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SUBSURFACE INVESTIGATION AND GROUNDWATER MONITORING REPORT QUARTER 2, 2008

FOR

FORMER PACO PUMPS FACILITY
9201 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

Prepared for

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July 31, 2008

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CERTIFICATION

This **Subsurface Investigation and Groundwater Monitoring Report, Quarter 2, 2008**, for 9201 San Leandro Street in Oakland, California, has been prepared by ERAS Environmental, Inc. (ERAS) under the professional supervision of the Registered Geologist whose signature appears hereon.

This report was prepared in general accordance with the accepted standard of practice that exists in Northern California at the time the investigation was performed. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies.

Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted professional practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

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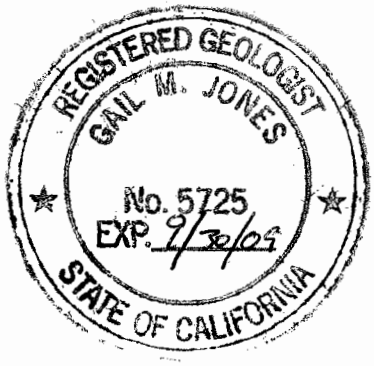
Respectfully submitted,



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July 31, 2008

1.0 INTRODUCTION AND BACKGROUND

ERAS Environmental, Inc. (ERAS) is pleased to present this report with the findings of the subsurface investigation and groundwater well monitoring conducted in June 2008 at the PACO Pumps, Inc. (PACO) fuel leak site at 9201 San Leandro Street in Oakland, California (the "Property"). The location of the Property is shown on **Figure 1**, Site Location Map. The site layout is shown on **Figure 2**.

This investigation is based on the Work Plan for Former PACO Pumps Facility (ERAS, March 17, 2008) and on the Technical Comments in the letter from Alameda County Environmental Health dated May 9, 2008 that is included in **Appendix A**. The objectives of this investigation are as follows.

1. Locate the terminus of the piping that extended from the former 550-gallon UST.
2. Delineate the horizontal and vertical extent of contamination along the western Property boundary adjacent to railroad tracks to assess if contamination was sufficiently removed by previous excavations in that area.
3. Collect soil samples in the near the western corner of the Property to delineate the PCB contamination in the area of well MW-1.
4. Collect soil samples to further delineate motor oil and other hydrocarbon contamination near the south corner of the Property and to assess if any chlorinated hydrocarbon contamination associated with the adjacent paint room facility may have impacted the shallow soil in the area.
5. Characterize the contamination of the soil and groundwater Characterize the contamination of the soil and groundwater in the vicinity of the former 550-gallon UST, including vertical variation of groundwater contamination, in the vicinity of the former 550-gallon UST, and in down-gradient locations along the Property boundaries to assess if contamination associated with the former UST has advanced offsite.
6. Collect groundwater grab-samples in the down-gradient and cross-gradient directions from well MW-4 to assess if the well is likely to be representative of the groundwater contamination in the vicinity of the suspected second UST and the down-gradient extent of contamination associated with the suspected UST.
7. Collect a soil-gas sample adjacent to well 9MW-3 and the former 550-gallong UST to characterize the location of maximum likely vapor-phase contamination.
8. Add detail to the floor usage inside the buildings particularly in the area near the 550-gallon UST.

This investigation was conducted in conjunction with a groundwater monitoring event for the five onsite groundwater monitoring wells.

1.1 PREVIOUS INVESTIGATIONS

The following is a summary of the previous subsurface investigation that has been performed at the Property. Work prior to 2007 was performed by the environmental consultant for PACO, Jonas & Associates. The analytical results from the previous investigations for which information was available was compiled in **Tables 1 through 4**.

1992 UST Removal

A Soil Characterization Report and Work Plan by Jonas & Associates dated in October 1992 identified a former 550-gallon UST located on the southeast side of the Operations Building (see **Figure 2**) on the Property. The UST was removed and gasoline impacted soil was discovered. This site was over excavated but impacted soil remained near the foundation of the building to the west of the former UST.

1992 Soil Boring Investigation

Soil samples were collected in 1992 from twenty-five locations on the Property. The sample analysis did not detect concentrations of petroleum hydrocarbons, volatile organic compounds (VOCs), or pesticides with one exception. A soil sample from boring B18, located at the southeastern side of the Property near the wood shop building, contained elevated concentrations of Total Petroleum Hydrocarbons as kerosene (TPH-k) and as motor oil (TPH-mo) at shallow depths in an area of surface staining.

The concentration of TPH-k of 8,000 milligrams per kilogram (mg/Kg) is above the current (November 2007) Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) of 83 mg/Kg. The concentration of TPH-mo of 8,000 mg/Kg was above the ESL of 410 mg/Kg. The contaminants detected at B18 were not detected in the nearest sample location B19 northeast or in B16 to the southwest indicating the contamination appeared to be limited in extent.

This report also contained a map displaying details of the excavation and soil samples collected in the area suspected to contain a former UST. Piping found in the excavation was believed to be associated with the former UST and is shown on the map which is included as **Appendix B**.

2000 Risk Management Plan and Monitoring

The Risk Management Plan (Jonas & Associates, 2000) addresses a ventilation system to mitigate vapor exposure risks within a room of Building 4, polychlorinated biphenyls (PCB) in soil, health and safety plans and buyer notification.

The plan recommended that the ventilation system should be maintained, that a small area of PCB contaminated soil currently covered by an asphalt cap not be disturbed, that a Health and Safety Plan be prepared prior to excavation activities in specified areas, that disclosure of these conditions be made to future buyers and that a Risk Management Plan be maintained and provided to any future owner.

The report also documents the detection of polychlorinated biphenyls (PCBs) above the RWQCB ESL of 0.089 mg/Kg in the western corner of the property, at 0.4 milligrams per kilogram (mg/Kg) in soil from boring B6, and 0.67 mg/Kg in soil from boring B7. These analytical results of these and other sample results are presented in **Table 1**.

2002 Addendum to Risk Management Plan

The Addendum to Risk Based Corrective Action Model (Jonas & Associates, 2002) evaluated indoor air risk from benzene in soil vapors and evaluated the RBCA model using a residential scenario. This RBCA identified two carcinogenic risks, based on the average and on the maximum groundwater results, using the residential indoor air exposure carcinogenic risk simulations.

Groundwater Monitoring

A total of five groundwater monitoring wells MW1 through MW5 have been installed at the Property. Monitoring of the groundwater wells was regularly conducted from 1992 to 1998, and occasionally since then. The locations of these wells are shown on **Figure 2**.

All of the wells except for MW3 have contained only low or less than detectable concentrations of gasoline hydrocarbons. Samples from MW3 have contained high concentrations, up to 40,000 micrograms per liter (µg/L) of TPH-g and 9,000 µg/L of benzene.

Missing Reports

Several investigations were conducted between 1987 and 1991, while the Property was owned by PACO. Due to an ongoing legal case, ERAS is not authorized to contact PACO Pumps to retrieve the documents requested in the ACEH letter (**Appendix A**).

1.2 GEOLOGY and HYDROGEOLOGY

The Property 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 (California Department of Water Resources, 1967). 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 Property has been determined to be to be to the southwest toward San Francisco Bay.

The sediments in the vicinity of the Property 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 Property. 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 (<10,000 years) blue clay layers that become increasingly thicker toward San Francisco Bay (Helley, et al, 1974). 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 Property 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.

2.0 WORK PERFORMED

ERAS conducted the subsurface investigation on June 12, 13, and 16, 2008 and groundwater well sampling on June 17 and 18, 2008. Prior to soil boring activities a permit was obtained from the Alameda County Public Works Department and is included as **Appendix C**. The drilling area was marked for USA Digs three days in advance so that private utility companies could mark their lines. All boring locations were given final clearance by Scan Tech of San Jose, a private underground line locator. All soil and groundwater waste are temporarily stored onsite in 55-gallon drums. Pick-up and disposal to an appropriate waste facility has been requested.

2.1 PIPING ASSOCIATED WITH FORMER 550-GALLON UST

ERAS attempted to locate the piping associated with the former 550-gallon UST on June 12th 2008. Scan Tech of San Jose was contracted by ERAS to clear the area where the piping was shown on the map included as **Appendix B**. ERAS planned to expose the piping using a shovel.

ERAS was not able to search this area due to a gas line and electrical line crossing the location preventing the overlaying concrete and asphalt from being cut. Scan Tech did not detect any lines heading toward the former tank pit.

2.2 HAND AUGER BORINGS AND SOIL SAMPLING

The standard operating procedures for collection of soil samples from hand borings are included in **Appendix D.** Boring Logs for all hand auger borings are included in **Appendix E.**

2.2.1 SOIL ALONG RAILROAD TRACKS

Sample locations are shown on **Figure 3**. Elevated concentrations of petroleum hydrocarbons were reported in Pit3 and Pit4, sampled in 1987 (see **Table 1**). A total of six soil borings (Pit3SE, Pit3E, Pit3NW, Pit4SE, Pit4NW, and Pit4E) were dug using a hand-auger on June 12th 2008 in the vicinity of these elevated concentrations to total depths of 2 to 3.5 feet bgs. Two 3-inch soil samples were collected from each boring, one soil sample from between 1 and 1.5 foot bgs, and a second from between 2.5 and 3.5 feet bgs.

Soil samples from the borings were stored in the field in a cooler with blue ice. The samples were refrigerated until transport under chain-of-custody procedures to the laboratory for analysis of total petroleum hydrocarbons as motor oil (TPH-mo) TPH-d, BTEX, MTBE, and polyaromatic hydrocarbons (PAH) which including creosote.

2.2.2 PCB IN SOIL

ERAS advanced three borings (HA-1, HA-2, and HA-3) on June 12th, 2008 by hand in the locations shown on the **Figure 4**. Boring HA-1 was advanced to a depth of 3.25 feet bgs and borings HA-2 and HA-3 were advanced to a depth of 2.75 feet bgs. All three borings were logged and soil samples were collected from 1.25-1.5 feet bgs. A soil sample was also collected from 3-3.25 feet bgs from HA-1 and 2.5-2.75 feet bgs from HA-2 and HA-3.

Soil samples from the borings were stored in the field in a cooler with blue ice. The samples were refrigerated until transport under chain-of-custody procedures to the laboratory. The soil samples from the borings were submitted to a state certified laboratory and analyzed PCBs by EPA method SW8082A.

2.2.3 BORINGS IN VICINITY OF MW-2

Elevated concentrations of kerosene and motor oil were found in soil from this area. ERAS advanced three borings (HA-4, HA-5, and HA-6) on June 12th, 2008 by hand in the locations shown on **Figure 5**. The soil borings were advanced to a depth of 3 feet bgs and soil samples were collected from 1-1.25 feet bgs and 2.75-3 feet bgs for analysis.

Soil samples from the borings were stored in the field in a cooler with blue ice. The samples were refrigerated until transport under chain-of-custody procedures to the laboratory. The samples were submitted to a state certified laboratory for analysis for TPH-d, TPH-mo, and TPH-k and volatile organic compounds (VOCs).

2.3 DIRECT-PUSH BORING AND SAMPLING

The standard operating procedures for direct-push boring and sampling are included in **Appendix D**. Boring Logs for GP-1 through GP-8, and SG-1 are included in **Appendix E.**

2.3.1 FORMER 550-GALLON UST

Concentrations of petroleum hydrocarbons above the ESL for potential drinking water have been consistently detected in samples from monitoring well MW-3. Seven sample borings were advanced on June 12th, 13th, and 16th 2008 to characterize fuel hydrocarbon contamination in soil, groundwater and soil-gas.

2.3.1.1 Soil and Groundwater Sampling

The locations of borings GP-1 through GP-8 are shown on **Figure 2**. Borings GP-2, GP-4, and GP-6 were located approximately 5 to 15 feet from the edge of the former 550-gallon excavation on the northwest, northeast, and southeast sides. Boring GP-8 was advanced along the southwest Property boundary to collect soil and groundwater samples to assess if contamination is migrating off-site in that direction. Borings GP-1 and GP-5 were located along the property boundary northwest of the operations building to assess if contamination is migrating offsite in the down-gradient direction.

The borings were advanced using a direct push sample rig by Vironex of Pacheco. Boring GP-6, located inside the building was drilled using a limited access rig. Soil samples were collected above first water for chemical analysis from those borings in which evidence of contamination was observed. The soil cores were screened for total organic vapors using an organic vapor monitor (OVM) to aid in the selection of soil samples for analysis.

Borings GP-1 and GP-2 were continuously cored to 40 feet bgs. A groundwater sample was collected at the top of the water table by inserting a temporary piezometer with 5 feet of screen to the base of the boring, 16 feet bgs for GP-1 and 13.5 feet bgs for GP-2. The groundwater

samples were collected using plastic tubing with a metal ball check at the base of the tubing (WaTerra-style pump). The ball-check was decontaminated prior to sampling. Groundwater samples were decanted directly into appropriate sample containers which were promptly labeled and stored in a cooler with blue-ice. After shallow water sample was complete, the temporary casing was removed and coring continued for descriptive logging and identification of groundwater sample intervals. Groundwater sample borings were located about 1 foot north of GP-1 and GP-2 for the collection of samples using a Hydropunch™ sampler. In both GP-1 and GP-2 unsuccessful attempts were made to collect groundwater samples from the interval to represent the basal portion of the screened interval of existing wells MW-1 through MW-5 (18 to 22 feet bgs for GP-1 and 15 to 19 feet for GP-2). However the fine-grained formation silted the sample screen and water did not enter the sample barrel.

All soil and water samples for the remaining locations, GP-4, GP-5, GP-6 and GP-8 were collected from a single boring. The borings were continuously cored until sufficient water entered the boring for the top-of-water sample which collected through a new temporary casing as described above, except in boring GP-8. The attempt to collect the first-water sample using a temporary casing was unsuccessful because the boring caved so that the casing could not be pushed into the water-bearing zone. A shallow water sample using the Hydropunch sampler across the caved interval was also unsuccessful. The shallowest water sample from boring GP-8 was collected from the interval 20 to 24 feet bgs through a Hydropunch sampler. Deeper water samples were collected from the intervals 25 to 29 feet bgs, and 31 to 35 feet bgs. The limited access sample rig encountered refusal at about 30 feet bgs, so the deepest interval water sample was not collected in that boring.

The samples were kept chilled until transport under chain-of-custody by the State certified environmental analytical laboratory. All soil and groundwater samples collected were submitted to a state certified laboratory and analyzed for TPH-g, BTEX, and 5 oxygenates, EDB and 1,2-DCA.

2.3.1.2 Soil-Gas Sampling

On June 16th 2008 ERAS collected one soil-gas and one soil sample from direct-push boring SG-1 located adjacent to monitoring well MW-3. The location of SG-1 is shown on **Figure 6**. The boring was advanced using a direct push sample rig by Vironex of Pacheco. The soil-gas sample was collected by advancing the soil vapor tip to a depth of 5.5 feet bgs and bulling back ½ foot to expose the sample tip from 5-5.5 feet bgs. The area where the rods exit the ground was sealed with hydrated bentonite. The summa canister was leak tested. The tubing and sample interval was purged of three volumes of gas to remove ambient air. A cloth moistened with isopropyl alcohol was tied to all fittings and was periodically re-moistened during sampling.

The soil vapor sample was collected into Summa canisters fitted with a 30-minute flow meter. The sampling was stopped when the vacuum decreased to 5 inches Hg, after about 41 minutes. The vapor sample was submitted to a state certified laboratory and analyzed for TPH-g by Method TO-3, benzene by EPA Method 8250, toluene, ethylbenzene, xylenes, MTBE, and isopropyl alcohol (leak detection compound) by EPA method TO15, oxygen, carbon dioxide and methane by EPA Method D1946.

Once the soil gas sample was collected the boring was advanced to a depth of 15 feet bgs for the collection of a soil sample beneath the soil gas sample. Soil was continuously logged and screened to collect relative level of contamination using an organic vapor meter to the base of the boring. One soil sample was collected from 9.5-10 feet bgs for chemical analysis. The soil sample collected was submitted to a state certified laboratory and analyzed for TPH-g by EPA Method 8015, and BTEX, five oxygenates, EDB and 1,2-DCA by EPA method 8260.

2.3.2 SUSPECTED 2ND UST AREA

No documents verifying the location of this UST near MW-4 reported by Jonas were found in the files of the City of Oakland Fire Department or in the previous reports made available to ERAS. The Jonas report (October 16, 1992) indicated their mapped location of this UST was based on verbal communication of a previous employee of PACO Pumps.

This warehouse is built on a heavily steel reinforced concrete floor for heavy forklift traffic and contains numerous large steel racks. Due to the steel reinforced concrete and the steel racks ground penetrating radar along with other methods of locating the exact location of this UST are not likely to succeed under current conditions. Therefore, it is not feasible at this time to physically locate the UST pit and confirm if the tank was removed while current business operations are ongoing.

ERAS attempted to advance three borings, as shown on **Figure 2**, down-gradient and cross-gradient of well MW-4 to investigate the extent of dissolved contamination that may be associated with this suspect 2nd UST. Borings GP-3 and GP-7 were advanced on June 13th and 16th 2008 by Vironex of Pacheco using a direct push sample rig. The planned boring located southeast of the office building was not able to be advanced due to a number of underground high pressure fire suppression lines in this desired location. The nearby alleyway between the buildings was not feasible as a replacement location due to high truck traffic. Therefore, that boring was aborted. A feasible replacement will be proposed later in this report.

