bromoform	ND		5.0		ug/Kg			09/26/14 08:33	1
Bromomethane	ND		10		ug/Kg			09/26/14 08:33	1
2-Butanone (MEK)	ND		50		ug/Kg			09/26/14 08:33	1
n-Butylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
sec-Butylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
tert-Butylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Carbon disulfide	ND		5.0		ug/Kg			09/26/14 08:33	1
Carbon tetrachloride	ND		5.0		ug/Kg			09/26/14 08:33	1
Chlorobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Chloroethane	ND		10		ug/Kg			09/26/14 08:33	1
Chloroform	ND		5.0		ug/Kg			09/26/14 08:33	1
Chloromethane	ND		10		ug/Kg			09/26/14 08:33	1
2-Chlorotoluene	ND		5.0		ug/Kg			09/26/14 08:33	1
4-Chlorotoluene	ND		5.0		ug/Kg			09/26/14 08:33	1
Chlorodibromomethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,3-Dichloropropane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,1-Dichloropropene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/Kg			09/26/14 08:33	1
Ethylene Dibromide	ND		5.0		ug/Kg			09/26/14 08:33	1
Dibromomethane	ND		10		ug/Kg			09/26/14 08:33	1
Dichlorodifluoromethane	ND		10		ug/Kg			09/26/14 08:33	1
1,1-Dichloroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2-Dichloroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,1-Dichloroethene	ND		5.0		ug/Kg			09/26/14 08:33	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			09/26/14 08:33	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2-Dichloropropane	ND		5.0		ug/Kg			09/26/14 08:33	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			09/26/14 08:33	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			09/26/14 08:33	1
Ethylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Hexachlorobutadiene	ND		5.0		ug/Kg			09/26/14 08:33	1
2-Hexanone	ND		50		ug/Kg			09/26/14 08:33	1
Isopropylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
4-Isopropyltoluene	ND		5.0		ug/Kg			09/26/14 08:33	1
Methylene Chloride	ND		10		ug/Kg			09/26/14 08:33	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			09/26/14 08:33	1
Naphthalene	ND		10		ug/Kg			09/26/14 08:33	1
N-Propylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Styrene	ND		5.0		ug/Kg			09/26/14 08:33	1

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-167668/5**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
Tetrachloroethene	ND		5.0		ug/Kg			09/26/14 08:33	1
Toluene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
Trichloroethene	ND		5.0		ug/Kg			09/26/14 08:33	1
Trichlorofluoromethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			09/26/14 08:33	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			09/26/14 08:33	1
Vinyl acetate	ND		20		ug/Kg			09/26/14 08:33	1
Vinyl chloride	ND		5.0		ug/Kg			09/26/14 08:33	1
Xylenes, Total	ND		10		ug/Kg			09/26/14 08:33	1
2,2-Dichloropropane	ND		5.0		ug/Kg			09/26/14 08:33	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			09/26/14 08:33	1
TBA	ND		100		ug/Kg			09/26/14 08:33	1
DIPE	ND		5.0		ug/Kg			09/26/14 08:33	1
TAME	ND		5.0		ug/Kg			09/26/14 08:33	1
Ethyl t-butyl ether	ND		5.0		ug/Kg			09/26/14 08:33	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	101		45 - 131		09/26/14 08:33	1
1,2-Dichloroethane-d4 (Surr)	111		60 - 140		09/26/14 08:33	1
Toluene-d8 (Surr)	99		58 - 140		09/26/14 08:33	1

**Lab Sample ID: LCS 720-167668/6**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	326		ug/Kg		130	30 - 162
Benzene	50.0	49.1		ug/Kg		98	70 - 130
Dichlorobromomethane	50.0	58.8		ug/Kg		118	70 - 131
Bromobenzene	50.0	48.2		ug/Kg		96	70 - 130
Chlorobromomethane	50.0	55.4		ug/Kg		111	70 - 130
Bromoform	50.0	59.3		ug/Kg		119	59 - 158
Bromomethane	50.0	52.2		ug/Kg		104	59 - 132
2-Butanone (MEK)	250	262		ug/Kg		105	53 - 124
n-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 142
sec-Butylbenzene	50.0	45.9		ug/Kg		92	70 - 136
tert-Butylbenzene	50.0	46.5		ug/Kg		93	70 - 130
Carbon disulfide	50.0	41.4		ug/Kg		83	60 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-167668/6**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	56.3		ug/Kg		113	70 - 138
Chlorobenzene	50.0	49.8		ug/Kg		100	70 - 130
Chloroethane	50.0	53.2		ug/Kg		106	65 - 130
Chloroform	50.0	55.5		ug/Kg		111	77 - 127
Chloromethane	50.0	53.1		ug/Kg		106	55 - 140
2-Chlorotoluene	50.0	47.4		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	48.5		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	63.2		ug/Kg		126	70 - 146
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	57.9		ug/Kg		116	70 - 140
1,1-Dichloropropene	50.0	55.6		ug/Kg		111	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	56.3		ug/Kg		113	60 - 145
Ethylene Dibromide	50.0	61.4		ug/Kg		123	70 - 140
Dibromomethane	50.0	59.9		ug/Kg		120	70 - 139
Dichlorodifluoromethane	50.0	49.5		ug/Kg		99	37 - 158
1,1-Dichloroethane	50.0	52.6		ug/Kg		105	70 - 130
1,2-Dichloroethane	50.0	60.2		ug/Kg		120	70 - 130
1,1-Dichloroethene	50.0	45.6		ug/Kg		91	76 - 122
cis-1,2-Dichloroethene	50.0	54.5		ug/Kg		109	70 - 138
trans-1,2-Dichloroethene	50.0	49.4		ug/Kg		99	67 - 130
1,2-Dichloropropane	50.0	53.0		ug/Kg		106	73 - 127
cis-1,3-Dichloropropene	50.0	60.1		ug/Kg		120	68 - 147
trans-1,3-Dichloropropene	50.0	66.7		ug/Kg		133	70 - 136
Ethylbenzene	50.0	46.7		ug/Kg		93	80 - 137
Hexachlorobutadiene	50.0	49.0		ug/Kg		98	70 - 132
2-Hexanone	250	320		ug/Kg		128	44 - 133
Isopropylbenzene	50.0	49.4		ug/Kg		99	70 - 130
4-Isopropyltoluene	50.0	46.5		ug/Kg		93	70 - 133
Methylene Chloride	50.0	49.4		ug/Kg		99	70 - 134
4-Methyl-2-pentanone (MIBK)	250	320		ug/Kg		128	60 - 160
Naphthalene	50.0	55.4		ug/Kg		111	60 - 147
N-Propylbenzene	50.0	45.7		ug/Kg		91	70 - 130
Styrene	50.0	52.0		ug/Kg		104	70 - 130
1,1,1,2-Tetrachloroethane	50.0	53.4		ug/Kg		107	70 - 130
1,1,1,2,2-Tetrachloroethane	50.0	53.8		ug/Kg		108	70 - 146
Tetrachloroethene	50.0	53.6		ug/Kg		107	70 - 132
Toluene	50.0	43.3		ug/Kg		87	80 - 128
1,2,3-Trichlorobenzene	50.0	52.7		ug/Kg		105	60 - 140
1,2,4-Trichlorobenzene	50.0	53.0		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	53.3		ug/Kg		107	70 - 130
1,1,2-Trichloroethane	50.0	58.3		ug/Kg		117	70 - 130
Trichloroethene	50.0	51.3		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	58.5		ug/Kg		117	60 - 140
1,2,3-Trichloropropane	50.0	56.9		ug/Kg		114	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.2		ug/Kg		92	60 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-167668/6**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	47.1		ug/Kg		94	70 - 130
1,3,5-Trimethylbenzene	50.0	47.3		ug/Kg		95	70 - 131
Vinyl acetate	50.0	53.4		ug/Kg		107	38 - 176
Vinyl chloride	50.0	52.3		ug/Kg		105	58 - 125
m-Xylene & p-Xylene	50.0	48.2		ug/Kg		96	70 - 146
o-Xylene	50.0	50.4		ug/Kg		101	70 - 140
2,2-Dichloropropane	50.0	54.4		ug/Kg		109	70 - 162
TBA	500	466		ug/Kg		93	63 - 130
DIPE	50.0	56.7		ug/Kg		113	70 - 131
TAME	50.0	60.1		ug/Kg		120	70 - 140
Ethyl t-butyl ether	50.0	58.5		ug/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		45 - 131
1,2-Dichloroethane-d4 (Surr)	114		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: LCS 720-167668/8**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	1070		ug/Kg		107	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	107		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: LCSD 720-167668/7**