Borings GP-3 and GP-7 were advanced to 35 feet bgs. Soil was continuously cored for lithologic logging and screened to 20 feet bgs for borings GP-3 and 15 feet bgs for boring GP-7 to collect relative level of contamination using an organic vapor meter. One soil sample was collected from the vadose zone from boring GP-3 for chemical analysis. Groundwater samples were collected after the first water bearing zone was encountered. Once the necessary samples were collected from the initial water bearing zone a Hydropunch™ sampler was utilized to collect discrete samples from 25-29 feet bgs and 31-35 feet bgs from boring GP-3, along with a sample from 25-29 feet bgs from borings GP-7. A discrete sample from 31-35 feet bgs was unable to be collected from boring GP-7 due to insufficient water.

All groundwater samples were collected using plastic tubing with a metal ball check at the base of the tubing (WaTerra-style pump). The ball-check was decontaminated prior to sampling. Groundwater samples were decanted directly into appropriate sample containers which were promptly labeled and stored in a cooler with blue-ice. The samples were kept chilled until transport under chain-of-custody by the State certified environmental analytical laboratory.

All soil and groundwater samples collected were submitted to a state certified laboratory and analyzed for TPH-d, TPH-g, BTEX, and five oxygenates, EDB and 1,2-DCA.

2.4 WELL MONITORING AND SAMPLING

On the 17th and 18th of June 2008, ERAS recorded groundwater elevations and collected groundwater samples from five on-site monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5. The locations of the monitoring wells are shown on **Figure 2**. The standard operating procedure for groundwater sampling is included as **Appendix D.**

At each monitoring well, the water-tight cap was removed and the water level in the well was allowed to equilibrate to atmospheric pressure at least one-half hour. Static water level was measured using an electronic water-level probe. The probe was decontaminated between wells using a non-phosphate detergent and rinsed with purified water. The field records of water-level measurements are included in **Appendix F.**

Groundwater was purged using a new disposable bailer from each well until the pH, conductivity, and temperature stabilized to within 10%. Samples were then decanted from the bailers using VOC-tips into appropriate containers (except for THP-d sample). The well purging and sampling forms are included in **Appendix F**. The sample containers were labeled and stored in a cooler with blue-ice, to be transported under chain-of-custody documentation to the State certified analytical laboratory for analysis of THP-g, BTEX, five oxygenates, 1,2-DCA and EDB. The chain-of-custody form is included in **Appendix G.**

Purge water is temporarily stored onsite. A request has been submitted to Integrated Wastestream Management (IWM) for transport of the 55-gallon drum will be transported to an appropriate disposal facility.

3.0 RESULTS OF INVESTIGATION

3.1 HYDROGEOLOGY

The depth-to-water data and casing elevation data was used to calculate the groundwater elevation in **Table 5.** The groundwater elevation data was used to infer the contours in the potentiometric map of **Figure 6**. The groundwater flow direction between MW-3 and MW-4 was determined to be to the southwest with a gradient of 0.006 ft/ft. The groundwater flow direction under the operations building was found to be toward the northwest at a gradient of 0.003 ft/ft. This groundwater flow pattern mirrors the topographic contours shown on **Figure 1.**

The descriptive field boring logs are included as Attachment E. Beneath the asphalt/concrete the subsurface consisted of clay, with interbedded silt and minor silty sand to about 24 feet bgs. Groundwater was found to occur in two water-bearing zones. First groundwater was encountered at depths between 12.5 and 20 feet bgs. Top of water in the wells has historically been measured as between 7 and 11 feet below top-of-casing. The deeper apparent top-of water in the borings may be due to clay smear of the direct-push boring making water more difficult to detect, rather than confined groundwater conditions. Thus the upper water-bearing zone is in the fine-grained materials from 7 to about 24 feet bgs The lower water-bearing zone encountered below about 24 feet in borings GP-1 and GP-2 was comprised of poorly graded fine to medium grained sand alternating with well sorted sand and gravel.

3.2 ANALYTICAL RESULTS

3.2.1 SOIL

3.2.1.1 Soil Along Railroad Tracks

The descriptive field boring logs are included as **Attachment E**. Sand and sandy gravel were encountered in borings Pit3SE, Pit3E, Pit3NW, Pit4SE, Pit4E, and Pit4NW to a depth of 2 to 2.5 feet and extended to the base of the borings. No hydrocarbon odors or elevate OVM detections were present.

Soil samples from borings Pit3SE, Pit3E, Pit3NW, Pit4SE, Pit4E, and Pit4NW were submitted to a state certified laboratory and analyzed for total petroleum hydrocarbons as motor oil (TPH-mo), TPH-d, BTEX, MTBE, and polyaromatic hydrocarbons (PAH) which include Creosote. The laboratory analytical report is included as **Appendix G**. A table displaying the results is included as **Table 6**.

TPH-d was only detected above the ESL in the sample collected from Pit3SE at a depth of 1.25-1.5 feet bgs at a concentration of 140mg/Kg. TPH-mo was only detected above the ESL in the sample collected from Pit3SE at a depth of 1.25-1.5 feet bgs at a concentration of 550mg/Kg. The only PAH that was detected above the ESLs was benzo(a) pyrene in the samples collected from Pit3NW at a depth of 1.25-1.5 feet bgs and Pit4SE at a depth of 1-1.25. The

concentrations of benzo(a)pyrene were 0.15mg/kg in Pit3NW and 0.042 in boring Pit4SE. No concentrations of BTEX or MTBE were detected above the MRL.

3.2.1.2 PCBs in Soil

The descriptive field boring logs are included as **Appendix E**. Beneath the concrete/asphalt silty clay was encountered in borings HA-1 and HA-2. Sandy gravel was encountered to the base of the boring in HA-3. No PCB odors were present.

The soil samples from borings HA-1, HA-2, and HA-3 were submitted to a state certified laboratory and analyzed PCBs by EPA method SW8082A. The laboratory analytical report is included as **Appendix G**. A table displaying the results is included as **Table 6**.

PCB's were only detected above the ESLs in samples collected from boring HA-2 at a depth of 2.5-2.75 feet bgs and HA-3 at a depth of 2.5-2.75 feet bgs. The concentrations were 0.050mg/Kg and 0.140mg/Kg respectively.

3.2.1.3 Boring MW-2 Area

The descriptive field boring logs are included as **Appendix E**. Sand and sandy gravel were encountered to a depth of 2 feet bgs where a silty clay was encountered which extended to the base of the boring. Hydrocarbon odors were present in all three borings (HA-4, HA-5, and HA-6).

The samples from borings HA-4, HA-5, and HA-6 were submitted to a state certified laboratory for analysis for TPH-d, TPH-mo, and TPH-kerosene by EPA method 8015, BTEX, and volatile organic compounds (VOCs) by EPA method 8260. The laboratory analytical report is included as **Appendix G**. A table displaying the results is included as **Table 6**.

TPH-d was detected above the ESL in the samples collected from boring HA-5 at a depth of 1-1.25 feet bgs and HA-6 at a depth of 1-1.25 feet bgs. The detected concentrations of TPH-d were 1,000mg/Kg and 7,600mg/Kg respectively. TPH-mo was detected above the ESL in the samples collected from boring HA-5 at a depth of 1-1.25 feet bgs and HA-6 at a depth of 1-1.25 feet bgs. The detected concentrations of TPH-d were 1,600mg/Kg and 20,000mg/Kg respectively.

TPH-k was detected above the ESL in the samples collected from boring HA-5 at a depth of 1-1.25 feet bgs and HA-6 at a depth of 1-1.25 feet bgs. The detected concentrations of TPH-d were 1,200mg/Kg and 2,700mg/Kg respectively. No concentrations of VOCs were detected above the ESL in any of samples collected from HA-4, HA-5, or HA-6. No concentrations of TH-d, TPH-mo, or TPH-k above the ESLs were detected in the samples collected from boring HA-4.

3.2.1.4 Soil From Direct-Push Borings

All soil samples collected from direct push borings were submitted to a state certified laboratory and analyzed for TPH-g by EPA 8015, and for BTEX, five oxygenates, EDB and 1,2-DCA by EPA Method 8260. The laboratory analytical report is included as **Appendix H**. A table displaying the analytical results is included as **Table 6**.

Concentrations of TPH-g were detected above the ESLs in the samples collected from borings GP-2, GP-4, GP-6, and SG-1 ranging from 340mg/Kg (GP-2) to 520mg/Kg (GP-6). Concentrations of benzene were detected above the ESLs in the samples collected from borings GP-2, GP-4, GP-6 and SG-1 ranging from 0.72mg/Kg (GP-4) to 4.6mg/Kg (GP-6). No concentrations of MTBE were detected in the soil samples collected from borings GP-2, GP-4, GP-6, GP-8 or SG-1. No concentrations of TPH-g or BTEX were detected in the soil sample collected from GP-8.

The soil sample collected from boring GP-3 to assess contamination associated with the suspected second UST located near well MW-4 was also analyzed for TPH-d by EPA method 8015. No concentrations of TPH-d, TPH-g, BTEX, or MTBE were detected in the soil sample collected from borings GP-3 above the laboratory reporting limit.

3.2.2 GROUNDWATER

All groundwater samples were analyzed for TPH-g by EPA Method 8015, and for BTEX, five oxygenates, EDB and 1,2-DCA by EPA Method 8260. The groundwater samples collected from groundwater monitoring well MW-4 and borings GP-3 and GP-7 was also analyzed for TPH-d by EPA method 8015. The analytical results for groundwater grab-samples are shown on **Table 2**, and groundwater samples from monitoring wells area shown on **Table 5**. The laboratory reports are included as **Appendix H**.

3.2.2.1 Shallow Water-Bearing Zone

Groundwater samples from the shallow water-bearing zone were collected from the monitoring wells MW-1 through MW-5 and borings GP-1 through GP-8. The concentrations of TPH-g and benzene in the shallow water-bearing zone are shown on **Figure 6**. Concentrations of TPH-g were detected in the groundwater samples collected from the shallow water bearing zone (8.5-24 feet bgs) from borings GP-2, GP-4, and GP-6 and wells MW-3 and MW-4 ranged from 81µg/L (MW-4) to 45,000µg/L (GP-2 8.5-13.5).

Concentrations of benzene detected in the groundwater samples collected from the shallow water bearing zone (8.5-24 feet bgs) from borings GP-2, GP-4, GP-6, well MW-4 and MW-3 ranged from 11µg/L (MW-4) to 4,400µg/L (MW-3). MTBE was detected above the ESL (5 µg/L) in the shallow water sample from GP-8 (20-24 feet bgs) at 6.1 µg/L. MTBE was not detected in the water samples from the vicinity of the 550-gallon UST (well MW-3, and borings GP-2, GP-4, and GP-6), but the reporting limits were elevated due to high concentrations of other compounds.

Only the groundwater samples from well MW-4, borings GP-3 and GP-7 were analyzed for TPH-d. TPH-d was detected above the ESL (100 µg/L) in the shallow samples from GP-3 at 180 µg/L TPH-d and GP-7 at 280 µg/L TPH-d. TPH-d was not detected above the reporting limit (50 µg/L) in the sample from well MW-4.

3.2.2.2 Lower Water-Bearing Zone

Groundwater grab-samples from the interval between 24 and 29 feet bgs were collected from borings GP-1 through GP-8. Groundwater from this interval from the borings adjacent to the 550-gallon UST, GP-2, GP-4, and GP-6 were found to contain concentrations of TPH-g and benzene ranging from 210µg/L TPH-g and 7.1 µg/L benzene (GP-2) to 12,000µg/L TPH-g and 240 µg/L benzene (GP-4). Concentrations of MTBE were detected in the samples from borings GP-2 at 12 µg/L MTBE and GP-8 at 6.1µg/L MTBE. The MTBE reporting limit for the samples GP-4 and GP-6 were elevated to the ESL of 5µg/L. No concentrations of TPH-g, BTEX or MTBE above the ESLs were detected in the groundwater samples collected from this interval in borings GP-1, GP-3, or GP-5. TPH-d was not detected in the samples from GP-3 and GP-7.

Groundwater grab-samples from the interval between 31 and 36 feet bgs were collected from borings GP-1 through GP-5, and GP-8. Concentrations of TPH-g and benzene were detected in the samples collected from borings GP-2 and GP-4, adjacent to the UST, at 70 µg/L THP-g and 5.2 µg/L benzene in GP-2, and 330µg/L TPH-g and 15 µg/L benzene in GP-4. Benzene was detected in the sample from boring GP-1 at 0.71 µg/L, which is below the ESL. No concentrations of TPH-g or BTEX were detected in the groundwater samples collected from this interval in borings GP-3, GP-5, or GP-8.

3.3.3 SOIL-GAS

The soil vapor sample SG-1 was submitted to a state certified laboratory and analyzed for TPH-g by TO-3, BTEX, MTBE, and isopropyl alcohol (leak detection compound) by TO15, and oxygen, carbon dioxide and methane by EPA Method D1946. The laboratory analytical report is included as **Appendix I**. The results are presented in **Table 4**.

Sample SG-1, 5-5.5 was found to contain TPH-g at 120,000 µg/m³ and benzene at 11,000 µg/m³, which are above the ESLs.

4.0 SITE CONCEPTUAL MODEL

4.1 HYDROGEOLOGY

Shallow groundwater flows toward west under most of the site, but toward the northwest in the vicinity of the southeast Property boundary. This conforms to the topography as shown in **Figure 1**. The top of groundwater is roughly from 8 to 10 feet bgs.

The upper 5 feet of the subsurface is comprised of silty sand underlain by alternating silt and clay to about 25 feet bgs. Groundwater is most likely under water-table (unconfined) conditions. Below 25 feet to at least 37.5 feet is comprised primarily of sand with interbedded gravel and silty/clayey sand.

4.2 EXTENT OF CONTAMINATION

4.2.1 SOIL

The onsite extent of fuel hydrocarbon and semi-volatile compounds in soil along the railroad tracks, the onsite extent of PCBs in shallow soil in the western corner of the Property near well MW-1, and onsite extent of total petroleum hydrocarbons in shallow soil near MW-2 have been delineated and found to be limited in horizontal and vertical extent. The estimated extent of TPH and benzo(a)pyrene above the ESLs in the area adjacent to the railroad tracts is shown in **Figure 3**. The estimated extent of PCB in shallow soil in the western corner of the Property is shown on **Figure 4**. The estimated extent of TPH in shallow soil in the area near MW-2 is shown on **Figure 5**.

It is unknown if soil contamination is associated with the suspected UST near MW-4. A soil samples was not collected from well MW-4. Also the area of the suspected UST has not been able to be investigated due to the presence of large steel racks in the area identified as the most likely location of the UST.

Shallow soil samples collected from borings adjacent to pit of the former 550-gallon UST were found to contain TPH-g and benzene concentrations in excess of the current ESLs (see **Figure 5**). Soil collected from boring GP-3 was not found to contain TPH-g or BTEX above the laboratory reporting limits, thus delineating the extent of soil contamination northeast of the former UST. The horizontal extent of soil contamination associated with the UST has not been delineated in other directions.

4.2.2 GROUNDWATER

Groundwater collected at various depths from direct-push borings adjacent to the former UST pit, GP-2, GP-4 and GP-6 indicate that the highest concentrations were found in the shallow zone in the fine grained material. The zone from 25 feet bgs to at least 35 feet (see logs GP-1 and GP-2) is comprised mainly of relatively high permeability sands. The top of the sandy zone from 25 to 29 feet was also found to contain concentrations of TPH-g and benzene (as well as some other compounds in G_3 and GP-6) above the ESLs. Groundwater samples from the zone of 31 to 35 feet bgs (collected from GP-2 and GP4 only), were found to have much lower concentrations with only TPH-g and benzene above the ESLs in boring GP-4 and only benzene

about the ESL in boring GP-2. Thus the contamination has advanced from the upper low permeability silt/clay zone above 25 feet bgs to impact the lower sand zone below 25 feet. The contaminant concentrations attenuate relatively rapidly below 30 feet to two to three orders of magnitude lower concentrations for TPH-g and one to three orders of magnitude lower for benzene.

The down-gradient extent of the dissolved plume is delineated by the results for groundwater from direct-push borings GP1, GP-5, and GP-8. MTBE was detected at 6.1 µg/L in GP-8 at 20 to 24 feet bgs, just above the current ESL of 5 µg/L. The groundwater samples from the down-gradient borings were not found to contain detectable concentrations in the shallow zone, but contained toluene in concentrations below the ESL in the upper part of the sandy zone (24 to 29 feet bgs). GP-1 was also found to contain benzene and toluene below the ESLs in the 32 to 36 foot interval. These results indicate the dissolved hydrocarbon plume is not advancing offsite.

The results for groundwater from locations to assess contamination associated with the suspected UST under the northeastern warehouse, MW-4, GP-3, and GP-7, are inconclusive. The sample from well MW-4, believed to be located adjacent to the UST was not found to contain diesel, but contained benzene at 11 µg/L, above the ESL of 1 µg/L, along with other aromatic compound in concentrations below the ESLs. This compares to the shallow groundwater samples from borings GP-3 and GP-7 which were found to contain TPH-d above the ESL of 100 µg/L, but no concentrations of TPH-g or BTEX above the laboratory reporting limit. Unfortunately, the planned location in the most down-gradient direction from MW-4 was aborted due to the proximity of a high pressure fire line and other utilities made the location unsafe to drill. The alley between the northeast warehouse and the adjacent building has very high truck traffic making drilling during normal working hours infeasible.

5.O RECOMMENDATIONS

5.1 SOIL CONTAMINATION ALONG RAILROAD TRACKS

Soil samples indicate that a small amount of soil with TPH and benzo(a)pyrene above the current ESLs exist. ERAS recommends additional excavation to remove this soil. The area of recommended soil removal to 3.5 feet bgs is shown in **Figure 3.** Five confirmation soil samples will be collected at about 1.25 feet bgs on the sidewalls and one bottom wall sample. Confirmation samples will be analyzed for TPH-d and TPH-mo by EPA Method 8015 with silica gel clean-up and SVOCs by 8270.

5.2 PCB CONTAMINATION IN VICINITY OF MW-1

The soil samples collected in the vicinity of 9MW-2 indicate that PCBs exist above the ESLs in soil down to 5 feet bgs. The most likely source of the PCB in soil appears to be the transformer located on the adjacent site just on the other side of the Property line. ERAS recommends removal of soil to 5 feet bgs in the area shown on **Figure 4**. Five confirmation soil samples will be collected from the excavation. Four sidewall samples will be collected at about 1.5 feet bgs and one bottom wall sample. The confirmation samples will be analyzed for PCBs by EPA Method 8082.

5.3 HYDROCARBON CONTAMINATION IN VICINITY OF MW-2

No VOCs were detected above current ESLs. Therefore, ERAS concludes that the usage of the adjacent building as a paint room has not significantly impacted the soil in this area.

Two soil samples collected at 1 to 1.25 feet bgs were found to contain TPH-d, TPH-mo, and TPH-k in excess of the current ESLs. The sample collected at location HA-4 between previous locations B-16 and B-17 was not found to contain contaminants above the current ESLS. None of the three soil samples collected from 2.75 to 3 feet bgs contained contaminants above the ESLs. The source of this contamination is unknown. Based on the highest concentrations being found along the Property line, and the known source and occurrence of hydrocarbon contamination of the adjacent portion of the neighboring property (9235 San Leandro Street), the source of the contamination is likely to have been located on the adjacent property.

ERAS recommends excavation of soil to a depth of 2.5 feet bgs in the area shown on **Figure 5**. Five confirmation soil samples will be collected from the excavation, one bottom wall sample and four sidewall samples will be collected at about 1 foot bgs. Soil samples will be analyzed for TPH-k, TPH-d and TPH-mo by EPA Method 8015 with silica gel clean-up.

5.5 CONTAMINATION ASSOCIATED WITH 550-GALLON UST

The soil samples collected from borings GP-2, GP-3, GP-6 and SG-1 were all found to contain contamination above the current ESLs. However the horizontal extent of soil contamination associated with the former UST has not been delineated.

The groundwater grab-samples collected adjacent to the UST from borings GP-2, GP4, and GP-6 were found to contain high concentrations of TPH-g and BTEX in the shallow groundwater

bearing zone with concentrations above the ESL for benzene extending to 35 feet. Therefore ERAS recommends the installation of a monitoring well adjacent to well MW-3 screened from 25 to 35 feet bgs. The down-gradient and cross-gradient borings G-1, GP-5 and GP-8 were not found to contain TPH-g or BTEX above the ESLs. However, the shallow sample from GP-8 was found to contain MTBE just above the current ESL for the protection of drinking water.

Therefore ERAS proposes the installation of wells adjacent to the locations of borings GP-1 and GP-8 to monitor the quality of groundwater advancing offsite. Each of these locations should include two wells, one screened from about 8 to 23 feet bgs to monitor the upper fine-grained water-bearing zone, and the second screened from 25 to 35 feet bgs to monitor the lower sandy water-bearing zone. Also, ERAS proposes the installation of a well next to well MW-3 that will be screened from 25 to 35 feet bgs to monitor the lower water-bearing zone in the area of the UST. The locations of the proposed well locations are shown on **Figure 7.**

ERAS recommends collection of soil-gas, soil and groundwater grab-samples from inside the southeastern warehouse building to delineate the down-gradient extent of contamination in the vapor phase, soil and groundwater. **Figure 7** shows one proposed sub-slab samples location and six boring locations for the collected of soil gas, soil and groundwater grab-samples. **Figure 8** shows a detailed view of the sub-slab sample location in a storage room, as well as the location of the deep-zone monitoring well adjacent to the UST and three of the multi-phase sample borings.

5.5.1 PROCEDURES FOR PROPOSED SUB-SLAB SAMPLE

The sub-slab sample is proposed for the room in which soil-gas samples B-5 and B-6 were collected in 1998. The data from this sample will give an indication of the degree of the concentration of contaminant vapors that collect under the slab in an area of known high contaminant vapors at 3 feet bgs in soil.

An outer boring will be cut utilizing a drill and a rotary bit about 2-inch diameter with no or minimal hammer to partially penetrate the concrete slab about 3 inches in depth. Cuttings and dust will be continuously vacuumed during advancement. A small inner hole of 5/16th diameter will be advanced and periodically vacuumed penetrating the slab and advancing about 3-inches into the sub-slab material. Stainless steel chromatography grade 3-inch long tubing will be set with the lower end suspended in the inner hole and the upper end connected via Swagelok compression filling to a Swagelok quick-connect fitting. The basal half of the upper larger diameter hole will be sealed using a quick-drying Portland cement pumped into place using a small squeeze-bulb dropper. Prior to sampling the probe will be allowed to equilibrate in the closed position for a minimum of one week. A schematic diagram of the proposed sub-slab sample port is included in **Appendix C**.

The soil-gas sample will be withdrawn through new polyethylene tubing into 6-liter Suma canister with a 30-minute flow regulator and particulate filter. Each canister will go through a leak test to be sure the fittings are air-tight. To pass the test, the canister must hold a vacuum for at least three minutes. Prior to sampling the ambient air will be purged by withdrawing three volumes of the tubing and vapor point holder, PRT tubing adapter and sampling interval (6-inch

(6-inch length of boring) into a separate purge canister. All fittings and potential entry points of ambient air including the top of the direct-push boring will be covered with a cloth or paper towel dampened with isopropyl alcohol as a leak detection compound. During the time of sample collection the cloth will be periodically re-dampened with alcohol.

The sample tubing will enter a flow regulator attached to a t-valve with one tubing path routed to the purge canister and the other tubing routed to the 6-liter sample Suma canister. To purge ambient air from the system, the time required for purging three volumes of the sample space and tubing will be calculated using the draw-rate of the flow regulator. When purging is complete, the T-valve will be switched to draw soil-gas into the sample canister. Sampling will be complete when the pressure gauge on the flow regulator is about five-inches Hg.

A schematic diagram of the sample train is included in **Appendix C**. Standard Operating Procedures for Soil-gas Sampling are included as **Appendix C**. The sample canisters will be stored out of direct sunlight and shipped under chain of custody for analysis of TPH-g by TO-3, BTEX/MTBE and 2-propanol (leak detection) by TO-15 and oxygen, carbon dioxide, methane by ASTM 1946.

5.5.2 PROCEDURES FOR PROPOSED DIRECT-PUSH SAMPLES

The proposed borings will be advanced using a limited access direct-push sample rig to about 30 feet bgs. Based on the drilling of GP-6 using a limited access rig 30 feet bgs is expected to be about the limit of the rig's penetration ability.

At the six soil boring locations, the direct-push sample rig will utilize the Geoprobe Post Run Tubing (PRT) system with 1/4th-inch polyethylene tubing and expendable or retractable drive points. The drive point will be driven to 5.5 feet below ground surface (bgs) and retracted to 5 feet bgs. The surface where the rods exit the ground will be sealed with bentonite chips and allowed to hydrate for 30 minutes. The soil-gas samples will be collected as described above for the sub-slab sample.

After soil gas sampling is complete, the borings will be advanced to about 4 feet below the first encountered groundwater. The soil will be cored continuously and screened for contamination using an OVM. A soil sample will be selected from the vadose zone of each boring for analysis of TPH-d by EPA Method 8015, and for TPH-g BTEX, five oxygenates, EDB, and 1,2-DCA by EPA Method 8260.

A temporary piezometer with 5 feet of screen will be inserted to the base of the boring and a groundwater sample will withdrawn and transferred to appropriate containers. The piezometer will then be removed and a Hydropunch™ style sampler will be advanced to 29 feet and a groundwater sample will be withdrawn from the 25 to 29 foot depth interval. Prior to sample withdrawal, one volume of the sample barrel and rod (about 1 gallon) will be purged to avoid cross contamination of the sample.

The standard operating procedures for direct-push drilling and sampling is included in **Attachment C.**

5.5.3 PROCEDURES FOR PROPOSED WELL INSTALLATION

Borings for the proposed wells will be initially continuously cored by direct-push rig for descriptive logging and refinement of final screened interval. For the shallow wells, a soil sample will be selected for chemical analysis of TPH-d by EPA Method 8015, and TPH-G, BTEX, 5 oxygenates, EDB and 1,2-DCA by EPA Method 8260. The borings for shallow wells will be advanced to about 23 feet bgs. The borings for the deeper wells will be advanced to about 35 feet bgs. The borings will be reamed using 8-inch diameter hollow-stem augers to total depth. The wells will be constructed of 2-inch diameter schedule 40 PVC with 0.002-inch screen. The screened interval will be about 8 to 23 feet for the shallow wells and about 25 to 35 feet for the deeper wells. The filter pack of #2/12 sand will be added to the annulus to 1-foot above the screen, and topped with 2 feet of hydrated bentonite. The remaining annulus will be sealed with neat cement grout to about 6 inches bgs. The deeper wells will be sealed by pumping the grout through a pipe to the base of the seal interval to provide a proper seal. The well-head will be protected with a traffic-rated flush mounted vault.

The wells will be developed at least 48 hours after using a surge block and pump until the silt clears substantially from the purge water. The new wells will be added to the quarterly groundwater monitoring program.

The standard operating procedures for well installation and development are included in **Appendix C.**

All soil and purge water will be stored onsite in 55-gallon drums until transport to an appropriate disposal facility.

5.6 CONTAMINATION ASSOCIATED WITH UST NEAR MW-4

The planned boring most down gradient of well MW-4 was aborted due to the presence of underground utilities. Therefore, ERAS proposes a boring located along the southeast wall of the northeast building as shown on **Figure 7.** Sampling from this direct-push boring would include a vadose zone soil sample if evidence of soil contamination is encountered, and collection of at least two groundwater samples, at least one each from the upper fine-grained water-bearing zone and the lower sandy zone. The boring procedures would be the same as described above, except that a soil-gas sample would not be collected.

5.7 GROUNDWATER MONITORING AND ANALYSIS

The proposed shallow groundwater monitoring wells near borings GP-1 and GP-8 will serve to confirm the interpretation of the potentiometric surface shown in **Figure 3**.

After installation of the proposed new wells, ERAS recommends a round of groundwater monitoring and sampling for all wells that includes the addition of analysis of TPH-d for groundwater from all wells. This is recommended to ascertain if the distribution of TPH-d above the ESL is more widespread than currently thought. Subsequent to that ERAS recommends that quarterly sampling be conducted for wells MW-3 and the new deeper well adjacent to MW-3, MW-4, the proposed shallow and deeper wells near boring GP-1, and the proposed shallow well near boring GP-8.

FIGURES

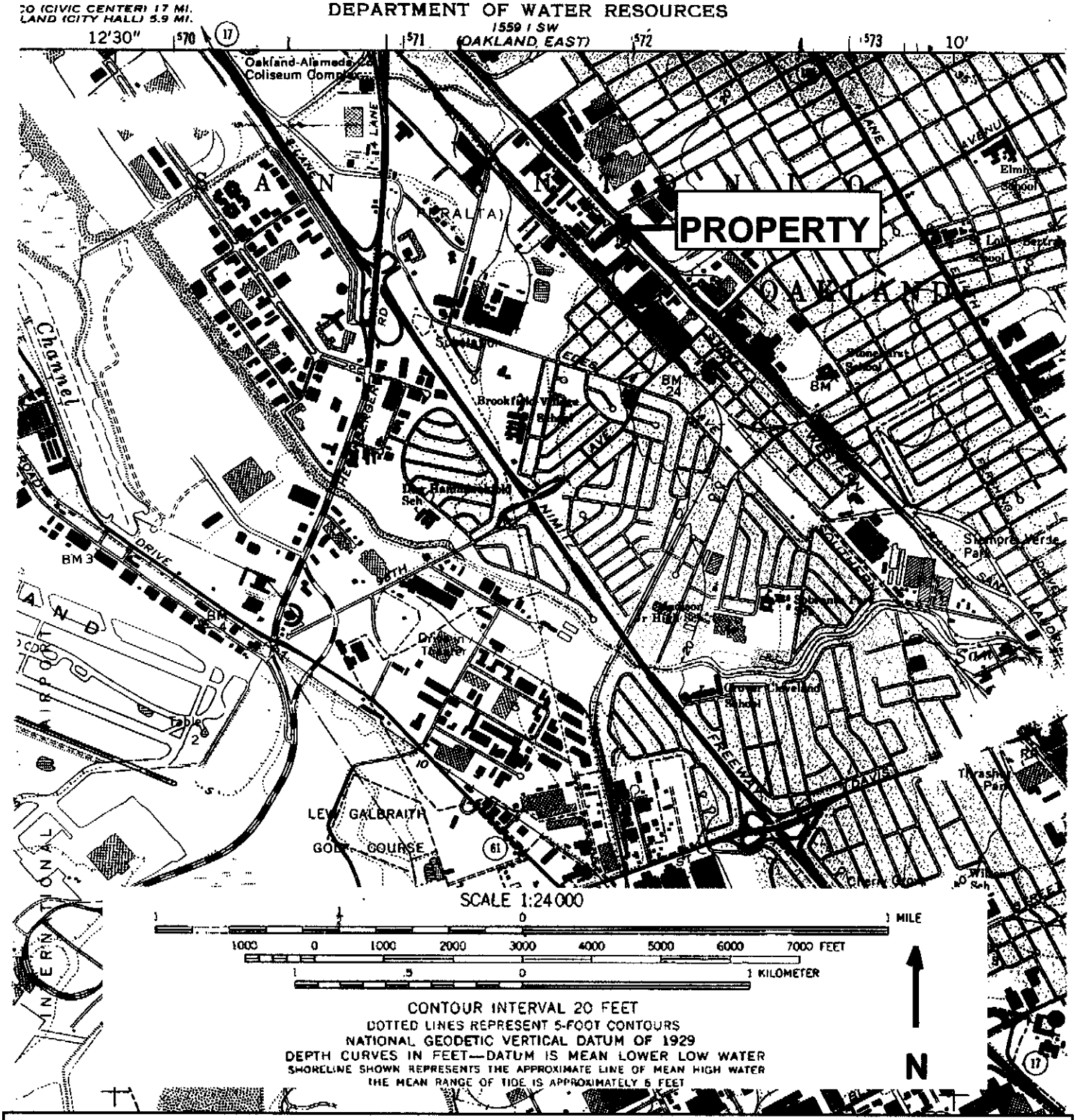


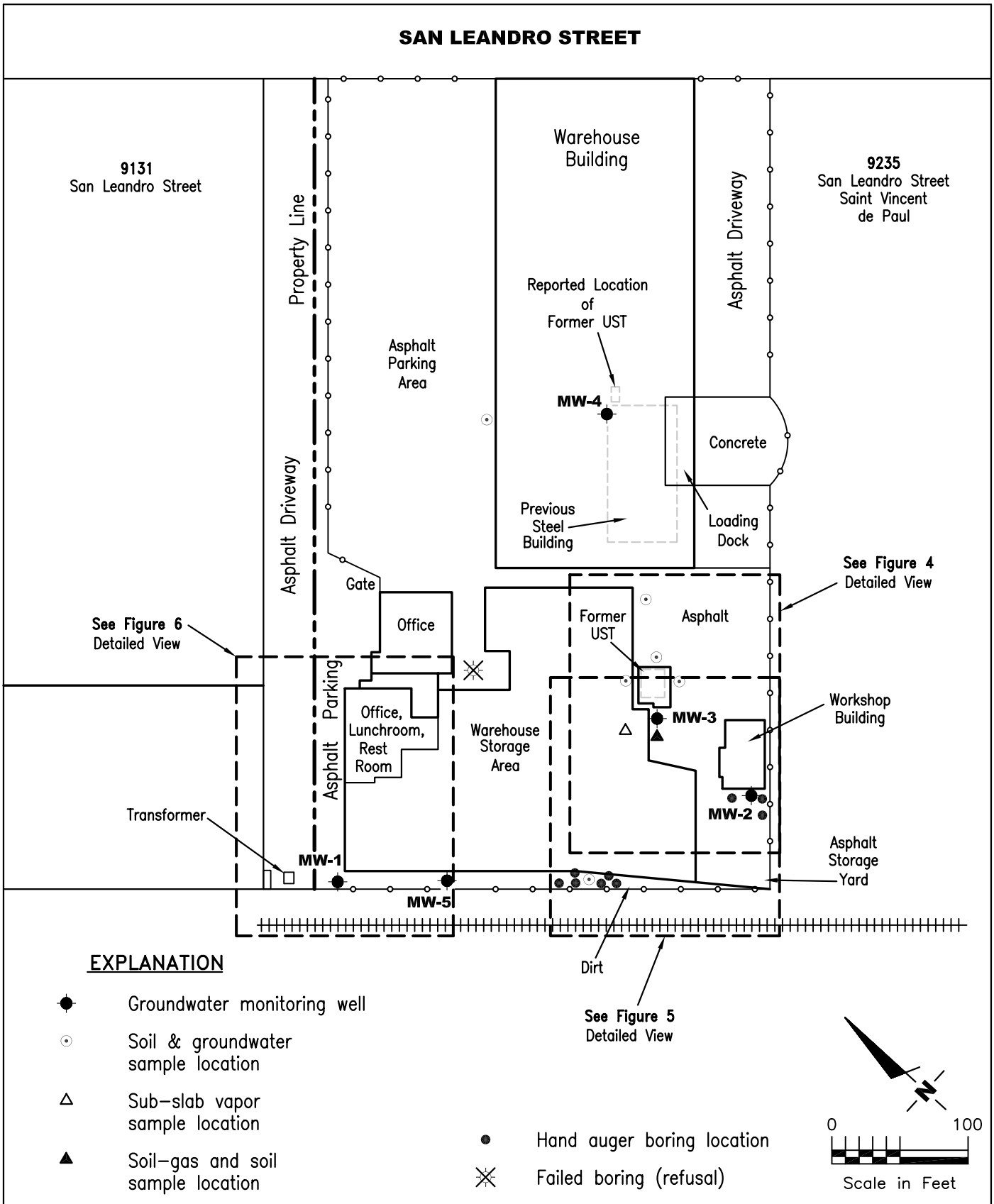
FIGURE 1

LOCATION MAP

9201 San Leandro Street

Oakland, CA 94603

ERAS Environmental, Inc.