**Matrix: Solid**

**Analysis Batch: 167668**

**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	56.1		ug/Kg		112	70 - 144	2	20
Acetone	250	295		ug/Kg		118	30 - 162	10	30
Benzene	50.0	50.7		ug/Kg		101	70 - 130	3	20
Dichlorobromomethane	50.0	58.5		ug/Kg		117	70 - 131	1	20
Bromobenzene	50.0	49.1		ug/Kg		98	70 - 130	2	20
Chlorobromomethane	50.0	56.0		ug/Kg		112	70 - 130	1	20
Bromoform	50.0	56.8		ug/Kg		114	59 - 158	4	20
Bromomethane	50.0	51.6		ug/Kg		103	59 - 132	1	20
2-Butanone (MEK)	250	256		ug/Kg		103	53 - 124	2	20
n-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 142	1	20
sec-Butylbenzene	50.0	47.2		ug/Kg		94	70 - 136	3	20
tert-Butylbenzene	50.0	48.0		ug/Kg		96	70 - 130	3	20
Carbon disulfide	50.0	43.0		ug/Kg		86	60 - 140	4	20

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-167668/7

Matrix: Solid

Analysis Batch: 167668

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	RPD Limit
							Limits	RPD		
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 138	1	20	
Chlorobenzene	50.0	50.0		ug/Kg		100	70 - 130	0	20	
Chloroethane	50.0	52.9		ug/Kg		106	65 - 130	0	20	
Chloroform	50.0	56.6		ug/Kg		113	77 - 127	2	20	
Chloromethane	50.0	50.9		ug/Kg		102	55 - 140	4	20	
2-Chlorotoluene	50.0	48.1		ug/Kg		96	70 - 138	1	20	
4-Chlorotoluene	50.0	49.5		ug/Kg		99	70 - 136	2	20	
Chlorodibromomethane	50.0	62.1		ug/Kg		124	70 - 146	2	20	
1,2-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130	1	20	
1,3-Dichlorobenzene	50.0	50.6		ug/Kg		101	70 - 131	2	20	
1,4-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 130	1	20	
1,3-Dichloropropane	50.0	57.0		ug/Kg		114	70 - 140	1	20	
1,1-Dichloropropene	50.0	56.2		ug/Kg		112	70 - 130	1	20	
1,2-Dibromo-3-Chloropropane	50.0	53.9		ug/Kg		108	60 - 145	4	20	
Ethylene Dibromide	50.0	60.6		ug/Kg		121	70 - 140	1	20	
Dibromomethane	50.0	58.9		ug/Kg		118	70 - 139	2	20	
Dichlorodifluoromethane	50.0	49.3		ug/Kg		99	37 - 158	0	20	
1,1-Dichloroethane	50.0	53.6		ug/Kg		107	70 - 130	2	20	
1,2-Dichloroethane	50.0	58.6		ug/Kg		117	70 - 130	3	20	
1,1-Dichloroethene	50.0	46.7		ug/Kg		93	76 - 122	2	20	
cis-1,2-Dichloroethene	50.0	55.4		ug/Kg		111	70 - 138	2	20	
trans-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	67 - 130	5	20	
1,2-Dichloropropane	50.0	54.1		ug/Kg		108	73 - 127	2	20	
cis-1,3-Dichloropropene	50.0	59.8		ug/Kg		120	68 - 147	1	20	
trans-1,3-Dichloropropene	50.0	66.8		ug/Kg		134	70 - 136	0	20	
Ethylbenzene	50.0	47.5		ug/Kg		95	80 - 137	2	20	
Hexachlorobutadiene	50.0	48.6		ug/Kg		97	70 - 132	1	20	
2-Hexanone	250	302		ug/Kg		121	44 - 133	6	20	
Isopropylbenzene	50.0	49.9		ug/Kg		100	70 - 130	1	20	
4-Isopropyltoluene	50.0	47.2		ug/Kg		94	70 - 133	2	20	
Methylene Chloride	50.0	50.9		ug/Kg		102	70 - 134	3	20	
4-Methyl-2-pentanone (MIBK)	250	300		ug/Kg		120	60 - 160	6	20	
Naphthalene	50.0	54.3		ug/Kg		109	60 - 147	2	20	
N-Propylbenzene	50.0	47.0		ug/Kg		94	70 - 130	3	20	
Styrene	50.0	52.2		ug/Kg		104	70 - 130	0	20	
1,1,1,2-Tetrachloroethane	50.0	54.0		ug/Kg		108	70 - 130	1	20	
1,1,1,2,2-Tetrachloroethane	50.0	53.8		ug/Kg		108	70 - 146	0	20	
Tetrachloroethene	50.0	53.7		ug/Kg		107	70 - 132	0	20	
Toluene	50.0	44.6		ug/Kg		89	80 - 128	3	20	
1,2,3-Trichlorobenzene	50.0	52.1		ug/Kg		104	60 - 140	1	20	
1,2,4-Trichlorobenzene	50.0	51.6		ug/Kg		103	60 - 140	3	20	
1,1,1-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130	1	20	
1,1,2-Trichloroethane	50.0	58.2		ug/Kg		116	70 - 130	0	20	
Trichloroethene	50.0	52.5		ug/Kg		105	70 - 133	2	20	
Trichlorofluoromethane	50.0	57.3		ug/Kg		115	60 - 140	2	20	
1,2,3-Trichloropropane	50.0	55.5		ug/Kg		111	70 - 146	3	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.6		ug/Kg		95	60 - 140	3	20	

TestAmerica Pleasanton



# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-167668/7**

**Matrix: Solid**

**Analysis Batch: 167668**

**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
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130	2	20
1,3,5-Trimethylbenzene	50.0	49.1		ug/Kg		98	70 - 131	4	20
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176	3	20
Vinyl chloride	50.0	51.7		ug/Kg		103	58 - 125	1	20
m-Xylene & p-Xylene	50.0	48.7		ug/Kg		97	70 - 146	1	20
o-Xylene	50.0	50.9		ug/Kg		102	70 - 140	1	20
2,2-Dichloropropane	50.0	56.6		ug/Kg		113	70 - 162	4	20
TBA	500	477		ug/Kg		95	63 - 130	2	20
DIPE	50.0	57.6		ug/Kg		115	70 - 131	2	20
TAME	50.0	59.6		ug/Kg		119	70 - 140	1	20
Ethyl t-butyl ether	50.0	58.6		ug/Kg		117	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	109		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: LCSD 720-167668/9**

**Matrix: Solid**

**Analysis Batch: 167668**

**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
Gasoline Range Organics (GRO) -C5-C12	1000	1070		ug/Kg		107	61 - 128	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene	100		45 - 131
1,2-Dichloroethane-d4 (Surr)	105		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: 720-60050-14 MS**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: SB-MW-12-14'**

**Prep Type: Total/NA**

**Prep Batch: 167692**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		47.9	42.3		ug/Kg		88	69 - 130
Acetone	ND		239	176		ug/Kg		74	37 - 150
Benzene	ND		47.9	41.2		ug/Kg		86	70 - 130
Dichlorobromomethane	ND		47.9	49.1		ug/Kg		103	64 - 135
Bromobenzene	ND		47.9	43.1		ug/Kg		90	70 - 130
Chlorobromomethane	ND		47.9	44.7		ug/Kg		93	65 - 130
Bromoform	ND		47.9	45.9		ug/Kg		96	58 - 132
Bromomethane	ND		47.9	43.2		ug/Kg		90	56 - 130
2-Butanone (MEK)	ND		239	165		ug/Kg		69	41 - 150
n-Butylbenzene	ND		47.9	45.5		ug/Kg		95	60 - 145
sec-Butylbenzene	ND		47.9	42.7		ug/Kg		89	64 - 137
tert-Butylbenzene	ND		47.9	43.9		ug/Kg		92	63 - 134
Carbon disulfide	ND		47.9	35.1		ug/Kg		73	10 - 150

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-60050-14 MS**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: SB-MW-12-14'**