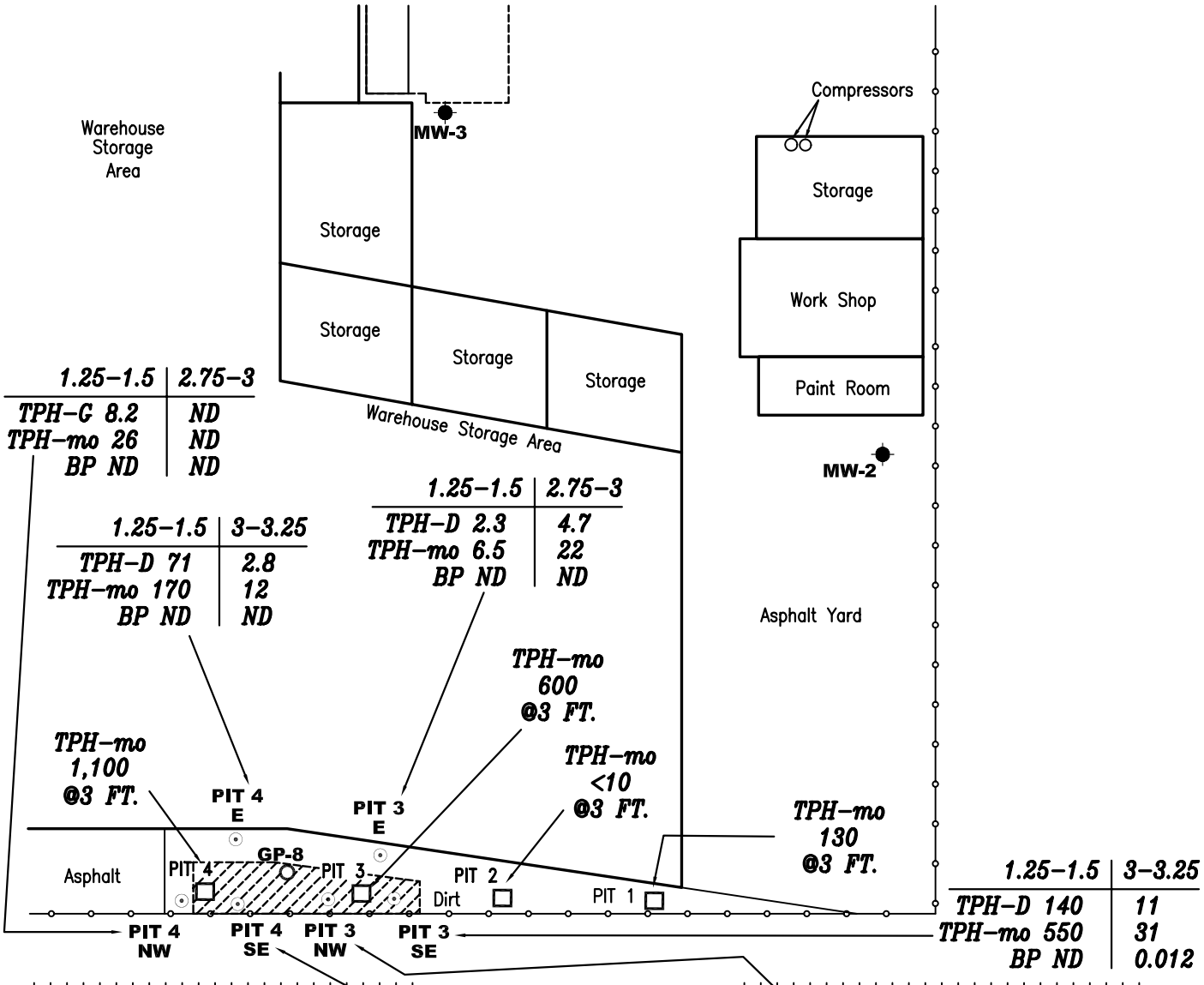


SITE PLAN

DATE 07/08 REVIEWED BY GJ/AS	**Former PACO Pumps Facility** 9201 San Leandro Street Oakland, California	JOB NUMBER 07-001-03 FIGURE 2

ERAS Environmental Inc.

ERAS 07-23-08 Site Plan 07-08.dwg

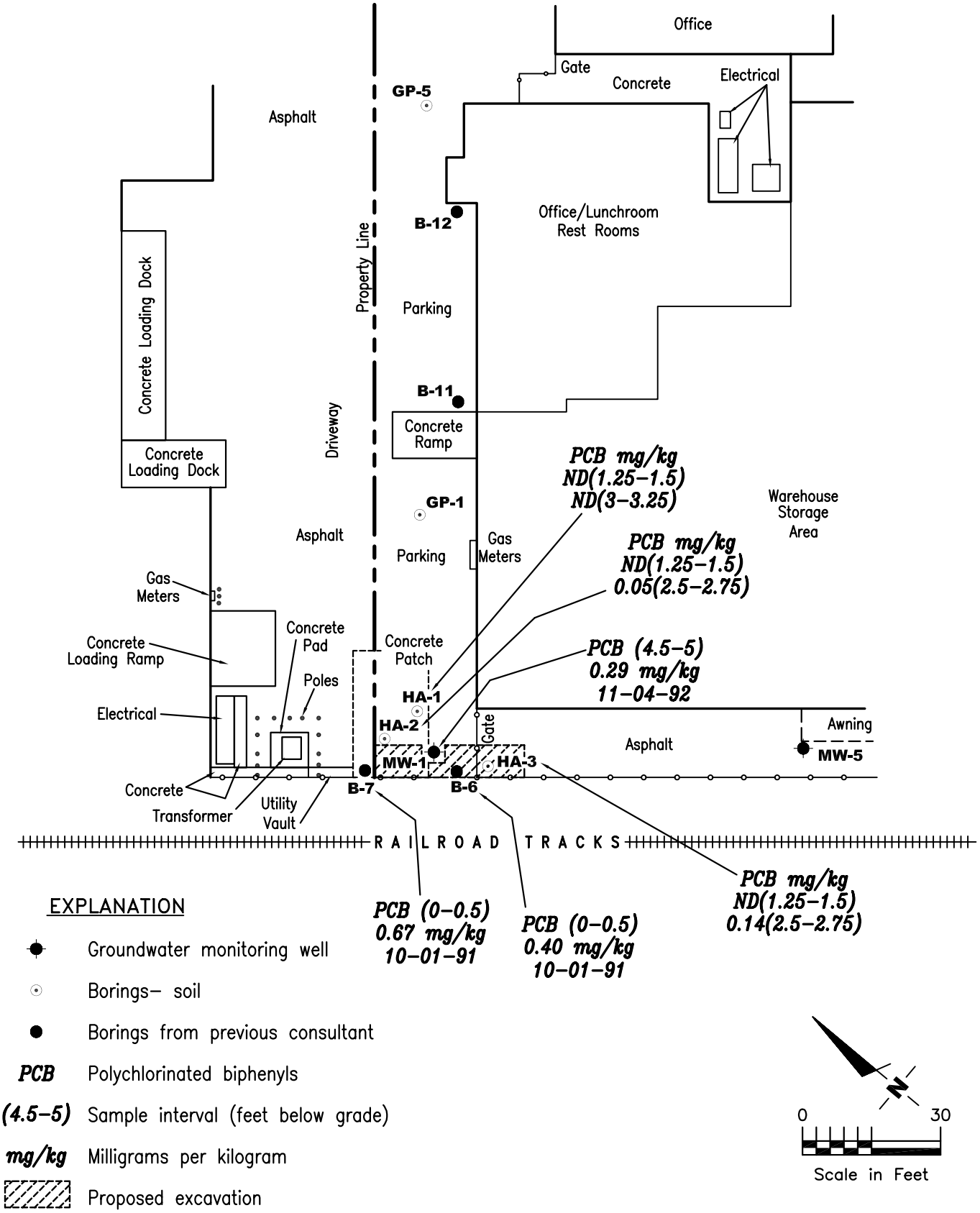


DETAILED VIEW of SAMPLE LOCATIONS along RAILROAD

DATE 07/08	Former PACO Pumps Facility	JOB NUMBER 07–001–03
REVIEWED BY AS/GJ	9201 San Leandro Street Oakland, California	FIGURE 3

ERAS Environmental Inc.

ERAS 07-30-08 Fig. 3 07-08.dwg

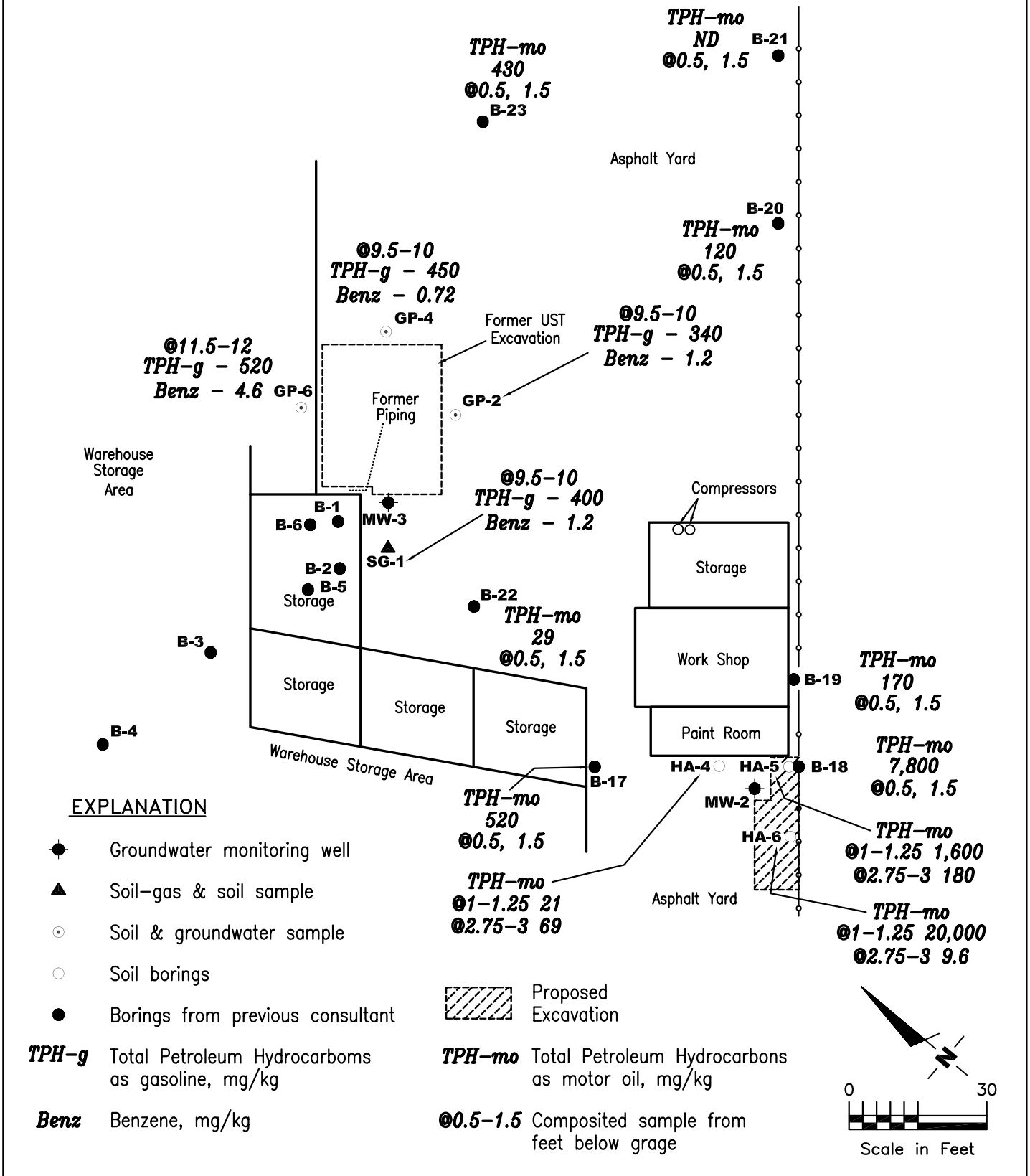


DETAILED VIEW of SOIL SAMPLE LOCATIONS for PCB ANALYSIS

DATE 07/08 REVIEWED BY AS/GJ	Former PACO Pumps Facility 9201 San Leandro Street Oakland, California	JOB NUMBER 07-001-03 FIGURE 4

ERAS Environmental Inc.

ERAS 07-30-08 Fig. 4 07-08.dwg

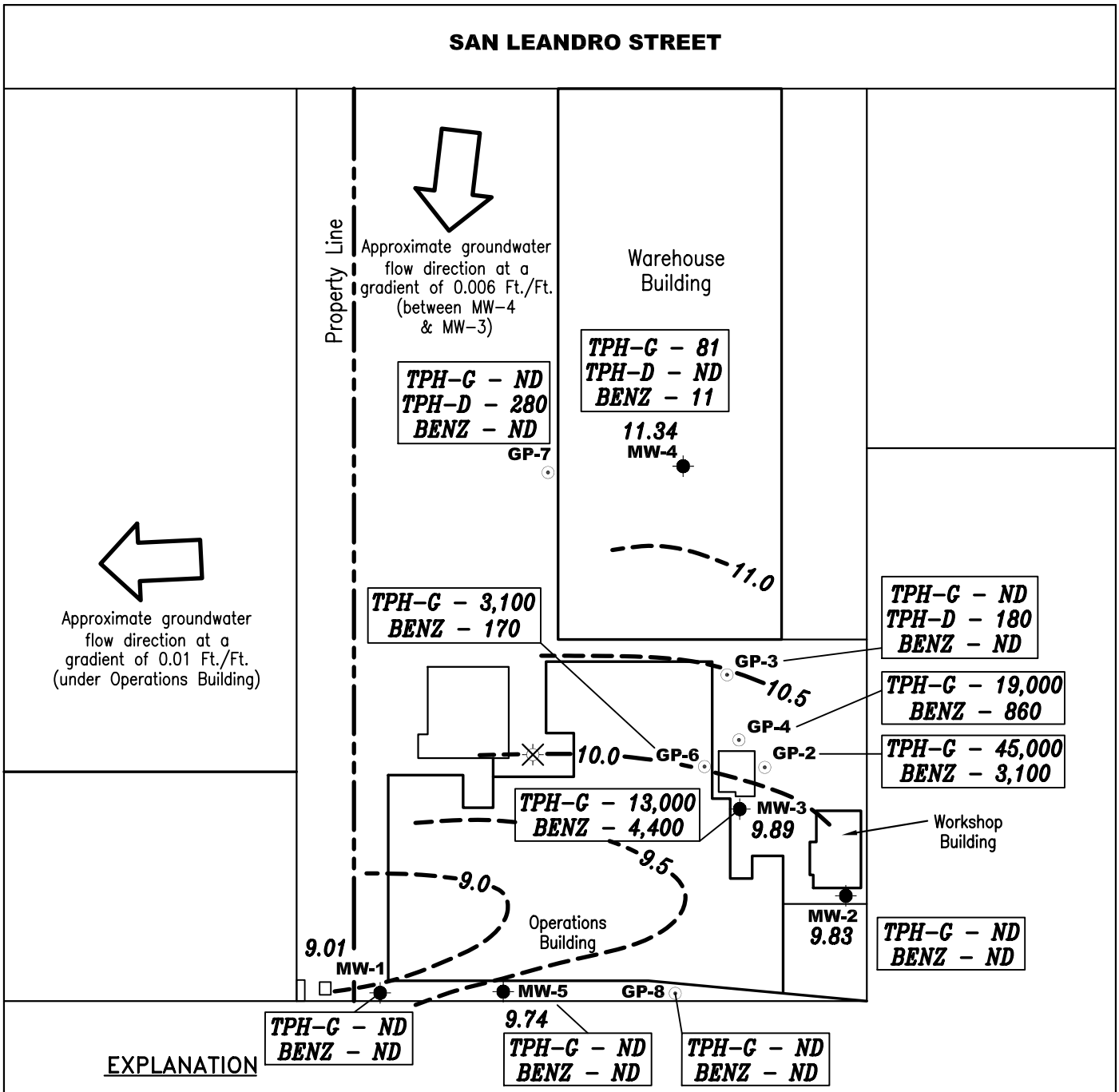


DETAILED VIEW of FORMER UST EXCAVATION AREA

DATE 07/08 REVIEWED BY AS/GJ	Former PACO Pumps Facility 9201 San Leandro Street Oakland, California	JOB NUMBER 07-001-03 FIGURE 5

ERAS Environmental Inc.

ERAS 07-30-08 Fig. 5 07-08.dwg

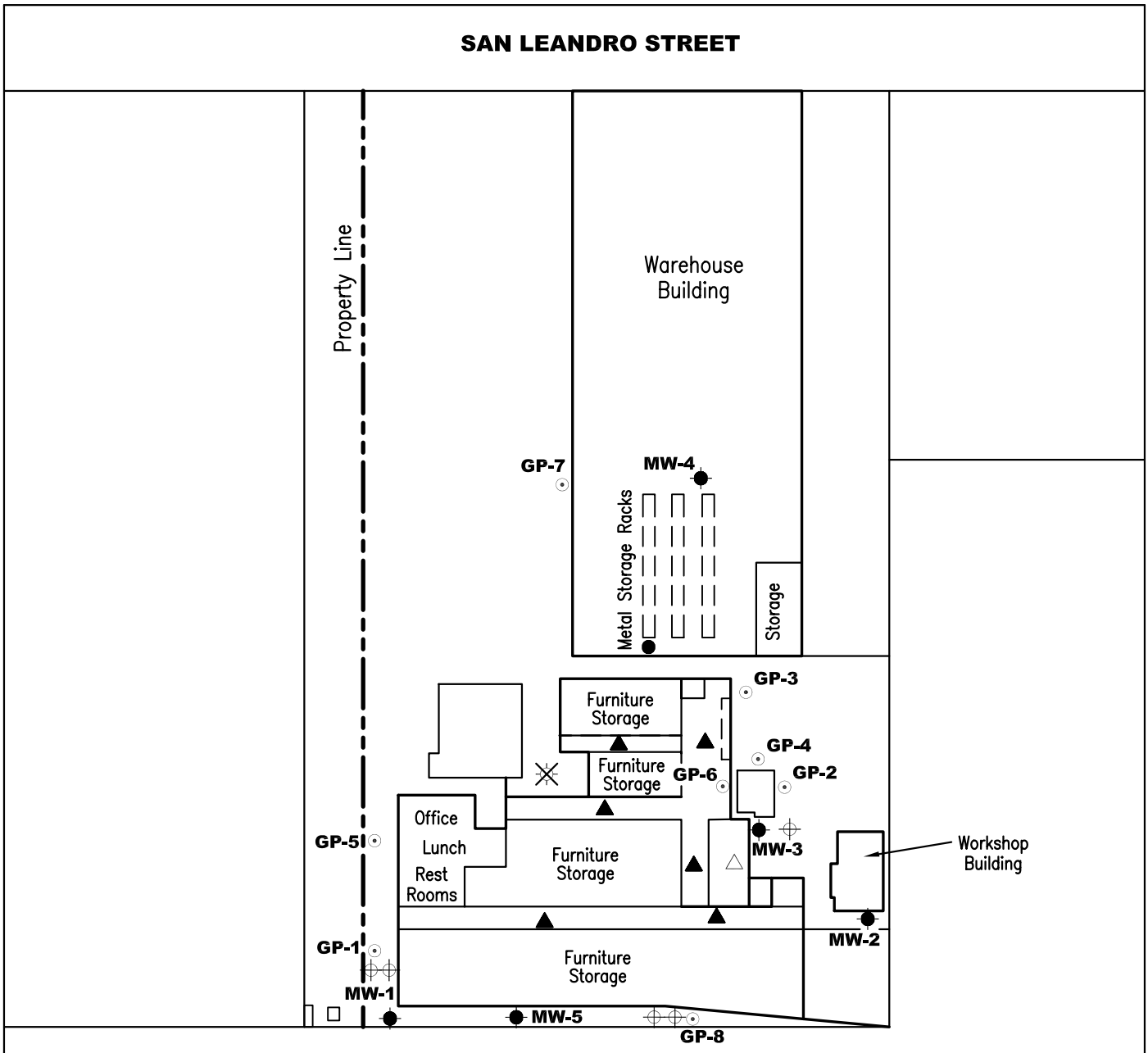


GROUNDWATER POTENTIOMETRIC MAP - QUARTER 2, 2008

DATE 07/08 REVIEWED BY GJ	Former PACO Pumps Facility 9201 San Leandro Street Oakland, California	JOB NUMBER 07-001-04 FIGURE 6

ERAS Environmental Inc.

ERAS 07-30-08 GWE 2nd qtr '08.dwg



EXPLANATION

- Groundwater monitoring well
- ERAS boring locations 06/08
- Failed boring (refusal)
- Proposed groundwater grab sample location
- Proposed soil–gas–groundwater sample locaqtion
- Proposed groundwater monitoring well location
- Proposed sub–slab sample port location

N

0 100

Scale in Feet

PROPOSED SAMPLE LOCATIONS

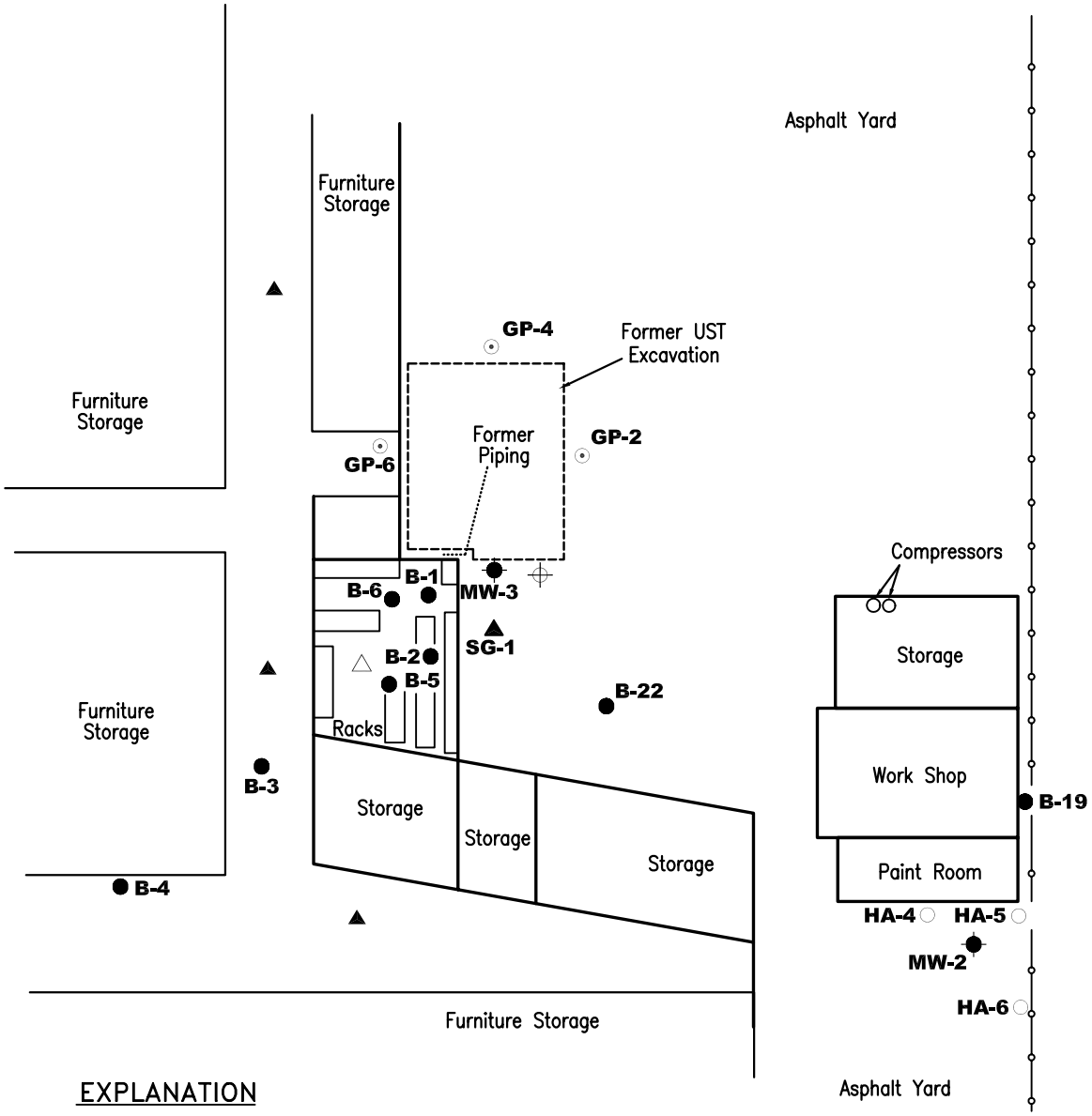
DATE
07/08
REVIEWED BY
GJ

Former PACO Pumps Facility
9201 San Leandro Street
Oakland, California

JOB NUMBER
07–001–04
FIGURE
7

ERAS Environmental Inc.

ERAS 07-23-08 Proposed Samples 07-08.dwg



EXPLANATION

- Groundwater monitoring well
- Soil borings
- Borings from previous consultant
- Soil & groundwater sample
- Proposed soil–gas, soil and groundwater sample location
- Proposed sub–slab sample port location
- Proposed groundwater monitoring well, screen 25–35 feet

0 30

Scale in Feet

UST AREA DETAIL w/PROPOSED SUB-SLAB & MONITORING WELL LOCATIONS

DATE
07/08
REVIEWED BY
AS/GJ

Former PACO Pumps Facility
9201 San Leandro Street
Oakland, California

JOB NUMBER
07–001–04
FIGURE
8

ERAS Environmental Inc.

ERAS 07-30-08 UST Area porp samp.dwg

TABLES

TABLE 1 - HISTORICAL ANALYTICAL RESULTS - SOIL SAMPLES
9201 San Leandro Street, Oakland, CA

Sample Id	Date	Sample Type	Depth (feet)	TPH-g	TPH-d	TPH-mo	TPH-k	Benzene	Toluene	Ethylbenzene	Xylenes	Oxygenates	VOCs	PCBs	Arsenic*
				(milligrams per kilogram)											
1987 Dames & More															
Pit 1	7/27/1987	Pit	1.5	NA	NA	250	NA	NA	0.600	NA	NA	NA	NA	NA	NA
Pit 1	7/27/1987	Pit	3	NA	NA	130	NA	NA	0.470	NA	NA	NA	NA	NA	NA
Pit 2	7/27/1987	Pit	1.5	<10	NA	<10	NA	NA	0.420	NA	NA	NA	NA	NA	NA
Pit 2	7/27/1987	Pit	3	NA	NA	<10	NA	NA	0.600	NA	NA	NA	NA	NA	NA
Pit 3	7/27/1987	Pit	1.5	NA	NA	**780 (800**)[1]**	NA	NA	0.230	NA	NA	NA	NA	NA	NA
Pit 3	7/27/1987	Pit	3	<10	NA	**600**	NA	NA	0.380	NA	NA	NA	NA	NA	**14**
Pit 4	7/27/1987	Pit	1.5	NA	NA	**780**	NA	NA	0.110	NA	NA	NA	NA	NA	NA
Pit 4	7/27/1987	Pit	3	NA	NA	**1100**	NA	NA	0.045	NA	NA	NA	NA	NA	NA
1991 Jonas & Assoc Rpt															
Location of Pits 1-4															
B-1 (Pit1)	10/1/1991	Boring	3.5	ND	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	NA
B-2 (Pit 2)	10/1/1991	Boring	3.5	ND	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	NA
B-3 (Pit 3)	10/1/1991	Boring	3.5	ND	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	NA
B-4 (Pit 4)	10/1/1991	Boring	3.5	ND	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	NA
B-5 (dup of B-4)	10/1/1991	Boring	3.5	ND	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	NA
Adjacent to MW-1															
B-6	10/1/1991	Boring	0-0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.400**	NA
B-7	10/1/1991	Boring	0-0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.670**	NA
1992 Jonas & Assoc Rpt															
B-8	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	22	110	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-9	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	**660**	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-10	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	27	63	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-11	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	120	410	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-12	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-13	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	55	98	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-14	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	21	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-16	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	45	190	ND	ND	0.008	ND	ND	NA	ND	NA	ND
B-17	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	**520**	290	ND	ND	ND	ND	NA	ND	NA	ND
B-18	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	**7800**	8000	0.005	0.049	0.088	1.2	NA	ND	NA	ND
B-19	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	170	27	ND	ND	ND	ND	NA	ND	NA	ND
B-20	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	15	120	ND	ND	ND	ND	ND	NA	ND	NA	**3.5**
B-21	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-22	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	29	ND	ND	ND	ND	ND	NA	ND	NA	**3.0**
B-23	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	**430**	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-24	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-25	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	49	210	ND	ND	ND	ND	ND	NA	ND	NA	ND
B-26	4/9,13,14/1992	Boring	0.5, 1.5[3]	NA	12	57	ND	ND	ND	ND	ND	NA	ND	NA	**5.4**

TABLE 1 - HISTORICAL ANALYTICAL RESULTS - SOIL SAMPLES
9201 San Leandro Street, Oakland, CA

Sample Id	Date	Sample Type	Depth (feet)	TPH-g	TPH-d	TPH-mo	TPH-k	Benzene	Toluene	Ethylbenzene	Xylenes	Oxygenates	VOCs	PCBs	Arsenic*
				(milligrams per kilogram)											
Excavation Samples															
B-1	6/30/1992	Sidewall	6	9.2	ND	NA	NA	0.043	ND	0.086	0.067	NA	NA	NA	NA
B-2	7/27/1992	Sidewall	6	6.2	NA	NA	NA	**1.800**	ND	0.180	ND	NA	NA	NA	NA
B-3	7/27/1992	Sidewall	6	7.3	NA	NA	NA	**0.053**	ND	0.200	ND	NA	NA	NA	NA
B-4	7/27/1992	Sidewall	6	5.3	NA	NA	NA	**0.650**	ND	0.160	0.014	NA	NA	NA	NA
B-5	7/27/1992	Sidewall	6	1.9	NA	NA	NA	0.034	ND	0.012	ND	NA	NA	NA	NA
B-6	8/3/1992	Sidewall	6	13	NA	NA	NA	**2.100**	0.018	0.340	0.190	NA	NA	NA	NA
B-7	8/3/1992	Sidewall	6	11	NA	NA	NA	**2.100**	0.011	0.230	0.067	NA	NA	NA	NA
B-8	8/3/1992	Sidewall	6	7.4	NA	NA	NA	**0.750**	0.0092	0.180	0.026	NA	NA	NA	NA
B-9	8/3/1992	Sidewall	6	2.3	NA	NA	NA	0.039	0.0058	0.008	0.009	NA	NA	NA	NA
B-10	8/11,12/1992	Sidewall	6	4.4	NA	NA	NA	**0.371**	0.0047	0.080	0.028	NA	NA	NA	NA
B-11	8/11,12/1992	Sidewall	6	13	NA	NA	NA	**0.670**	0.0076	0.160	0.100	NA	NA	NA	NA
B-12	8/11,12/1992	Sidewall	6	ND	NA	NA	NA	0.010	ND	ND	ND	NA	NA	NA	NA
B-13	8/11,12/1992	Sidewall	6	1.1	NA	NA	NA	0.013	ND	ND	0.007	NA	NA	NA	NA
1993 Jonas & Assoc Rpt															
MW-1	11/4/1992	Boring	5	NA	<1	530	<1.0	NA	NA	NA	NA	NA	NA	**0.29**	NA
MW-1	11/4/1992	Boring	10	NA	<1	<10	<1.0	NA	NA	NA	NA	NA	NA	<0.1	NA
MW-1	11/4/1992	Boring	15	NA	<1	<10	<1.0	NA	NA	NA	NA	NA	NA	<0.1	NA
MW-2	11/3/1992	Boring	0.5, 1.5[3]	<1	NA	NA	NA	<0.20	<0.20	1.90	9.60	NA	NA	NA	NA
MW-2	11/3/1992	Boring	5	<1	<1	310	14	<0.005	<0.005	0.025	0.041	NA	NA	NA	NA
MW-2	11/3/1992	Boring	10	<1	<1	230	8	<0.005	<0.005	0.011	0.020	NA	NA	NA	NA
MW-2	11/3/1992	Boring	15	<1	<1	<10	<1.0	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-3	11/4/1992	Boring	5	9.5	NA	NA	NA	1.90	0.0095	0.240	0.110	NA	NA	NA	NA
MW-3	11/4/1992	Boring	10	250	NA	NA	NA	3.70	11.00	2.20	6.40	NA	NA	NA	NA
MW-3	11/4/1992	Boring	15	<1	NA	NA	NA	<0.005	0.0054	<0.005	0.028	NA	NA	NA	NA
MW-3	11/4/1992	Boring	20	<1	NA	NA	NA	<0.005	0.010	<0.005	0.012	NA	NA	NA	NA
MW-3	11/4/1992	Boring	25	1.2	NA	NA	NA	0.031	0.065	0.0078	0.023	NA	NA	NA	NA
MW-3	11/4/1992	Boring	30	10	NA	NA	NA	0.200	0.300	0.039	0.110	NA	NA	NA	NA
MW-4	11/9/1992	Boring	0.5	5.9	<1	<10	<1.0	0.078	<0.005	0.0099	0.058	NA	NA	NA	NA
MW-4	11/9/1992	Boring	5	6.3	<1	<10	<1.0	0.700	0.014	0.130	0.590	NA	NA	NA	NA
MW-4	11/9/1992	Boring	10	32	<1	<10	<1.0	0.340	0.760	0.910	4.200	NA	NA	NA	NA
MW-4	11/9/1992	Boring	15	<1	<1	<10	<1.0	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-4	11/9/1992	Boring	20	<1	<1	<10	<1.0	0.0098	0.0093	0.013	0.053	NA	NA	NA	NA
1997 Jonas & Assoc Rpt															
Inside building															
B-1	1/31/1997	Boring	8.5	ND (1.0)	NA	NA	NA	0.012	ND (0.0050)	ND (0.0050)	ND (0.0050)	NA	NA	NA	NA
B-2	1/31/1997	Boring	8.5	9.5	NA	NA	NA	0.042	0.014	0.035	0.058	NA	NA	NA	NA
ESL				83	83	410	83	0.044	2.9	3.3	2.3	-	-	0.089	0.38

Notes

ND = Not detected above the reported detection limit

NA = Not Analyzed

TPH = Total petroleum hydrocarbons quantitated as gasoline (-g), diesel (-d), motor oil (-mo), or kerosene (-k).