**Prep Type: Total/NA**

**Prep Batch: 167692**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier			Limits	
Carbon tetrachloride	ND		47.9	50.5		ug/Kg		105	54 - 130
Chlorobenzene	ND		47.9	42.8		ug/Kg		89	70 - 130
Chloroethane	ND		47.9	43.6		ug/Kg		91	61 - 130
Chloroform	ND		47.9	47.3		ug/Kg		99	67 - 130
Chloromethane	ND		47.9	46.0		ug/Kg		96	50 - 131
2-Chlorotoluene	ND		47.9	43.6		ug/Kg		91	70 - 130
4-Chlorotoluene	ND		47.9	44.4		ug/Kg		93	70 - 130
Chlorodibromomethane	ND		47.9	50.1		ug/Kg		105	60 - 141
1,2-Dichlorobenzene	ND		47.9	44.5		ug/Kg		93	70 - 130
1,3-Dichlorobenzene	ND		47.9	45.3		ug/Kg		95	70 - 130
1,4-Dichlorobenzene	ND		47.9	43.9		ug/Kg		92	70 - 130
1,3-Dichloropropane	ND		47.9	44.9		ug/Kg		94	70 - 130
1,1-Dichloropropene	ND		47.9	47.7		ug/Kg		100	67 - 130
1,2-Dibromo-3-Chloropropane	ND		47.9	42.1		ug/Kg		88	57 - 130
Ethylene Dibromide	ND		47.9	47.1		ug/Kg		98	66 - 135
Dibromomethane	ND		47.9	46.7		ug/Kg		98	65 - 131
Dichlorodifluoromethane	ND		47.9	52.7		ug/Kg		110	38 - 130
1,1-Dichloroethane	ND		47.9	44.4		ug/Kg		93	67 - 130
1,2-Dichloroethane	ND		47.9	47.5		ug/Kg		99	70 - 130
1,1-Dichloroethene	ND		47.9	38.2		ug/Kg		80	64 - 130
cis-1,2-Dichloroethene	ND		47.9	45.9		ug/Kg		96	68 - 131
trans-1,2-Dichloroethene	ND		47.9	41.9		ug/Kg		87	70 - 130
1,2-Dichloropropane	ND		47.9	43.4		ug/Kg		91	65 - 133
cis-1,3-Dichloropropene	ND		47.9	47.8		ug/Kg		100	46 - 139
trans-1,3-Dichloropropene	ND		47.9	53.5		ug/Kg		112	55 - 131
Ethylbenzene	ND		47.9	42.0		ug/Kg		88	65 - 130
Hexachlorobutadiene	ND		47.9	43.8		ug/Kg		91	58 - 132
2-Hexanone	ND		239	212		ug/Kg		89	44 - 150
Isopropylbenzene	ND		47.9	44.6		ug/Kg		93	65 - 130
4-Isopropyltoluene	ND		47.9	43.2		ug/Kg		90	69 - 134
Methylene Chloride	ND		47.9	40.1		ug/Kg		84	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		239	214		ug/Kg		90	51 - 140
Naphthalene	ND		47.9	42.3		ug/Kg		88	45 - 146
N-Propylbenzene	ND		47.9	43.1		ug/Kg		90	70 - 130
Styrene	ND		47.9	44.8		ug/Kg		94	58 - 135
1,1,1,2-Tetrachloroethane	ND		47.9	46.8		ug/Kg		98	64 - 133
1,1,2,2-Tetrachloroethane	ND		47.9	42.5		ug/Kg		89	70 - 131
Tetrachloroethene	ND		47.9	47.6		ug/Kg		99	67 - 130
Toluene	ND		47.9	38.3		ug/Kg		80	70 - 130
1,2,3-Trichlorobenzene	ND		47.9	42.6		ug/Kg		89	58 - 138
1,2,4-Trichlorobenzene	ND		47.9	44.2		ug/Kg		92	49 - 144
1,1,1-Trichloroethane	ND		47.9	47.5		ug/Kg		99	57 - 133
1,1,2-Trichloroethane	ND		47.9	45.2		ug/Kg		94	68 - 132
Trichloroethene	ND		47.9	45.3		ug/Kg		95	66 - 130
Trichlorofluoromethane	ND		47.9	50.2		ug/Kg		105	61 - 130
1,2,3-Trichloropropane	ND		47.9	44.6		ug/Kg		93	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		47.9	40.3		ug/Kg		84	52 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-60050-14 MS**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: SB-MW-12-14'**

**Prep Type: Total/NA**

**Prep Batch: 167692**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.		
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	
1,2,4-Trimethylbenzene	ND		47.9	43.5		ug/Kg		91	64 - 140		
1,3,5-Trimethylbenzene	ND		47.9	44.6		ug/Kg		93	67 - 134		
Vinyl acetate	ND		47.9	30.0		ug/Kg		63	52 - 150		
Vinyl chloride	ND		47.9	45.1		ug/Kg		94	62 - 130		
m-Xylene & p-Xylene	ND		47.9	43.1		ug/Kg		90	70 - 130		
o-Xylene	ND		47.9	44.5		ug/Kg		93	68 - 130		
2,2-Dichloropropane	ND		47.9	50.7		ug/Kg		106	63 - 130		
TBA	ND		47.9	463		ug/Kg		97	70 - 130		
DIPE	ND		47.9	45.7		ug/Kg		95	70 - 130		
TAME	ND		47.9	46.2		ug/Kg		97	70 - 130		
Ethyl t-butyl ether	ND		47.9	46.1		ug/Kg		96	70 - 130		
<b>MS MS</b>											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene	100		45 - 131								
1,2-Dichloroethane-d4 (Surr)	104		60 - 140								
Toluene-d8 (Surr)	97		58 - 140								

**Lab Sample ID: 720-60050-14 MSD**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: SB-MW-12-14'**

**Prep Type: Total/NA**

**Prep Batch: 167692**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit
Methyl tert-butyl ether	ND		44.5	41.4		ug/Kg		93	69 - 130	2	20	
Acetone	ND		222	172		ug/Kg		77	37 - 150	3	20	
Benzene	ND		44.5	41.2		ug/Kg		93	70 - 130	0	20	
Dichlorobromomethane	ND		44.5	47.1		ug/Kg		106	64 - 135	4	20	
Bromobenzene	ND		44.5	44.0		ug/Kg		99	70 - 130	2	20	
Chlorobromomethane	ND		44.5	43.3		ug/Kg		97	65 - 130	3	20	
Bromoform	ND		44.5	43.6		ug/Kg		98	58 - 132	5	20	
Bromomethane	ND		44.5	45.6		ug/Kg		102	56 - 130	6	20	
2-Butanone (MEK)	ND		222	174		ug/Kg		78	41 - 150	5	20	
n-Butylbenzene	ND		44.5	45.7		ug/Kg		103	60 - 145	1	20	
sec-Butylbenzene	ND		44.5	43.3		ug/Kg		97	64 - 137	1	20	
tert-Butylbenzene	ND		44.5	44.4		ug/Kg		100	63 - 134	1	20	
Carbon disulfide	ND		44.5	35.1		ug/Kg		79	10 - 150	0	20	
Carbon tetrachloride	ND		44.5	48.3		ug/Kg		109	54 - 130	4	20	
Chlorobenzene	ND		44.5	42.8		ug/Kg		96	70 - 130	0	20	
Chloroethane	ND		44.5	46.0		ug/Kg		103	61 - 130	5	20	
Chloroform	ND		44.5	45.6		ug/Kg		103	67 - 130	4	20	
Chloromethane	ND		44.5	47.4		ug/Kg		107	50 - 131	3	20	
2-Chlorotoluene	ND		44.5	44.0		ug/Kg		99	70 - 130	1	20	
4-Chlorotoluene	ND		44.5	44.5		ug/Kg		100	70 - 130	0	20	
Chlorodibromomethane	ND		44.5	47.2		ug/Kg		106	60 - 141	6	20	
1,2-Dichlorobenzene	ND		44.5	44.4		ug/Kg		100	70 - 130	0	20	
1,3-Dichlorobenzene	ND		44.5	45.1		ug/Kg		101	70 - 130	1	20	
1,4-Dichlorobenzene	ND		44.5	44.2		ug/Kg		99	70 - 130	1	20	
1,3-Dichloropropane	ND		44.5	42.6		ug/Kg		96	70 - 130	5	20	
1,1-Dichloropropene	ND		44.5	46.7		ug/Kg		105	67 - 130	2	20	

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-60050-14 MSD**

**Matrix: Solid**

**Analysis Batch: 167668**

**Client Sample ID: SB-MW-12-14'**

**Prep Type: Total/NA**

**Prep Batch: 167692**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
1,2-Dibromo-3-Chloropropane	ND		44.5	40.4		ug/Kg		91	57 - 130	4	20
Ethylene Dibromide	ND		44.5	43.4		ug/Kg		98	66 - 135	8	20
Dibromomethane	ND		44.5	44.8		ug/Kg		101	65 - 131	4	20
Dichlorodifluoromethane	ND		44.5	54.8		ug/Kg		123	38 - 130	4	20
1,1-Dichloroethane	ND		44.5	43.9		ug/Kg		99	67 - 130	1	20
1,2-Dichloroethane	ND		44.5	45.1		ug/Kg		101	70 - 130	5	20
1,1-Dichloroethene	ND		44.5	38.3		ug/Kg		86	64 - 130	0	20
cis-1,2-Dichloroethene	ND		44.5	44.5		ug/Kg		100	68 - 131	3	20
trans-1,2-Dichloroethene	ND		44.5	41.7		ug/Kg		94	70 - 130	0	20
1,2-Dichloropropane	ND		44.5	43.1		ug/Kg		97	65 - 133	1	20
cis-1,3-Dichloropropene	ND		44.5	46.9		ug/Kg		105	46 - 139	2	20
trans-1,3-Dichloropropene	ND		44.5	50.6		ug/Kg		114	55 - 131	5	20
Ethylbenzene	ND		44.5	41.4		ug/Kg		93	65 - 130	1	20
Hexachlorobutadiene	ND		44.5	43.4		ug/Kg		98	58 - 132	1	20
2-Hexanone	ND		222	204		ug/Kg		92	44 - 150	4	20
Isopropylbenzene	ND		44.5	43.6		ug/Kg		98	65 - 130	2	20
4-Isopropyltoluene	ND		44.5	43.6		ug/Kg		98	69 - 134	1	20
Methylene Chloride	ND		44.5	39.4		ug/Kg		89	63 - 130	2	20
4-Methyl-2-pentanone (MIBK)	ND		222	210		ug/Kg		95	51 - 140	2	20
Naphthalene	ND		44.5	42.9		ug/Kg		97	45 - 146	2	20
N-Propylbenzene	ND		44.5	43.3		ug/Kg		97	70 - 130	0	20
Styrene	ND		44.5	44.1		ug/Kg		99	58 - 135	1	20
1,1,1,2-Tetrachloroethane	ND		44.5	46.2		ug/Kg		104	64 - 133	1	20
1,1,2,2-Tetrachloroethane	ND		44.5	41.6		ug/Kg		93	70 - 131	2	20
Tetrachloroethene	ND		44.5	44.9		ug/Kg		101	67 - 130	6	20
Toluene	ND		44.5	38.8		ug/Kg		87	70 - 130	1	20
1,2,3-Trichlorobenzene	ND		44.5	43.1		ug/Kg		97	58 - 138	1	20
1,2,4-Trichlorobenzene	ND		44.5	44.6		ug/Kg		100	49 - 144	1	20
1,1,1-Trichloroethane	ND		44.5	45.5		ug/Kg		102	57 - 133	4	20
1,1,2-Trichloroethane	ND		44.5	42.5		ug/Kg		96	68 - 132	6	20
Trichloroethene	ND		44.5	44.8		ug/Kg		101	66 - 130	1	20
Trichlorofluoromethane	ND		44.5	50.9		ug/Kg		114	61 - 130	1	20
1,2,3-Trichloropropane	ND		44.5	44.7		ug/Kg		101	62 - 150	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		44.5	39.5		ug/Kg		89	52 - 130	2	20
1,2,4-Trimethylbenzene	ND		44.5	44.1		ug/Kg		99	64 - 140	1	20
1,3,5-Trimethylbenzene	ND		44.5	45.3		ug/Kg		102	67 - 134	1	20
Vinyl acetate	ND		44.5	29.1		ug/Kg		65	52 - 150	3	20
Vinyl chloride	ND		44.5	46.9		ug/Kg		105	62 - 130	4	20
m-Xylene & p-Xylene	ND		44.5	42.5		ug/Kg		95	70 - 130	1	20
o-Xylene	ND		44.5	43.8		ug/Kg		98	68 - 130	2	20
2,2-Dichloropropane	ND		44.5	46.8		ug/Kg		105	63 - 130	8	20
TBA	ND		445	453		ug/Kg		102	70 - 130	2	20
DIPE	ND		44.5	45.3		ug/Kg		102	70 - 130	1	20
TAME	ND		44.5	45.3		ug/Kg		102	70 - 130	2	20
Ethyl t-butyl ether	ND		44.5	44.8		ug/Kg		101	70 - 130	3	20

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-60050-14 MSD**  
**Matrix: Solid**  
**Analysis Batch: 167668**

**Client Sample ID: SB-MW-12-14'**  
**Prep Type: Total/NA**  
**Prep Batch: 167692**

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	98		45 - 131
1,2-Dichloroethane-d4 (Surr)	101		60 - 140
Toluene-d8 (Surr)	97		58 - 140

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 720-167802/1-A**  
**Matrix: Solid**  
**Analysis Batch: 167858**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 167802**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		09/29/14 14:50	09/30/14 12:05	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		09/29/14 14:50	09/30/14 12:05	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
p-Terphenyl	109		40 - 130	09/29/14 14:50	09/30/14 12:05	1

**Lab Sample ID: LCS 720-167802/2-A**  
**Matrix: Solid**  
**Analysis Batch: 167858**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 167802**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Diesel Range Organics [C10-C28]	82.3	83.4		mg/Kg		101	50 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
p-Terphenyl	115		40 - 130

**Lab Sample ID: LCSD 720-167802/3-A**  
**Matrix: Solid**  
**Analysis Batch: 167858**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 167802**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
Diesel Range Organics [C10-C28]	82.9	79.1		mg/Kg		95	50 - 150	5	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
p-Terphenyl	121		40 - 130

**Lab Sample ID: MB 720-167922/1-A**  
**Matrix: Solid**  
**Analysis Batch: 167945**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 167922**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		09/30/14 19:41	10/01/14 12:29	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		09/30/14 19:41	10/01/14 12:29	1

TestAmerica Pleasanton

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: MB 720-167922/1-A**  
**Matrix: Solid**  
**Analysis Batch: 167945**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 167922**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
p-Terphenyl	108		40 - 130	09/30/14 19:41	10/01/14 12:29	1

**Lab Sample ID: LCS 720-167922/2-A**  
**Matrix: Solid**  
**Analysis Batch: 167945**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 167922**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Diesel Range Organics [C10-C28]	83.3	81.8		mg/Kg		98	50 - 150
Surrogate	LCS LCS		Limits				
%Recovery	Qualifier						
p-Terphenyl	123		40 - 130				

**Lab Sample ID: LCSD 720-167922/3-A**  
**Matrix: Solid**  
**Analysis Batch: 167945**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 167922**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
Diesel Range Organics [C10-C28]	82.8	82.0		mg/Kg		99	50 - 150	0	35
Surrogate	LCSD LCSD		Limits						
%Recovery	Qualifier								
p-Terphenyl	112		40 - 130						

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 250-30669/1-A**  
**Matrix: Solid**  
**Analysis Batch: 30765**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 30669**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		2.5		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
PCB-1221	ND		5.0		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
PCB-1232	ND		2.5		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
PCB-1242	ND		2.5		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
PCB-1248	ND		2.5		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
PCB-1254	ND		2.5		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
PCB-1260	ND		2.5		ug/Kg		09/24/14 13:30	09/26/14 02:33	1
Surrogate	MB MB		Limits						
%Recovery	Qualifier								
DCB Decachlorobiphenyl (Surr)	119		15 - 150						
							Prepared	Analyzed	Dil Fac
							09/24/14 13:30	09/26/14 02:33	1

TestAmerica Pleasanton



# QC Association Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## GC/MS VOA

### Analysis Batch: 167668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-13	SB-MW-12-4'	Total/NA	Solid	8260B/CA_LUFT	167692
720-60050-14	SB-MW-12-14'	Total/NA	Solid	MS	167692
720-60050-14 MS	SB-MW-12-14'	Total/NA	Solid	8260B/CA_LUFT	167692
720-60050-14 MSD	SB-MW-12-14'	Total/NA	Solid	MS	167692
LCS 720-167668/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	167692
LCS 720-167668/8	Lab Control Sample	Total/NA	Solid	MS	167692
LCS 720-167668/7	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	167692
LCS 720-167668/9	Lab Control Sample Dup	Total/NA	Solid	MS	167692
MB 720-167668/5	Method Blank	Total/NA	Solid	8260B/CA_LUFT	167692
				MS	