VOCs = Volatile Organic Compounds

PCBs = Polychlorinated biphenyls

* = Analyzed for Antimony, Barium, Beryllium, Cadmium, Chromium (total), Cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc as well - all concentrations below residential and industrial ESLs

** = Duplicate Sample

[1] = Quantitated as creosote

[3] = composited

ESL = Environmental Screening Level RWQCB, November 2007, residential land use, groundwater is potential drinking water

TABLE 2. ANALYTICAL RESULTS - GROUNDWATER GRAB-SAMPLES
9201 San Leandro Street, Oakland, CA

Sample Id	Date	Depth (feet)	TPH-d	TPH-g	Benzene	Toluene	thylbenzen	Xylenes	MTBE	Other Oxygenates
			(µg/L)							
West of former 550-gallon UST										
B1	3-Feb-97	15-20	NA	**31,000**	**7,100**	**4,100**	**520**	**1,400**	NA	NA
B2	3-Feb-97	15-20	NA	**41,000**	**14,000**	**2,600**	**740**	**1,700**	NA	NA
B3	2-Feb-98	15-20	NA	**1,400**	**310**	9.9	27	**56**	NA	NA
B4	2-Feb-98	15-20	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
ERAS Environmental Investigation										
GP-1	12-Jun-08	13.5-16	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
GP-1	12-Jun-08	24-28	NA	<50	<0.5	0.62	<0.5	<0.5	<0.5	ND
GP-1	12-Jun-08	32-36	NA	<50	0.71	0.75	<0.5	<0.5	<0.5	ND
GP-2	12-Jun-08	8.5-13.5	NA	**45,000**	**2900**	**2600**	**450**	**1100**	<10	**14 (1,2-DCA)**
GP-2	12-Jun-08	25-29	NA	**210**	**7.1**	7.1	1.0	2.7	1.2	ND
GP-2	12-Jun-08	31-35	NA	70	**5.2**	3.0	<0.5	1.2	1.0	ND
GP-3	13-Jun-08	19.5-22	**180**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2.1 (TBA)
GP-3	13-Jun-08	25-29	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
GP-3	13-Jun-08	31-35	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
GP-4	13-Jun-08	13-15	NA	**19000**	**860**	**670**	**260**	**420**	<17	ND
GP-4	13-Jun-08	25-29	NA	**12000**	**240**	**230**	**130**	**240**	<5.0	ND
GP-4	13-Jun-08	31-35	NA	**330**	**15**	12	5.7	10	0.65	ND
GP-5	13-Jun-08	16-20	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
GP-5	13-Jun-08	25-29	NA	<50	<0.5	0.69	<0.5	<0.5	<0.5	ND
GP-5	13-Jun-08	31-35	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
GP-6	16-Jun-08	13.5-18	NA	**3100**	**170**	30	22	**35**	<5.0	ND
GP-6	16-Jun-08	25-29	NA	**3000**	**160**	39	**40**	**75**	<5.0	ND
GP-7	16-Jun-08	13-15	**280**	<50	<0.5	<0.5	<0.5	<0.5	0.93	ND
GP-7	16-Jun-08	25-29	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
GP-8	16-Jun-08	20-24	NA	<50	<0.5	<0.5	<0.5	<0.5	**6.1**	**1.9 (1,2-DCA)**
GP-8	16-Jun-08	25-29	NA	<50	<0.5	<0.5	<0.5	<0.5	0.78	ND
GP-8	16-Jun-08	31-35	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
ESL			100	100	1	40	30	20	5	0.5 (1,2(DCA)

TABLE 2. ANALYTICAL RESULTS - GROUNDWATER GRAB-SAMPLES
9201 San Leandro Street, Oakland, CA

Notes
µg/L = Micrograms per liter
TPH-g = Total petroleum hydrocarbons as gasoline
MTBE = Methel Tertiary Butyl Ether
Oxygenates = t-Amyl methyl ether, t-Butyl alcohol (TBA), 1,2-Dibromoethane, 1,2-Dichloroethane (1,2-DCA), Diisopropyl ether, ethyl t-butyl ether
ESL = Environmental screening levels, RWQCB, November 2007, potential drinking water
NA = Not Analyzed
ND = Not Detected

TABLE -4 HISTORICAL ANALYTICAL RESULTS - GROUNDWATER WELL SAMPLES

9201 San Leandro Street
Oakland, California

Sample Id	Date	Depth	TOC Elevation	Depth to Water	GW Elevation	TPH-d	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates
		(feet)	(feet amsl)	(feet)	(feet amsl)	(micrograms per liter)							
MW-1	15-Nov-92	5.25-20.25	18.05	9.34	8.71	<50	NA	NA	NA	NA	NA	NA	NA
MW-1	9-Mar-93	5.25-20.25	18.05	8.50	9.55	140	NA	NA	NA	NA	NA	NA	NA
MW-1	21-Jul-93	5.25-20.25	18.05	9.00	9.05	<50	NA	NA	NA	NA	NA	NA	NA
MW-1	29-Jan-94	5.25-20.25	18.05	-	-	<50	NA	NA	NA	NA	NA	NA	NA
MW-1	26-May-94	5.25-20.25	18.05	9.06	8.99	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	24-Aug-94	5.25-20.25	18.05	8.40	9.65	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	22-Nov-94	5.25-20.25	18.05	8.20	9.85	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	8-Feb-95	5.25-20.25	18.05	8.30	9.75	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	31-May-95	5.25-20.25	18.05	9.35	8.70	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	8-Aug-95	5.25-20.25	18.05	9.16	8.89	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	29-Nov-95	5.25-20.25	18.05	9.28	8.77	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	29-Feb-96	5.25-20.25	18.05	7.62	10.43	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	23-May-96	5.25-20.25	18.05	8.28	9.77	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	4-Nov-96	5.25-20.25	18.05	9.20	8.85	MA	NA	NA	NA	NA	NA	NA	NA
MW-1	13-May-97	5.25-20.25	18.05	9.04	9.01	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	27-Oct-00	5.25-20.25	18.05	-	-	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-1	14-Nov-07	5.25-20.00	18.05	8.50	9.55	NA	<50	<0.50	<0.50	<0.50	<0.50	<2.0	NA
MW-1	17-Jun-08	5.25-20.00	18.05	9.04	9.01	NA	<50	<0.5	<0.5	<0.5	<0.5	0.67	ND
MW-2	16-Nov-92	5.25-20.25	19.40	10.05	9.35	<50	<50	<0.5	<0.5	<0.5	<1.5	NA	NA
MW-2	9-Mar-93	5.25-20.25	19.40	9.21	10.19	430	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	21-Jul-93	5.25-20.25	19.40	9.72	9.68	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	29-Jan-94	5.25-20.25	19.40	-	-	<50	<50	<2.0	<2.0	<2.0	<2.0	NA	NA
MW-2	26-May-94	5.25-20.25	19.40	9.58	9.82	<50	<50	2.3	0.8	<0.5	<0.5	NA	NA
MW-2	24-Aug-94	5.25-20.25	19.40	9.98	9.42	<50	<50	6.1	1.4	0.5	0.6	NA	NA
MW-2	22-Nov-94	5.25-20.25	19.40	8.7	10.70	<50	<50	3.4	1.8	<0.5	0.5	NA	NA
MW-2	8-Feb-95	5.25-20.25	19.40	8.68	10.72	<50	<50	4.5	1.3	<0.5	0.5	NA	NA
MW-2	31-May-95	5.25-20.25	19.40	9.48	9.92	<50	NA	NA	NA	NA	NA	NA	NA
MW-2	8-Aug-95	5.25-20.25	19.40	9.64	9.76	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	29-Nov-95	5.25-20.25	19.40	9.86	9.54	<50	NA	NA	NA	NA	NA	NA	NA
MW-2	29-Feb-96	5.25-20.25	19.40	8.12	11.28	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-2	23-May-96	5.25-20.25	19.40	8.70	10.70	<50	NA	NA	NA	NA	NA	NA	NA
MW-2	4-Nov-96	5.25-20.25	19.40	9.50	9.90	<50	NA	NA	NA	NA	NA	NA	NA
MW-2	13-May-97	5.25-20.25	19.40	9.44	9.96	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	13-Nov-03	5.25-20.00	19.40	8.94	10.46	NA	<50	<0.50	<0.50	<0.50	<0.50	<2.0	NA
MW-2	17-Jun-08	5.25-20.00	19.40	9.57	9.83	NA	<50	<0.5	<0.5	<0.5	<0.5	1.1	ND
MW-3	16-Nov-92	5.25-20.25	19.70	10.35	9.35	<50	40,000	2,900	6,700	550	1700	NA	NA
MW-3	9-Mar-93	5.25-20.25	19.70	9.19	10.51	290	12,000	1,000	300	110	170	NA	NA
MW-3	21-Jul-93	5.25-20.25	19.70	11.07	8.63	<50	3,400	420	63	36	37	NA	NA
MW-3	29-Jan-94	5.25-20.25	19.70	-	-	<50	5,600	910	220	47	36	NA	NA
MW-3	26-May-94	5.25-20.25	19.70	10.04	9.66	<50	5,200	890	180	45	43	NA	NA
MW-3	24-Aug-94	5.25-20.25	19.70	11.08	8.62	<50	5,200	580	76	29	22	NA	NA
MW-3	22-Nov-94	5.25-20.25	19.70	8.92	10.78	<50	2,200	670	130	31	28	NA	NA
MW-3	8-Feb-95	5.25-20.25	19.70	8.9	10.80	<50	2,900	780	120	31	33	NA	NA
MW-3	31-May-95	5.25-20.25	19.70	10.16	9.54	NA	9,100	2,800	160	91	72	NA	NA
MW-3	31-May-95	5.25-20.25	19.70	10.16	9.54	NA	5,300	1,300	170	37	44	NA	NA
MW-3	28-Aug-95	5.25-20.25	19.70	9.92	9.78	NA	1,400	<0.5	<0.5	1.7	7.9	NA	NA
MW-3	28-Aug-95	5.25-20.25	19.70	9.92	9.78	NA	4,800	2,500	150	53	44	NA	NA
MW-3	29-Nov-95	5.25-20.25	19.70	10.70	9.00	NA	3,000	780	43	32	32	NA	NA
MW-3	29-Nov-95	5.25-20.25	19.70	10.7	9.00	NA	2,400	830	38	21	16	NA	NA

TABLE -4 HISTORICAL ANALYTICAL RESULTS - GROUNDWATER WELL SAMPLES

9201 San Leandro Street
Oakland, California

Sample Id	Date	Depth	TOC Elevation	Depth to Water	GW Elevation	TPH-d	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates
		(feet)	(feet amsl)	(feet)	(feet amsl)	(micrograms per liter)							
MW-3	29-Feb-96	5.25-20.25	19.70	8.52	11.18	NA	3,800	1,200	130	36	35	NA	NA
MW-3	29-Feb-96	5.25-20.25	19.70	8.52	11.18	NA	8,000	3,400	430	100	99	NA	NA
MW-3	23-May-96	5.25-20.25	19.70	8.15	11.55	NA	6,900	3,300	340	71	74	NA	NA
MW-3	23-May-96	5.25-20.25	19.70	8.15	11.55	NA	4,300	3,200	350	72	74	NA	NA
MW-3	4-Nov-96	5.25-20.25	19.70	7.21	12.49	NA	4,900	2,100	110	70	44	NA	NA
MW-3	4-Nov-96	5.25-20.25	19.70	7.21	12.49	NA	4,500	2,100	130	61	39	NA	NA
MW-3	13-May-97	5.25-20.25	19.70	9.82	9.88	NA	10,000	4,800	530	100	92	<100	NA
MW-3	26-Jan-98	5.25-20.25	19.70	-	-	NA	12,000	5,000	250	91	100	NA	NA
MW-3	27-Oct-00	5.25-20.25	19.70	-	-	NA	19,000	9,000	1,000	250	130	NA	NA
MW-3	13-Nov-03	5.25-19.90	19.70	9.21	10.49	NA	13,000	3,900	370	300	130	<40	NA
MW-3	17-Jun-08	5.25-19.90	19.70	9.81	9.89	NA	**13,000**	**4,400**	**600**	**300**	**150**	<100	ND
MW-4	16-Nov-92	5.25-20.25	19.65	8.87	10.78	<50	560	66	73	16	130	NA	NA
MW-4	16-Nov-92	5.25-20.25	19.65	8.87	10.78	<50	520	63	67	15	140	NA	NA
MW-4	9-Mar-93	5.25-20.25	19.65	7.96	11.69	<50	750	67	12	29	62	NA	NA
MW-4	21-Jul-93	5.25-20.25	19.65	8.06	11.59	<50	250	21	4.2	8.4	11	NA	NA
MW-4	29-Jan-94	5.25-20.25	19.65	-	-	<50	180	28	2.2	6.2	10	NA	NA
MW-4	26-May-94	5.25-20.25	19.65	8.57	11.08	NA	130	14	3.2	6.1	4.7	NA	NA
MW-4	24-Aug-94	5.25-20.25	19.65	8.75	10.9	NA	70	6.7	0.9	2.8	2.6	NA	NA
MW-4	22-Nov-94	5.25-20.25	19.65	7.41	12.24	NA	90	16	1.7	5.6	3.4	NA	NA
MW-4	8-Feb-95	5.25-20.25	19.65	7.2	12.45	NA	90	17	1.3	5.5	3.0	NA	NA
MW-4	31-May-95	5.25-20.25	19.65	8.32	11.33	NA	80	13	0.6	2.3	1.2	NA	NA
MW-4	8-Aug-95	5.25-20.25	19.65	8.66	10.99	NA	<50	3.6	<0.5	1.4	0.6	NA	NA
MW-4	29-Nov-95	5.25-20.25	19.65	8.93	10.72	NA	<50	4.5	0.7	1.0	0.7	NA	NA
MW-4	29-Feb-96	5.25-20.25	19.65	6.54	13.11	NA	80	7.4	1	3.2	2.4	NA	NA
MW-4	23-May-96	5.25-20.25	19.65	7.24	12.41	NA	<50	11	2	2.3	1.9	NA	NA
MW-4	4-Nov-96	5.25-20.25	19.65	8.58	11.07	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	13-May-97	5.25-20.25	19.65	8.42	11.23	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	13-Nov-03	5.25-19.90	19.65	7.61	12.04	<50	<50	6.3	0.56	3.4	1.0	<2.0	NA
MW-4	17-Jun-08	5.25-19.9	19.65	8.31	11.34	<50	81	**11**	0.51	4.7	1.6	<0.5	ND
MW-5	24-Aug-94	5.25-20.25	18.49	8.22	10.27	130	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	22-Nov-94	5.25-20.25	18.49	7.90	10.59	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	8-Feb-95	5.25-20.25	18.49	7.92	10.57	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	31-May-95	5.25-20.25	18.49	8.74	9.75	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	8-Aug-95	5.25-20.25	18.49	8.93	9.56	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	29-Nov-95	5.25-20.25	18.49	9.11	9.38	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	29-Feb-96	5.25-20.25	18.49	7.36	11.13	NA	<50	0.6	<0.5	<0.5	<0.5	NA	NA
MW-5	23-May-96	5.25-20.25	18.49	7.92	10.57	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	4-Nov-96	5.25-20.25	18.49	8.78	9.71	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	13-May-97	5.25-20.25	18.49	8.82	9.67	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	27-Oct-00	5.25-20.25	18.49	-	-	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
MW-5	13-Nov-03	5.25-19.90	18.49	8.16	10.33	NA	<50	<0.50	<0.50	<0.50	<0.50	<2.0	NA
MW-5	17-Jun-08	5.25-19.90	18.49	8.75	9.74	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
ESL						100	100	1	40	30	20	5	

Notes
TPH-g = Total petroleum hydrocarbons as gasoline
MTBE = Methel Tertiary Butyl Ether
Oxygenates = t-Amyl methyl ether, t-Butyl alcohol (TBA), 1,2-Dibromoethane, 1,2-Dichloroethane (1,2-DCA), Diisopropyl ether, ethyl t-butyl ether
ESL = Environmental screening levels, RWQCB, November 2007, potential drinking water
ND = Not Detected. NA = Not Analyzed.