### Prep Batch: 167692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-13	SB-MW-12-4'	Total/NA	Solid	5030B	
720-60050-14	SB-MW-12-14'	Total/NA	Solid	5030B	
720-60050-14 MS	SB-MW-12-14'	Total/NA	Solid	5030B	
720-60050-14 MSD	SB-MW-12-14'	Total/NA	Solid	5030B	

## GC Semi VOA

### Prep Batch: 30669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-7	SB-MW-10-1'	Total/NA	Solid	3550B	
720-60050-8	SB-MW-10-2.5'	Total/NA	Solid	3550B	
720-60050-9	SB-MW-10-5'	Total/NA	Solid	3550B	
720-60050-10	SB-MW-11-1'	Total/NA	Solid	3550B	
720-60050-11	SB-MW-11-2.5'	Total/NA	Solid	3550B	
720-60050-12	SB-MW-11-5'	Total/NA	Solid	3550B	
LCS 250-30669/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 250-30669/1-A	Method Blank	Total/NA	Solid	3550B	

### Analysis Batch: 30765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-8	SB-MW-10-2.5'	Total/NA	Solid	8082	30669
720-60050-9	SB-MW-10-5'	Total/NA	Solid	8082	30669
720-60050-10	SB-MW-11-1'	Total/NA	Solid	8082	30669
720-60050-11	SB-MW-11-2.5'	Total/NA	Solid	8082	30669
720-60050-12	SB-MW-11-5'	Total/NA	Solid	8082	30669
LCS 250-30669/2-A	Lab Control Sample	Total/NA	Solid	8082	30669
MB 250-30669/1-A	Method Blank	Total/NA	Solid	8082	30669

### Analysis Batch: 30788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-7	SB-MW-10-1'	Total/NA	Solid	8082	30669

TestAmerica Pleasanton



# QC Association Summary

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## GC Semi VOA (Continued)

### Prep Batch: 167802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-13	SB-MW-12-4'	Total/NA	Solid	3546	
720-60050-14	SB-MW-12-14'	Total/NA	Solid	3546	
LCS 720-167802/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-167802/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-167802/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 167855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-13	SB-MW-12-4'	Total/NA	Solid	8015B	167802
720-60050-14	SB-MW-12-14'	Total/NA	Solid	8015B	167802

### Analysis Batch: 167858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-167802/2-A	Lab Control Sample	Total/NA	Solid	8015B	167802
LCSD 720-167802/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	167802
MB 720-167802/1-A	Method Blank	Total/NA	Solid	8015B	167802

### Prep Batch: 167922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-1	SB-SGI-2-1'	Total/NA	Solid	3546	
720-60050-4	SB-SGI-1-1'	Total/NA	Solid	3546	
LCS 720-167922/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-167922/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-167922/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 167945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-167922/2-A	Lab Control Sample	Total/NA	Solid	8015B	167922
LCSD 720-167922/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	167922
MB 720-167922/1-A	Method Blank	Total/NA	Solid	8015B	167922

### Analysis Batch: 167946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-1	SB-SGI-2-1'	Total/NA	Solid	8015B	167922
720-60050-4	SB-SGI-1-1'	Total/NA	Solid	8015B	167922

# Lab Chronicle

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Client Sample ID: SB-SGI-2-1'

Lab Sample ID: 720-60050-1

Date Collected: 09/19/14 10:11

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			167922	09/30/14 19:41		TAL PLS
Total/NA	Analysis	8015B		20	167946	10/01/14 10:30	JL	TAL PLS

## Client Sample ID: SB-SGI-1-1'

Lab Sample ID: 720-60050-4

Date Collected: 09/19/14 10:28

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			167922	09/30/14 19:41		TAL PLS
Total/NA	Analysis	8015B		10	167946	10/01/14 11:30	JL	TAL PLS

## Client Sample ID: SB-MW-10-1'

Lab Sample ID: 720-60050-7

Date Collected: 09/19/14 11:30

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30669	09/24/14 13:30	MLH	TAL PRT
Total/NA	Analysis	8082		25	30788	09/26/14 14:50	ELP	TAL PRT

## Client Sample ID: SB-MW-10-2.5'

Lab Sample ID: 720-60050-8

Date Collected: 09/19/14 11:33

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30669	09/24/14 13:30	MLH	TAL PRT
Total/NA	Analysis	8082		1	30765	09/25/14 16:14	ELP	TAL PRT

## Client Sample ID: SB-MW-10-5'

Lab Sample ID: 720-60050-9

Date Collected: 09/19/14 11:34

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30669	09/24/14 13:30	MLH	TAL PRT
Total/NA	Analysis	8082		1	30765	09/25/14 16:38	ELP	TAL PRT

## Client Sample ID: SB-MW-11-1'

Lab Sample ID: 720-60050-10

Date Collected: 09/19/14 11:40

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30669	09/24/14 13:30	MLH	TAL PRT
Total/NA	Analysis	8082		5	30765	09/26/14 02:10	ELP	TAL PRT

TestAmerica Pleasanton

# Lab Chronicle

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## Client Sample ID: SB-MW-11-2.5'

Lab Sample ID: 720-60050-11

Date Collected: 09/19/14 11:42

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30669	09/24/14 13:30	MLH	TAL PRT
Total/NA	Analysis	8082		20	30765	09/25/14 18:12	ELP	TAL PRT

## Client Sample ID: SB-MW-11-5'

Lab Sample ID: 720-60050-12

Date Collected: 09/19/14 11:43

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30669	09/24/14 13:30	MLH	TAL PRT
Total/NA	Analysis	8082		50	30765	09/25/14 18:36	ELP	TAL PRT

## Client Sample ID: SB-MW-12-4'

Lab Sample ID: 720-60050-13

Date Collected: 09/19/14 08:30

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			167692	09/26/14 09:58	YYB	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	167668	09/26/14 14:22	PDR	TAL PLS
Total/NA	Prep	3546			167802	09/29/14 14:50		TAL PLS
Total/NA	Analysis	8015B		2	167855	09/30/14 20:20	JL	TAL PLS

## Client Sample ID: SB-MW-12-14'

Lab Sample ID: 720-60050-14

Date Collected: 09/19/14 08:55

Matrix: Solid

Date Received: 09/19/14 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			167692	09/26/14 09:58	YYB	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	167668	09/26/14 14:50	PDR	TAL PLS
Total/NA	Prep	3546			167802	09/29/14 14:50		TAL PLS
Total/NA	Analysis	8015B		1	167855	09/30/14 16:39	JL	TAL PLS

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919  
TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

# Certification Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

## 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

## Laboratory: TestAmerica Portland

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13 *
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

\* Certification renewal pending - certification considered valid.

# Method Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PRT

**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

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200



# Sample Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-60050-1	SB-SGI-2-1'	Solid	09/19/14 10:11	09/19/14 14:40
720-60050-4	SB-SGI-1-1'	Solid	09/19/14 10:28	09/19/14 14:40
720-60050-7	SB-MW-10-1'	Solid	09/19/14 11:30	09/19/14 14:40
720-60050-8	SB-MW-10-2.5'	Solid	09/19/14 11:33	09/19/14 14:40
720-60050-9	SB-MW-10-5'	Solid	09/19/14 11:34	09/19/14 14:40
720-60050-10	SB-MW-11-1'	Solid	09/19/14 11:40	09/19/14 14:40
720-60050-11	SB-MW-11-2.5'	Solid	09/19/14 11:42	09/19/14 14:40
720-60050-12	SB-MW-11-5'	Solid	09/19/14 11:43	09/19/14 14:40
720-60050-13	SB-MW-12-4'	Solid	09/19/14 08:30	09/19/14 14:40
720-60050-14	SB-MW-12-14'	Solid	09/19/14 08:55	09/19/14 14:40



>>> Select a Laboratory <<<

720-60050

Chain of Custody Record

156387  
TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

#N/A #N/A #N/A #N/A  
Regulatory Program:  DW  NPDES  RCRA  Other: \_\_\_\_\_  
TestAmerica Laboratories, Inc.

Your Company Name here: **THE SAURES GARRE**  
 Address: **3478 BUSBY AVE (S&E 100)**  
 City/State/Zip: **PLEASANT HILL, CA 94523**  
 (xxx) xxx-xxxx (925) 324-5374 Phone 5374 FAX  
 (xxx) xxx-xxxx  
 Project Name: **FORMER PACO PUMP SITE**  
 Site: **PACO PUMP SITE (FORMER)**  
 P O #: **04-PFT-005**

Client Contact: \_\_\_\_\_  
 Project Manager: **PRISHA SOGENSEN**  
 Tel/Fax: (910) 847-9217  
 Analysis Turnaround Time: \_\_\_\_\_  
 CALENDAR DAYS: \_\_\_\_\_ WORKING DAYS: \_\_\_\_\_  
 TAT if different from Below: \_\_\_\_\_  
 2 weeks  
 1 week  
 2 days  
 1 day  
**STANDARD**

Site Contact: **CHRISTINE CALINS** Date: **9/19/14**  
 Carrier: \_\_\_\_\_

COC No: \_\_\_\_\_ of **2** COCs  
 Sampler: \_\_\_\_\_  
 For Lab Use Only:  
 Walk-In Client: \_\_\_\_\_  
 Lab Sampling: \_\_\_\_\_  
 Job / SDG No.: \_\_\_\_\_

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Carrier	Sample Specific Notes
1. SB-SGI-2-1'	9/19/14	1011	G	Soil	1		PCBs USEPA METHOD 8082 TEPA USEPA METHOD 8015 *		HOLD
2. SB-SGI-2-2.5'		1013			1				HOLD
3. SB-SGI-2-5'		1023			1				HOLD
4. SB-SGI-1-1'		1028			1				HOLD
5. SB-SGI-1-2.5'		1032			1				HOLD
6. SB-SGI-1-5'		1040			1				HOLD
7. SB-MW-10-1'		1130			1				
8. SB-MW-10-2.5'		1133			1				
9. SB-MW-10-5'		1134			1				
10. SB-MW-11-1'		1140			1				
11. SB-MW-11-2.5'		1142			1				
12. SB-MW-11-5'		1143			1				

Possible Hazard Identification: **HAZARDOUS WASTE**  
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.  
 Non-hazard  Flammable  San Irritant  Poison B  Unknown  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

\*Diesel & Motor Oil

6.1pc

Special Instructions/QC Requirements & Comments: \_\_\_\_\_

Custody Seals Intact:  Yes  No

Relinquished by: *[Signature]* Custody Seal No.: \_\_\_\_\_  
 Company: **SGE** Date/Time: **9/19/14 1440**

Relinquished by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by: *[Signature]* Received in Laboratory by: \_\_\_\_\_  
 Company: **TAAS** Date/Time: **9/19/14 1440**

Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Cooler Temp. (°C): \_\_\_\_\_ Obs'd: \_\_\_\_\_ Therm ID No: \_\_\_\_\_



720-60050 Chain of Custody

# TestAmerica

LEADER IN ENVIRONMENTAL TESTING  
**770-60050**

TESTAMERICA Pleasanton Chain of Custody  
 1220 Quarry Lane • Pleasanton CA 94566-4756  
 Phone: (925) 484-1919 • Fax: (925) 600-3002

Date 9/19/14 Page 2 of 2

156387

## Report To

## Analysis Request

Attn: **PASKA JOHNSON**

Company: **THE SOURCE GROUP**

Address: **3478 BUSTICK AVE (Pleasant Hill)**  
 (CA 9423)

Email: **RJohansen@thesourcegroup.net**

Bill To: **04-PFT-005**

Sampled By: **C. Collins**

Phone: **(925) 326-5374**

Attn: \_\_\_\_\_

Sample ID	Date	Time	Mat	Preserv	Analysis Request
13 MW-12-41	9/19/14	0830	SOIL	N/A	Volatile Organics GC/MS (VOCs) <input checked="" type="checkbox"/> EPA 8260B HVOCs by <input type="checkbox"/> EPA 8260B EPA 8260B: <input checked="" type="checkbox"/> Gas <input type="checkbox"/> BTEX <input checked="" type="checkbox"/> 5 Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol TEPH EPA 8015B <input type="checkbox"/> Silica Gel <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other _____ SemiVolatile Organics GC/MS <input type="checkbox"/> EPA 8270C PNA/PAH's by <input type="checkbox"/> 8270C <input type="checkbox"/> 8270C SIM Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664/9071) <input type="checkbox"/> Total Pesticides <input type="checkbox"/> EPA 8081 <input type="checkbox"/> EPA 8082 CAM17 Metals (EPA 6010/7470/7471) Metals: <input type="checkbox"/> 6010B <input type="checkbox"/> 200.7 <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Metals: <input type="checkbox"/> 6020 <input type="checkbox"/> 200.8 (ICP-MS): _____ <input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> W.E.T (DI) <input type="checkbox"/> TCLP Hex. Chrom by <input type="checkbox"/> EPA 7196 <input type="checkbox"/> or EPA 7199 pH <input type="checkbox"/> 9040 <input type="checkbox"/> SM4500 <input type="checkbox"/> Spec. Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> SS <input type="checkbox"/> TDS Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> NO <sub>3</sub> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> PO <sub>4</sub> <input type="checkbox"/> Perchlorate by EPA 314.0 COD <input type="checkbox"/> EPA 410.4 <input type="checkbox"/> SM5220D <input type="checkbox"/> Turbidity
14 MW-12-191	9/19/14	0855	SOIL	N/A	

### Project Info.

Project Name/ #: \_\_\_\_\_

# of Containers: **2**

PO#: **04-PFT-005**

Head Space: \_\_\_\_\_

PO#: **(SAME)**

Temp: \_\_\_\_\_

Credit Card V/N: \_\_\_\_\_  
 If yes, please call with payment information ASAP

T	10	5	4	3	2	1	Other:
A	Day	Day	Day	Day	Day	Day	<b>STANDARD</b>

Report:  Routine  Level 3  Level 4  EDD  EDF  
 Special Instructions / Comments:  Global ID \_\_\_\_\_

See Terms and Conditions on reverse

### 1) Relinquished by:

Signature: \_\_\_\_\_  
 Printed Name: **CHRISTINE COLLINS**  
 Date: **9/19/14**

Signature: \_\_\_\_\_  
 Printed Name: **SGT**  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

### 2) Relinquished by:

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

### 3) Relinquished by:

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Date: \_\_\_\_\_



## Login Sample Receipt Checklist

Client: The Source Group

Job Number: 720-60050-1

**Login Number: 60050**

**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.	False	
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	

## Login Sample Receipt Checklist

Client: The Source Group

Job Number: 720-60050-1

**Login Number: 60050**

**List Source: TestAmerica Portland**

**List Number: 2**

**List Creation: 09/24/14 10:56 AM**

**Creator: Svabik-Seror, Philip M**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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?	False	Received project as a subcontract.
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



# 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: 720-60050-3  
Client Project/Site: Former Paco Pump Site

For:  
The Source Group  
3478 Buskirk Avenue, Suite 100  
Pleasant Hill, California 94523

Attn: Mr. Paisha Jorgensen



Authorized for release by:  
10/21/2014 4:21:13 PM

Afsaneh Salimpour, Senior Project Manager  
(925)484-1919  
[afsaneh.salimpour@testamericainc.com](mailto:afsaneh.salimpour@testamericainc.com)

### LINKS

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results through  
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Have a Question?



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*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: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

## 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: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

**Job ID: 720-60050-3**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-60050-3

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/19/2014 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.1° C.

Except:

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-12-4'. The container label lists the sample time at 08:45, while the COC lists the sample time at 08:30.

#### GC Semi VOA

Method(s) 8015B: The following sample(s) required a dilution due to the nature of the sample matrix: SB-SGI-2-2.5' (720-60050-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8015B: The following sample was analyzed outside of analytical holding time because the analysis was requested after the sample holding time had expired: SB-SGI-2-2.5' (720-60050-2).

Method(s) 8015B: Capric acid Surrogate recovery for the following sample(s) was outside control limits: SB-SGI-1-2.5' (720-60050-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to prepared sample out of holding time : SB-SGI-1-2.5' (720-60050-5).