TABLE 4 - ANALYTICAL RESULTS - SOIL GAS SAMPLES

9201 San Leandro Street
Oakland, California

Sample Id	Date	Depth (feet)	TPH-g (C5+) (µg/m³)	TPH-g (C2-C4) (µg/m³)	TPH-g (C6-C12) (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethylbenzene (µg/m³)	Xylenes (µg/m³)	MTBE (µg/m³)	CO2 % by vol	Methane % by vol	Oxygen % by vol
Southwest of former 550-gallon UST													
B-5	16-Oct-98	3.0	**61,350,000**	262,000	-	162,900	25,600	<10,900	19,100	NA	NA	NA	NA
B-6	16-Oct-98	3.0	**40,082,000**	3,272,000	-	92,700	20,000	<9,100	21,300	NA	NA	NA	NA
2008 ERAS Environmental													
SG-1		5-5.5	**-**	-	**120,000**	11,000	190	780	530	<7.3	0.1100	0.0230	20.0000
ESLres			10,000	10,000	10,000	84	63,000	210,000	21,000	9,400	-	-	-
ESLind			29,000	29,000	29,000	280	180,000	580,000	58,000	3,100	-	-	-

Notes

mg/m³ = milligrams per cubic meter

TPH-g = Total petroleum hydrocarbons as gasoline

ESLres = Environmental screening levels set forth by the Reginol Water Quality Control Board, November 2007, residential area, shallow soil gas

ESLind = Environmental screening levels set forth by the Reginol Water Quality Control Board, November 2007, industrial area, shallow soil gas

TABLE 5 - QUARTERLY GROUNDWATER DATA AND ANALYTICAL RESULTS - MONITORING WELLS, QUARTER 2, 2008

9201 San Leandro Street
Oakland, California

Sample ID	Date Monitored	Total Depth (feet bgs)	TOC Elevation (feet amsl)	Depth to Water (feet)	GW Elevation (feet amsl)	TPH-d	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
						(microgram per liter)						
MW-1	17-Jun-08	20	18.05	9.04	9.01	NA	<50	<0.5	<0.5	<0.5	<0.5	0.67
MW-2	17-Jun-08	20	19.40	9.57	9.83	NA	<50	<0.5	<0.5	<0.5	<0.5	1
MW-3	17-Jun-08	19.9	19.70	9.81	9.89	NA	**13,000**	**4,400**	**600**	**300**	**150**	<100
MW-4	17-Jun-08	19.9	19.65	8.31	11.34	<50*	81	**11**	0.51	4.7	1.6	<0.5
MW-5	17-Jun-08	19.9	18.49	8.75	9.74	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5
ESL						100	100	1	40	30	20	5

Notes
TOC ELEV = Top of well casing elevation in feet above mean sea level
GW ELEV = Top of groundwater elevation.
µg/L = Micrograms per liter
TPH-G = Total petroleum hydrocarbons as gasoline.
MTBE = Methyl-tert-butyl ether, No other Oxygenates were detected.
NA = Not Analyzed
* = Groundwater sample for TPH-d from MW-4 collected on June 18, 2008

TABLE 6 - ANALYTICAL RESULTS - SOIL, JUNE 2008
9201 San Leandro Street
Oakland, CA

SOIL ALONG RAILROAD TRACKS

Sample ID	Depth (feet)	Date	TPH-d	TPH-mo	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) flouranthene	Benzo(g,h,i) perylene	Benzo(k) flouranthene	Chrysene	Dibenzo(a,h) anthracene	Flouranthene	Indeno (1,2,3-cd) pyrene	Phen-anthrene	Pyrene	Other SVOCs
			(milligrams per kilogram)														
Pit3SE	1.25-1.5	12-Jun-08	**140**	**550**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	ND
Pit3SE	2.75-3	12-Jun-08	11	31	<0.005	0.010	0.012	0.012	0.011	0.012	0.014	<0.005	0.014	0.0073	0.011	0.014	ND
Pit3E	1.25-1.5	12-Jun-08	2.3	6.5	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
Pit3E	2.75-3	12-Jun-08	4.7	22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Pit3NW	1.25-1.5	12-Jun-08	55	170	0.036	0.15	**0.15**	0.13	0.12	0.14	0.19	0.042	0.19	0.078	0.15	0.23	ND
Pit3NW	2.25-2.5	12-Jun-08	2.3	6.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Pit4SE	1-1.25	12-Jun-08	6.5	25	0.0057	0.032	**0.042**	0.031	0.035	0.032	0.042	0.014	0.030	0.025	0.017	0.042	ND
Pit4SE	3.25-3.5	12-Jun-08	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Pit4E	1.25-1.5	12-Jun-08	71	170	<0.005	<0.005	<0.005	0.0082	<0.005	0.0058	<0.005	<0.005	0.011	<0.005	<0.005	0.0081	ND
Pit4E	3-3.25	12-Jun-08	2.8	12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Pit4NW	1.25-1.5	12-Jun-08	8.2	26	<0.005	0.018	0.020	0.033	0.016	0.021	0.021	0.0065	0.021	0.011	0.013	0.025	ND
Pit4NW	2.75-3	12-Jun-08	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
ESL			83	410	-	**0.38**	**0.038**	**0.38**	**35**	**0.38**	40	**0.062**	**40**	**0.62**	**40**	**500**	-

PCB IN SOIL NEAR WESTERN CORNER OF PROPERTY

Sample ID	Depth (feet)	Date	PCB's (mg/kg)
Adjacent to MW-1			
HA-1	1.25-1.5	12-Jun-08	ND
HA-1	3-3.25	12-Jun-08	ND
HA-2	1.25-1.5	12-Jun-08	ND
HA-2	2.5-2.75	12-Jun-08	**0.050**
HA-3	1.25-1.5	12-Jun-08	ND
HA-3	2.5-2.75	12-Jun-08	**0.140**
ESL res			0.089

SOIL IN VICINITY OF MW-2

Sample ID	Depth (feet)	Date	TPH-d	TPH-mo	TPH-k	Acetone	2-Butanone (MEK)	n-Butyl Benzene	tert Butyl Benzene	cis 1,2-Dichloroethene	Toluene	Napthalene	1,2,4 Trimethyl Benzene	sec Butyl Benzene	Isopropyl Benzene	n-Propyl Benzene	1,3,5-Trimethyl Benzene	Xylenes	Other VOCs
			(milligrams per kilogram)																
HA-4	1-1.25	12-Jun-08	2.8	21	2.1	0.12	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
HA-4	2.75-3	12-Jun-08	16	69	2.5	0.20	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
HA-5	1-1.25	12-Jun-08	**1,000**	**1,600**	**1,200**	<0.20	<0.080	0.20	<0.020	<0.020	<0.020	0.067	0.73	0.16	0.056	0.13	0.36	0.11	ND
HA-5	2.75-3	12-Jun-08	78	180	61	<0.05	<0.02	0.077	0.010	0.0079	0.035	0.011	0.032	0.084	0.030	0.057	0.046	0.015	ND
HA-6	1-1.25	12-Jun-08	**7,600**	**20,000**	**2,700**	<0.05	<0.02	0.019	<0.005	<0.005	0.021	<0.005	0.042	0.045	0.0073	0.012	0.015	0.0086	ND
HA-6	2.75-3	12-Jun-08	2.3	9.6	<1	<0.05	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
ESL			83	2500	83	2.1	3.9	-	-	0.19	-	2.8	-	-	-	-	-	2.3	-

SOIL FROM DIRECT-PUSH BORINGS

Sample Id	Depth (feet)	Date	TPH-g	TPH-d	Benzene	Toluene	Ethylbenzene	Xylenes	Oxygenates
			(milligrams per kilogram)						
GP-2	9.5-10	6/12/2008	**340**	NA	**1.2**	0.19	2.2	2.0	ND
SG-1	9.5-10	6/16/2008	**400**	NA	**1.2**	2.8	**1.9**	**2.9**	ND
GP-3	9.5-10	6/13/2008	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	ND
GP-4	9.5-10	6/13/2008	**450**	NA	**0.72**	<0.10	2.1	1.4	ND
GP-6	11.5-12	6/16/2008	**520**	NA	**4.6**	2.6	2.6	**7.4**	**ND**
GP-8	9.5-10	6/16/2008	<1.0	NA	<0.005	<0.005	<0.005	<0.005	ND
ESL			83	83	0.044	2.9	3.3	2.3	-

Notes
ND = Not detected above the reported detection limit
TPH-g = Total petroleum hydrocarbons as gasoline
TPH-d = Total petroleum hydrocarbons as diesel
TPH-mo = Total petroleum hydrocarbons as motor oil
SVOCs = Semi volitile organic compounds
PCBs = Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
Oxygenates = methyl t-butyl ether, t-amyl methyl ether, t-butyl alcohol, 1,2-dirbromoethane, 1,2-dichloroethane, diisopropyl ether, ethyl t-butyl ether
ESL = Environmental Screening Level, RWQCB November 2007, shallow soil, residential land use, groundwater is potential drinking water

APPENDIX A

ACEH LETTER

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 9, 2008

Mr. John Lilla
PACO Pumps, Inc.
800 Koomey Road
Brookshire, TX 77423

Mr. Harold Vignoles
9201 San Leandro LLC
9201 San Leandro Street
Oakland, CA 94603

Mr. Dallas Nelson
GP Holdings LLC
5977 Keith Avenue
Oakland, CA 94618-1545

Subject: Fuel Leak Case No. RO0000320 and Geotracker Global ID T0600101592, PACO Pumps Inc, 9201 San Leandro Street, Oakland, CA 94603

Dear Mr. Lilla, Mr. Vignoles, and Mr. Nelson:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted document entitled, "*Workplan for Former Paco Pumps Facility, 9201 San Leandro Street, Oakland, California*," dated March 17, 2008. The March 17, 2008 Work Plan, which was prepared on your behalf by ERAS Environmental, Inc., was revised in response to technical comments in ACEH correspondence dated January 31, 2008. The Work Plan provides more detailed maps of proposed sampling locations. However, the Work Plan does not adequately address several of the technical comments. Therefore, we request that you prepare a Revised Work Plan **by July 18, 2008** that addresses the technical comments below.

REQUEST FOR INFORMATION

We previously requested that you submit copies of the following reports, which are referenced in other technical reports for the site but are not in the ACEH case file. The Work Plan indicates that ERAS Environmental, Inc. is not authorized to contact PACO Pumps to retrieve the documents requested in our January 31, 2008 correspondence. This correspondence is directed to all responsible parties. All responsible parties are required to cooperate and respond to these requests. Therefore, we request that the responsible party with access to the documents listed below submit the requested documents by July 18, 2008. In addition, please submit any other technical reports presenting the results of environmental investigations or cleanup that were not previously submitted to ACEH.

- Cutliffe, S., 1987. Findings and Results of the Cleanup Project Performed on 14 and 15 December 1987 at PACO Oakland Site.
- Dames & Moore, 1987. Site Contamination Study – PACO Pumps Facility, Oakland, for Amsted Industries.

- Ecology and Environment Inc., 1985. CERCLA Site Inspection, PACO Pumps 845 92nd Avenue, Oakland, CA. Site ERRIS #CAD 088772629, Inspection ID# C(85)C371, Date of Inspection 9/17/85, Report Due November 8, 1985.
- Jonas & Associates, Inc., 1991. Soil Characterization Report Stained Asphalt/Concrete Area – PACO Pumps, 9201 San Leandro Street, Oakland, CA, October 30, 1991.
- Van Aken, B., 1987. Internal PACO Correspondence to Mr. John G. Terranova regarding excavation, November 4, 1987.

TECHNICAL COMMENTS

1. **Piping Associated with Former 550-Gallon UST.** Our August 21, 2007 technical comments requested that you determine whether UST system piping encountered during the 1992 UST excavation remains in place beneath the adjacent building or extends to a dispenser in another location. Utility location using magnetic and ground penetrating radar methods was previously proposed within the former UST area. The March 17, 2008 Work Plan does not propose utility locations and instead proposes hand digging at the building foundation to locate the pipe prior to additional investigation. We have no objection to locating the pipe prior to conducting additional investigation to assess whether piping remains in place beneath the adjacent building or extended to a dispenser in another location.

2. **Maps Showing Proposed Sampling Locations.** The March 17, 2008 Work Plan includes several detailed maps, which are improvements from the previous Work Plan. We appreciate the generally improved and more accurate presentation of proposed sampling locations.

3. **Groundwater Characterization for Former 550-Gallon UST Area.** The March 17, 2008 Work Plan proposes a total of six soil borings for characterization of the extent of groundwater contamination from the former 550-gallon UST. Three soil borings are proposed within approximately 20 feet of the former UST, one soil boring approximately 125 feet southwest of the former UST, and two soil borings more than 200 feet northwest of the former 550-gallon UST. One additional soil boring is proposed approximately 125 feet northwest of the former 550-gallon UST, apparently to investigate the second UST. In the Revised Work Plan requested below, please review the potential to move the two proposed borings along the northwest property boundary closer to the former 550-gallon UST. Moving the borings approximately 120 feet to the southeast inside the Warehouse Storage Area would provide a transect of three borings including the proposed boring southeast of the Office shown on Figure 3.

4. **Vertical Delineation.** The March 17, 2008 Work Plan proposes the collection of a grab groundwater sample from first encountered groundwater and a second groundwater sample from each boring at a depth of 15 to 19 feet bgs. In order to characterize the subsurface stratigraphy and select intervals for depth-discrete groundwater sampling, we request that you extend one of the three proposed soil borings in the area of the former 550-gallon UST and each of the three borings downgradient of crossgradient from the 550-gallon UST to a depth of 40 feet bgs. Coarse-grained zones that may act as migration pathways are to be

targeted for grab groundwater sampling. Please include plans in the Revised Work Plan requested below to extend the soil borings to 40 feet bgs and to select subsurface zones for depth-discrete groundwater sampling based on encountered conditions.

5. **Proposed Groundwater Analyses.** Analysis for MTBE using EPA Method 8015/8021 is not acceptable. In the Revised Work Plan requested below, please include analyses for MTBE, TAME, DIPE, ETBE, TBA, 1,2-dichloroethane, and ethylene dibromide using EPA Method 8260B. We also request that soil samples be analyzed for lead.

6. **Soil Vapor Sampling.** Due to the elevated concentrations of benzene detected in previous soil gas samples, our January 31, 2008 correspondence indicated that the proposed scope of soil vapor sampling must be expanded. No changes were made to the proposed scope of soil vapor sampling in the March 17, 2008 Work Plan. The March 17, 2008 Work Plan proposes collection of one sub-slab vapor sample within the building and one soil vapor sample outside the building. Table 4 – Historical Analytical Results – Soil Gas Samples contains an error, which makes it appear that the detected concentrations of benzene in soil gas do not exceed screening levels. The correct Environmental Screening Level (ESL) for benzene in soil gas for residential land use is 84 micrograms per cubic meter ($\mu g/m^3$) and for commercial land use is 280 $\mu g/m^3$. Table 4 shows units in milligrams per cubic meter (mg/m^3). Therefore, the correct ESLs are three orders of magnitude lower than those shown on Table 4. The concentration of benzene detected in soil vapor samples B-5 and B-6 inside the building are more than 300 times higher than the commercial ESL for benzene in soil gas. The scope of the proposed soil vapor sampling investigation is inadequate to characterize the extent of the elevated concentrations of benzene in soil vapor and must be expanded in the Revised Work Plan requested below.

7. **Proposed Soil Vapor Analyses.** Please review the proposed soil vapor analyses on page 6, specifically whether TPHg will be analyzed by Method TO-15.

8. **Detailed Map of Former UST Excavation & Proposed Sampling (Figure 4).** Figure 4 shows several rooms west of the Former UST Excavation labeled, "Storage." Thank you for including a more detailed map. In the Revised Work Plan requested below, please expand the detailed depiction of building walls and uses to include the area north of the Former UST Excavation. In addition, please include a more detailed description of the occupancy of the adjacent areas to the Former UST Excavation.

9. **Proposed Utility Survey for UST in Area of Well 9MW4.** A geophysical survey was previously proposed in the area of well 9MW4 to locate a suspected UST. The March 17, 2008 Work Plan indicates that ground penetrating radar and other geophysical methods are not feasible due to steel reinforcing in the floor and steel racks. Soil and groundwater sampling from three borings located around the perimeters of the building are proposed in lieu of the geophysical survey. In the Revised Work Plan requested below, please describe the rationale for locating three borings around the perimeter of the warehouse building. In addition, please confirm that the use of ground penetrating radar is not feasible.

10. **Soil Removal Along Railroad Tracks.** We request that soil samples be collected from all intervals where staining, odor, or elevated PID readings are observed. If no evidence of contamination is observed, we request that soil samples be collected from 1.5 and 3.0 feet bgs. We concur with the proposal to extend the borings to a depth of 5 feet bgs and collect a soil sample from 5 feet bgs if contamination is observed at 3 feet bgs. Please include these modifications in the Revised Work Plan requested below.

11. **PCBs in Soil.** PCBs were detected in surface soil samples from two of the three sampling locations in the area of well MW-1. In the Revised Work Plan requested below, please include soil samples at depths shallower than 3 to 4 feet.