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

#### Metals

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

#### Organic Prep

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

# Detection Summary

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Client Sample ID: SB-SGI-2-1'

## Lab Sample ID: 720-60050-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	4.7		0.49		mg/Kg	4		6010B	Total/NA
Chromium	140		1.9		mg/Kg	4		6010B	Total/NA
Nickel	93		1.9		mg/Kg	4		6010B	Total/NA
Lead	310		1.9		mg/Kg	4		6010B	Total/NA
Zinc	1500		5.8		mg/Kg	4		6010B	Total/NA

## Client Sample ID: SB-SGI-2-2.5'

## Lab Sample ID: 720-60050-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	280	H	5.0		mg/Kg	5		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	600	H	250		mg/Kg	5		8015B	Silica Gel Cleanup
Cadmium	6.4		0.42		mg/Kg	4		6010B	Total/NA
Chromium	120		1.7		mg/Kg	4		6010B	Total/NA
Nickel	100		1.7		mg/Kg	4		6010B	Total/NA
Lead	240		1.7		mg/Kg	4		6010B	Total/NA
Zinc	1700		5.0		mg/Kg	4		6010B	Total/NA

## Client Sample ID: SB-SGI-1-1'

## Lab Sample ID: 720-60050-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	110		1.9		mg/Kg	4		6010B	Total/NA
Nickel	74		1.9		mg/Kg	4		6010B	Total/NA
Lead	27		1.9		mg/Kg	4		6010B	Total/NA
Zinc	160		5.8		mg/Kg	4		6010B	Total/NA

## Client Sample ID: SB-SGI-1-2.5'

## Lab Sample ID: 720-60050-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	51	H	1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	66	H	50		mg/Kg	1		8015B	Silica Gel Cleanup
Cadmium	0.46		0.43		mg/Kg	4		6010B	Total/NA
Chromium	35		1.7		mg/Kg	4		6010B	Total/NA
Nickel	43		1.7		mg/Kg	4		6010B	Total/NA
Lead	24		1.7		mg/Kg	4		6010B	Total/NA
Zinc	160		5.2		mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

**Client Sample ID: SB-SGI-2-1'**

**Lab Sample ID: 720-60050-1**

**Date Collected: 09/19/14 10:11**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	4.7		0.49		mg/Kg		10/15/14 18:24	10/17/14 17:18	4
Chromium	140		1.9		mg/Kg		10/15/14 18:24	10/17/14 17:18	4
Nickel	93		1.9		mg/Kg		10/15/14 18:24	10/17/14 17:18	4
Lead	310		1.9		mg/Kg		10/15/14 18:24	10/17/14 17:18	4
Zinc	1500		5.8		mg/Kg		10/15/14 18:24	10/17/14 17:18	4



# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

**Client Sample ID: SB-SGI-2-2.5'**

**Lab Sample ID: 720-60050-2**

Date Collected: 09/19/14 10:13

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	280	H	5.0		mg/Kg		10/15/14 14:53	10/17/14 04:53	5
Motor Oil Range Organics [C24-C36]	600	H	250		mg/Kg		10/15/14 14:53	10/17/14 04:53	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0		0 - 1				10/15/14 14:53	10/17/14 04:53	5
p-Terphenyl	0	XD	38 - 148				10/15/14 14:53	10/17/14 04:53	5

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	6.4		0.42		mg/Kg		10/15/14 18:24	10/17/14 17:23	4
Chromium	120		1.7		mg/Kg		10/15/14 18:24	10/17/14 17:23	4
Nickel	100		1.7		mg/Kg		10/15/14 18:24	10/17/14 17:23	4
Lead	240		1.7		mg/Kg		10/15/14 18:24	10/17/14 17:23	4
Zinc	1700		5.0		mg/Kg		10/15/14 18:24	10/17/14 17:23	4

# Client Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

**Client Sample ID: SB-SGI-1-1'**

**Lab Sample ID: 720-60050-4**

**Date Collected: 09/19/14 10:28**

**Matrix: Solid**

**Date Received: 09/19/14 14:40**

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.48		mg/Kg		10/15/14 18:24	10/17/14 17:28	4
<b>Chromium</b>	<b>110</b>		1.9		mg/Kg		10/15/14 18:24	10/17/14 17:28	4
<b>Nickel</b>	<b>74</b>		1.9		mg/Kg		10/15/14 18:24	10/17/14 17:28	4
<b>Lead</b>	<b>27</b>		1.9		mg/Kg		10/15/14 18:24	10/17/14 17:28	4
<b>Zinc</b>	<b>160</b>		5.8		mg/Kg		10/15/14 18:24	10/17/14 17:28	4

# Client Sample Results

Client: The Source Group  
 Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

**Client Sample ID: SB-SGI-1-2.5'**

**Lab Sample ID: 720-60050-5**

Date Collected: 09/19/14 10:32

Matrix: Solid

Date Received: 09/19/14 14:40

**Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	51	H	1.0		mg/Kg		10/17/14 14:06	10/20/14 12:25	1
Motor Oil Range Organics [C24-C36]	66	H	50		mg/Kg		10/17/14 14:06	10/20/14 12:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	2	X	0 - 1				10/17/14 14:06	10/20/14 12:25	1
p-Terphenyl	78		38 - 148				10/17/14 14:06	10/20/14 12:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.46		0.43		mg/Kg		10/15/14 18:24	10/17/14 17:32	4
Chromium	35		1.7		mg/Kg		10/15/14 18:24	10/17/14 17:32	4
Nickel	43		1.7		mg/Kg		10/15/14 18:24	10/17/14 17:32	4
Lead	24		1.7		mg/Kg		10/15/14 18:24	10/17/14 17:32	4
Zinc	160		5.2		mg/Kg		10/15/14 18:24	10/17/14 17:32	4

# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 720-168894/1-A**

**Matrix: Solid**

**Analysis Batch: 168950**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 168894**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		10/15/14 14:53	10/16/14 23:39	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		10/15/14 14:53	10/16/14 23:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.03		0 - 1	10/15/14 14:53	10/16/14 23:39	1
p-Terphenyl	89		38 - 148	10/15/14 14:53	10/16/14 23:39	1

**Lab Sample ID: LCS 720-168894/2-A**

**Matrix: Solid**

**Analysis Batch: 168950**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 168894**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	82.9	40.5		mg/Kg		49	36 - 112

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	99		38 - 148

**Lab Sample ID: MB 720-169074/1-A**

**Matrix: Solid**

**Analysis Batch: 169174**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 169074**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		10/17/14 14:06	10/20/14 13:51	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		10/17/14 14:06	10/20/14 13:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1	10/17/14 14:06	10/20/14 13:51	1
p-Terphenyl	112		38 - 148	10/17/14 14:06	10/20/14 13:51	1

**Lab Sample ID: LCS 720-169074/2-A**

**Matrix: Solid**

**Analysis Batch: 169175**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 169074**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	83.3	57.2		mg/Kg		69	36 - 112

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	108		38 - 148

**Lab Sample ID: 720-60050-5 MS**

**Matrix: Solid**

**Analysis Batch: 169155**

**Client Sample ID: SB-SGI-1-2.5'**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 169074**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	51	H	83.3	117		mg/Kg		79	50 - 150

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# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 720-60050-5 MS**  
**Matrix: Solid**  
**Analysis Batch: 169155**

**Client Sample ID: SB-SGI-1-2.5'**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 169074**

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
p-Terphenyl	69		38 - 148

**Lab Sample ID: 720-60050-5 MSD**  
**Matrix: Solid**  
**Analysis Batch: 169155**

**Client Sample ID: SB-SGI-1-2.5'**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 169074**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier		Result	Qualifier				Limits	RPD	Limit	
Diesel Range Organics [C10-C28]	51	H	82.0	102		mg/Kg		63	50 - 150	13	30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
p-Terphenyl	64		38 - 148

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-168920/1-A**  
**Matrix: Solid**  
**Analysis Batch: 169045**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 168920**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	ND		0.13		mg/Kg		10/15/14 18:24	10/16/14 23:43	1
Chromium	ND		0.50		mg/Kg		10/15/14 18:24	10/16/14 23:43	1
Nickel	ND		0.50		mg/Kg		10/15/14 18:24	10/16/14 23:43	1
Lead	ND		0.50		mg/Kg		10/15/14 18:24	10/16/14 23:43	1
Zinc	ND		1.5		mg/Kg		10/15/14 18:24	10/16/14 23:43	1

**Lab Sample ID: LCS 720-168920/2-A**  
**Matrix: Solid**  
**Analysis Batch: 169045**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 168920**

Analyte	Spike	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Cadmium	50.0	48.5		mg/Kg		97	80 - 120	
Chromium	50.0	50.0		mg/Kg		100	80 - 120	
Nickel	50.0	49.7		mg/Kg		99	80 - 120	
Lead	50.0	50.2		mg/Kg		100	80 - 120	
Zinc	50.0	46.3		mg/Kg		93	80 - 120	

**Lab Sample ID: LCSD 720-168920/3-A**  
**Matrix: Solid**  
**Analysis Batch: 169045**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 168920**

Analyte	Spike	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Cadmium	50.0	48.6		mg/Kg		97	80 - 120	0	20	
Chromium	50.0	49.9		mg/Kg		100	80 - 120	0	20	
Nickel	50.0	49.8		mg/Kg		100	80 - 120	0	20	
Lead	50.0	50.3		mg/Kg		101	80 - 120	0	20	
Zinc	50.0	46.6		mg/Kg		93	80 - 120	1	20	

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# QC Sample Results

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 720-168920/25-A

Matrix: Solid

Analysis Batch: 169045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168920

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	201	186		mg/Kg		93	67 - 118
Chromium	106	97.8		mg/Kg		92	67 - 121
Nickel	305	281		mg/Kg		92	65 - 117
Lead	302	274		mg/Kg		91	62 - 113
Zinc	388	357		mg/Kg		92	62 - 110

# QC Association Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## GC Semi VOA

### Prep Batch: 168894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-2	SB-SGI-2-2.5'	Silica Gel Cleanup	Solid	3546	
LCS 720-168894/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	
MB 720-168894/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	

### Analysis Batch: 168950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-2	SB-SGI-2-2.5'	Silica Gel Cleanup	Solid	8015B	168894
LCS 720-168894/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	168894
MB 720-168894/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	168894

### Prep Batch: 169074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-5	SB-SGI-1-2.5'	Silica Gel Cleanup	Solid	3546	
720-60050-5 MS	SB-SGI-1-2.5'	Silica Gel Cleanup	Solid	3546	
720-60050-5 MSD	SB-SGI-1-2.5'	Silica Gel Cleanup	Solid	3546	
LCS 720-169074/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	
MB 720-169074/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	

### Analysis Batch: 169155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-5	SB-SGI-1-2.5'	Silica Gel Cleanup	Solid	8015B	169074
720-60050-5 MS	SB-SGI-1-2.5'	Silica Gel Cleanup	Solid	8015B	169074
720-60050-5 MSD	SB-SGI-1-2.5'	Silica Gel Cleanup	Solid	8015B	169074

### Analysis Batch: 169174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-169074/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	169074

### Analysis Batch: 169175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-169074/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	169074

## Metals

### Prep Batch: 168920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-1	SB-SGI-2-1'	Total/NA	Solid	3050B	
720-60050-2	SB-SGI-2-2.5'	Total/NA	Solid	3050B	
720-60050-4	SB-SGI-1-1'	Total/NA	Solid	3050B	
720-60050-5	SB-SGI-1-2.5'	Total/NA	Solid	3050B	
LCS 720-168920/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 720-168920/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 720-168920/25-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 720-168920/1-A	Method Blank	Total/NA	Solid	3050B	

### Analysis Batch: 169045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-168920/2-A	Lab Control Sample	Total/NA	Solid	6010B	168920
LCSD 720-168920/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	168920
LCSSRM 720-168920/25-A	Lab Control Sample	Total/NA	Solid	6010B	168920

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# QC Association Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Metals (Continued)

### Analysis Batch: 169045 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-168920/1-A	Method Blank	Total/NA	Solid	6010B	168920

### Analysis Batch: 169115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60050-1	SB-SGI-2-1'	Total/NA	Solid	6010B	168920
720-60050-2	SB-SGI-2-2.5'	Total/NA	Solid	6010B	168920
720-60050-4	SB-SGI-1-1'	Total/NA	Solid	6010B	168920
720-60050-5	SB-SGI-1-2.5'	Total/NA	Solid	6010B	168920



# Lab Chronicle

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## Client Sample ID: SB-SGI-2-1'

Date Collected: 09/19/14 10:11

Date Received: 09/19/14 14:40

## Lab Sample ID: 720-60050-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			168920	10/15/14 18:24	CTD	TAL PLS
Total/NA	Analysis	6010B		4	169115	10/17/14 17:18	SLK	TAL PLS

## Client Sample ID: SB-SGI-2-2.5'

Date Collected: 09/19/14 10:13

Date Received: 09/19/14 14:40

## Lab Sample ID: 720-60050-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			168894	10/15/14 14:53	AFM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		5	168950	10/17/14 04:53	JL	TAL PLS
Total/NA	Prep	3050B			168920	10/15/14 18:24	CTD	TAL PLS
Total/NA	Analysis	6010B		4	169115	10/17/14 17:23	SLK	TAL PLS

## Client Sample ID: SB-SGI-1-1'

Date Collected: 09/19/14 10:28

Date Received: 09/19/14 14:40

## Lab Sample ID: 720-60050-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			168920	10/15/14 18:24	CTD	TAL PLS
Total/NA	Analysis	6010B		4	169115	10/17/14 17:28	SLK	TAL PLS

## Client Sample ID: SB-SGI-1-2.5'

Date Collected: 09/19/14 10:32

Date Received: 09/19/14 14:40

## Lab Sample ID: 720-60050-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			169074	10/17/14 14:06	JRM	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	169155	10/20/14 12:25	JL	TAL PLS
Total/NA	Prep	3050B			168920	10/15/14 18:24	CTD	TAL PLS
Total/NA	Analysis	6010B		4	169115	10/17/14 17:32	SLK	TAL PLS

**Laboratory References:**

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

# Certification Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

## 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

- 1
- 2
- 3
- 4
- 5
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- 14

# Method Summary

Client: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	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: The Source Group  
Project/Site: Former Paco Pump Site

TestAmerica Job ID: 720-60050-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-60050-1	SB-SGI-2-1'	Solid	09/19/14 10:11	09/19/14 14:40
720-60050-2	SB-SGI-2-2.5'	Solid	09/19/14 10:13	09/19/14 14:40
720-60050-4	SB-SGI-1-1'	Solid	09/19/14 10:28	09/19/14 14:40
720-60050-5	SB-SGI-1-2.5'	Solid	09/19/14 10:32	09/19/14 14:40

- 1
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- 10
- 11
- 12
- 13
- 14

720-60050-3

Mullen, Joan

**From:** Salimpour, Afsaneh  
**Sent:** Tuesday, October 14, 2014 3:44 PM  
**To:** Mullen, Joan  
**Subject:** FW: Additional analysis for 720-60050-1

**AFSANEH SALIMPOUR**  
Senior Project Manager

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING  
1220 Quarry Lane

Pleasanton, CA 94566

Tel 925.484.1919 | Fax 925.600.3002

[www.testamericainc.com](http://www.testamericainc.com)



720-60050 Chain of Custody

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**From:** Paisha Jorgensen [mailto:pjorgensen@thesourcegroup.net]  
**Sent:** Tuesday, October 14, 2014 3:15 PM  
**To:** Salimpour, Afsaneh  
**Subject:** Additional analysis for 720-60050-1

Hi Afsaneh,  
I would like to request the following additional analysis:

LUFT 5 metals

- SB-SGI-1-1'
- SB-SGI-1-2.5'
- SB-SGI-2-1'
- SB-SGI-2-2.5'

TPHd/mo with silica gel cleanup

- SB-SGI-1-2.5'
- SB-SGI-2-2.5'

Thank you,  
Paisha



720-60050-3

Mullen, Joan

**From:** Salimpour, Afsaneh  
**Sent:** Tuesday, October 14, 2014 3:44 PM  
**To:** Mullen, Joan  
**Subject:** FW: Additional analysis for 720-60050-1

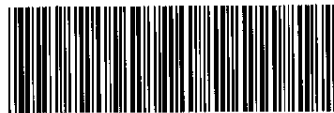
**AFSANEH SALIMPOUR**  
Senior Project Manager

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING  
1220 Quarry Lane

Pleasanton, CA 94566

Tel 925.484.1919 | Fax 925.600.3002

[www.testamencainc.com](http://www.testamencainc.com)



720-60050 Chain of Custody

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**From:** Paisha Jorgensen [mailto:pjorgensen@thesourcegroup.net]  
**Sent:** Tuesday, October 14, 2014 3:15 PM  
**To:** Salimpour, Afsaneh  
**Subject:** Additional analysis for 720-60050-1

Hi Afsaneh,  
I would like to request the following additional analysis:

- LUFT 5 metals
- SB-SGI-1-1'
- SB-SGI-1-2.5'
- SB-SGI-2-1'
- SB-SGI-2-2.5'

- TPHd/mo with silica gel cleanup
- SB-SGI-1-2.5'
- SB-SGI-2-2.5'

Thank you,  
Paisha



## Login Sample Receipt Checklist

Client: The Source Group

Job Number: 720-60050-3

Login Number: 60050

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.	False	
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	