12. **Elevated Concentrations of TPH as Kerosene and TPH as Motor Oil Detected in Boring B18.** We request that you include one additional sampling location between B-18 and B-17 in order to evaluate whether contamination detected in the two borings is contiguous. Please include this modification in the Revised Work Plan requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **July 18, 2008** – Revised Work Plan

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032

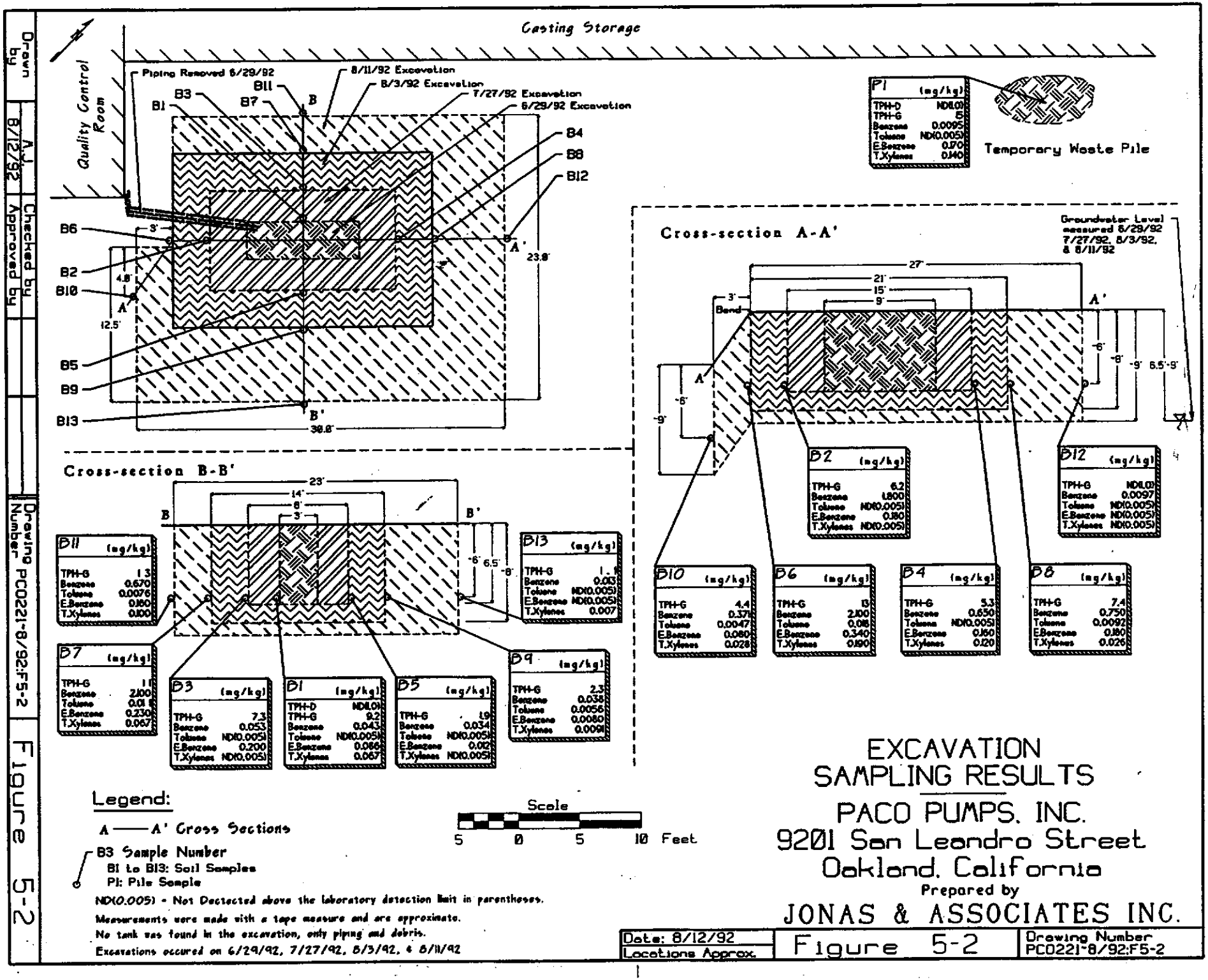
Gail Jones, ERAS Environmental, 1533 B Street, Hayward, CA 94541

Stacie Boothe, Gibson, Dunn, & Crutcher, LLP, 1050 Connecticut Avenue, N.W., Washington, D.C. 20036-5306

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

APPENDIX B

MAP OF UST EXCAVATION


Casting Storage
Quality Control Room
Piping Removed 6/29/92
8/11/92 Excavation
8/3/92 Excavation
7/27/92 Excavation
6/29/92 Excavation
B1
B3
B7
B11
B
B4
B8
B12
B6
B2
B10
B5
B9
B13
A
A'
B'
3'
4.8'
12.5'
23.8'
38.8'
P1 (mg/kg)
TPH-D ND(1.0)
TPH-G 5
Benzene 0.0095
Toluene ND(0.005)
E.Benzene 0.170
T.Xylenes 0.140
Temporary Waste Pile
Cross-section A-A'
Groundwater Level measured 6/29/92 7/27/92, 8/3/92, & 8/11/92
27'
21'
15'
9'
3'
Bend
A
A'
-6'
-8'
-9'
6.5'-9'
B2 (mg/kg)
TPH-G 6.2
Benzene 1.800
Toluene ND(0.005)
E.Benzene 0.180
T.Xylenes ND(0.005)
B12 (mg/kg)
TPH-G ND(1.0)
Benzene 0.0097
Toluene ND(0.005)
E.Benzene ND(0.005)
T.Xylenes ND(0.005)
Cross-section B-B'
23'
14'
8'
3'
B
B'
-6'
6.5'
-8'
B11 (mg/kg)
TPH-G 13
Benzene 0.670
Toluene 0.0076
E.Benzene 0.160
T.Xylenes 0.100
B13 (mg/kg)
TPH-G 1.8
Benzene 0.013
Toluene ND(0.005)
E.Benzene ND(0.005)
T.Xylenes 0.007
B10 (mg/kg)
TPH-G 4.4
Benzene 0.371
Toluene 0.0047
E.Benzene 0.080
T.Xylenes 0.028
B6 (mg/kg)
TPH-G 13
Benzene 2.100
Toluene 0.018
E.Benzene 0.340
T.Xylenes 0.190
B4 (mg/kg)
TPH-G 5.3
Benzene 0.650
Toluene ND(0.005)
E.Benzene 0.160
T.Xylenes 0.120
B8 (mg/kg)
TPH-G 7.4
Benzene 0.750
Toluene 0.0092
E.Benzene 0.180
T.Xylenes 0.026
B7 (mg/kg)
TPH-G 11
Benzene 2.100
Toluene 0.018
E.Benzene 0.230
T.Xylenes 0.067
B3 (mg/kg)
TPH-G 7.3
Benzene 0.053
Toluene ND(0.005)
E.Benzene 0.200
T.Xylenes ND(0.005)
B1 (mg/kg)
TPH-D ND(1.0)
TPH-G 9.2
Benzene 0.043
Toluene ND(0.005)
E.Benzene 0.086
T.Xylenes 0.067
B5 (mg/kg)
TPH-G 1.9
Benzene 0.034
Toluene ND(0.005)
E.Benzene 0.012
T.Xylenes ND(0.005)
B9 (mg/kg)
TPH-G 2.3
Benzene 0.038
Toluene 0.0056
E.Benzene 0.0080
T.Xylenes 0.0091
Legend:
A——A' Cross Sections
B3 Sample Number
B1 to B13: Soil Samples
P1: Pile Sample
ND(0.005) - Not Detected above the laboratory detection limit in parentheses.
Measurements were made with a tape measure and are approximate.
No tank was found in the excavation, only piping and debris.
Excavations occured on 6/29/92, 7/27/92, 8/3/92, & 8/11/92
Scale
5 0 5 10 Feet
EXCAVATION SAMPLING RESULTS
PACO PUMPS, INC.
9201 San Leandro Street
Oakland, California
Prepared by
JONAS & ASSOCIATES INC.
Date: 8/12/92
Locations Approx.
Figure 5-2
Drawing Number PC0221-8/92:F5-2
Drawn by A.J. 8/12/92
Checked by
Approved by
Drawing Number PC0221-8/92:F5-2
Figure 5-2

APPENDIX C

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: 06/03/2008 By jamesy

Permit Numbers: W2008-0308
Permits Valid from 06/12/2008 to 06/17/2008

Application Id: 1212169577084
City of Project Site: Oakland
Site Location: 9201 San Leandro Street
12 borings to 40 feet and 1 boring to 10 feet
Project Start Date: 06/12/2008
Completion Date: 06/17/2008
Requested Inspection: 06/17/2008
Scheduled Inspection: 06/17/2008 at 2:30 PM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)

Applicant: ERAS Environmental, Inc. - Andrew Savage
1533 B Street, Hayward, CA 94541
Phone: 510-247-9885
Property Owner: Mark Vignoles
9201 San Leandro Street, Oakland, CA 94603
Phone: --
Client: ** same as Property Owner **
Contact: Andrew Savage
Phone: 510-247-9885
Cell: 925-330-8926

Total Due: $200.00
Receipt Number: WR2008-0186 **Total Amount Paid:** $200.00
Payer Name : Andrew Savage Paid By: MC **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 13 Boreholes
Driller: Vironex Inc. - Lic #: 705927 - Method: DP **Work Total: $200.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2008-0308	06/03/2008	09/10/2008	13	2.50 in.	40.00 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 Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org 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.

6. 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.

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

APPENDIX D

STANDARD OPERATING PROCEDURES

STANDARD OPERATING PROCEDURE – HAND BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, the surface is either cored if concrete or hammered through using a pick, if asphalt.

A hand operated coring device equipped with a 3-inch diameter auger bit is advanced into the soil until full. The auger is removed and emptied and this process is repeated until the desired depth is reached. The hand auger is removed and a slide hammer core sampling device, equipped with two 3-inch long, 2-inch diameter brass liners is advanced six inches into the undisturbed soil at the bottom of the borehole.

One of the 3-inch liners is selected and the ends of the tube are covered with Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the borehole number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in covered 5-gallon plastic buckets or 55-gallon drums at the project site.

BOREHOLE GROUTING FOR HAND BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURES - GROUNDWATER SAMPLING

Prior to groundwater sampling, a measurement is made of the static water level using a water level probe. At sites where the presence of separate-phase hydrocarbons is suspected, a product bailer or an interface probe is used to measure product thickness. The water level probe is cleaned with non-phosphate detergent and rinsed with de-ionized (DI) water between wells.

STANDARD PURGE PROCEDURES

The static water level and well depth are used to calculate the well casing volume. A minimum of 4 well casing volumes of water are purged from the well prior to sampling in order to obtain a representative sample of the groundwater from the formation surrounding the well. Wells should be purged and sampled in order of least to highest suspected concentrations.

Standard purging equipment is a new disposable bailer for each well. Alternatively, purging and sampling systems may be a stainless steel bailers; HDPE tubing with a foot-valve, or low-flow purging using a peristaltic pumps. Appropriate personal protective equipment is worn during purging. The well is purged until the clarity, pH, and conductivity of the discharged water have stabilized. "Stabilized" is defined as three consecutive readings within 10% of one another.

These parameters are measured and recorded initially, after every well casing volume is removed, and after the sample is collected. In some localities, turbidity, Eh, and dissolved oxygen measurements may also be required. If the well is purged dry prior to the removal of three or four casing volumes of water, the water level is allowed to recover to 80% of the static level before sampling. Whenever possible, samples will be collected within 24 hours after purging. Ideally, samples will be collected immediately after purging to minimize volatilization of aromatic hydrocarbons.

The standard sampling equipment will be inert polyethylene disposable bailers. New sampling gloves are worn during each sample collection. Sample containers typically consist, depending on the analysis, 40 milliliter volatile organic analysis (VOA) vials with Teflon septa, 1 liter amber glass bottles, or plastic bottles. HCl or other preservative are added to the sample containers as appropriate by the laboratory prior to sampling. The groundwater sample is decanted into each VOA vial to form a meniscus at the top to eliminate air bubbles when capped. The sample is labeled with date, time, sample number, project number and analysis. The samples are stored in a cooler with blue ice or ice, and delivered under chain-of-custody to the state-certified analytical laboratory. For quality control purposes, duplicate samples, trip blanks, and equipment blanks may also be collected. The duplicate sample is given a different number than the original sample from the same well. Trip blanks are prepared by the laboratory using DI water and remain in the cooler. Equipment blanks are collected from sampling equipment using DI water after the equipment has been decontaminated and rinsed.

All non-dedicated purging and sampling equipment is washed in non-phosphate detergent solution and double rinsed with DI water after use in every well to avoid cross-contamination.

Purge water will be properly disposed or temporarily contained in labeled steel barrels pending chemical analysis to determine proper disposal procedure.

STANDARD OPERATING PROCEDURE – DIRECT PUSH BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, all boreholes will be hand dug to a depth of 4-5 feet below ground surface (bgs) to check for underground utility lines.

Soil and groundwater samples are collected for lithologic and chemical analyses using a direct driven soil coring system. A hydraulic hammer drives sampling rods into the ground to collect continuous soil cores. As the rods are advanced, soil is driven into an approximately 2.5-inch-diamter sample barrel that is attached to the end of the rods. Soil samples are collected in sleeves inside the sample barrel as the rods are advanced. After being driven 4 to 5 feet into the ground, the rods are removed from the borehole. The sleeve containing the soil core is removed from the sample barrel, and can then be preserved for chemical analyses, or used for lithologic description. This process is repeated until the desired depth is reached.

A soil core interval selected for analyses is cut from the sleeve using a hacksaw. The ends of the tube are covered with aluminum foil or Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the bore number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in 55-gallon drums at the project site.

GROUNDWATER SAMPLING FROM DIRECT PUSH BORINGS

After the targeted water-bearing zone has been penetrated, the soil-sample barrel is removed from the borehole. Small-diameter well casing with 0.010-inch slotted well screen may be installed in the borehole to facilitate the collection of groundwater samples. Threaded sections of PVC are lowered into the borehole. Groundwater samples may then be collected with a bailer, peristaltic pump, or WaTerra pump until adequate sample volume is obtained.

Groundwater samples are preserved, stored in an ice-filled cooler, and are delivered, under chain-of-custody, to a laboratory certified by the California Department of Health Services (DHS) for hazardous materials analysis.

BOREHOLE GROUTING FOR DIRECT PUSH BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout to the surface. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURE –
GEOPROBE SOIL-GAS SAMPLING

A soil-gas sample will not be collected within seven days following a measurable precipitation event.

Sample rods are driven to the desired depth. A soil-gas sampling tubing system is inserted into the rods and connected to an expendable point holder. The rods are retracted a desired 6-inch interval and the expendable drive point on the bottom of the rods is released. Hydrated bentonite is placed around where the drill rod exits the ground to prevent surface air migrating down the outer portion of the rods. The bentonite will be allowed to hydrate and expand for at least 30 minutes prior to purging the sample line.

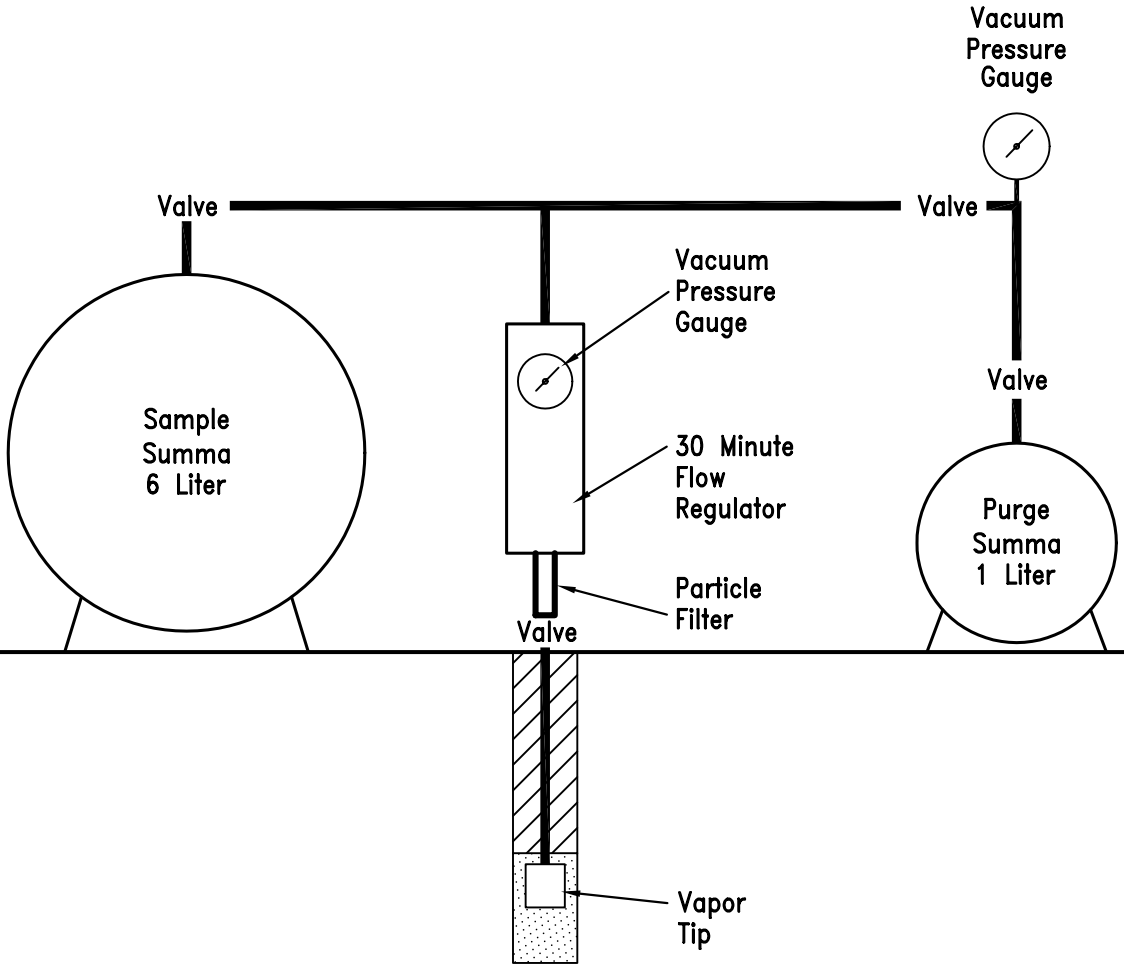
The soil sample is then collected into a Summa canister. A summa canister is a stainless steel vessel which has had the internal surfaces specially passivated using a "Summa" process. The Summa canister arrives pre-cleaned from the laboratory and with an internal vacuum between 25" Hg and 20" Hg. Prior to use, the pressure in the summa canister is checked with a pressure gauge to ensure a vacuum of at least 25" Hg for quality control purposes.

As a check for air leaks a paper towel or rag wetted with isopropyl alcohol will be placed on all sample line fittings and the top of the inside of the drill rod. Analysis of the sample for isopropyl alcohol will indicate if ambient air entered the sample.

A vacuum is applied to the tubing to purge at least three volumes of air from the sample tubing using a flow regulator at a purge rate from 100 to 200 ml/min.

Once the tubing has been purged of ambient air, it is connected to a summa canister. A particulate filter is used in-line to filter out particles and liquids. A flow controller is placed in line between the filter and the canister to maintain a low purge rate.

The valve on the summa canister is opened, and the soil-gas sample is drawn into the canister. The sample tubing will be checked for condensation. If observed, the sample will be discarded. The flow controller will stop drawing in air after a pre-set time interval. The remaining canister vacuum should be about 5-inches Hg. The vacuum left inside the canister is recorded on the chain-of-custody. The soil-gas samples will be transferred under chain-of-custody procedures to a state certified laboratory for analyses. Upon receipt, the laboratory will check the pressure in the canister and compare it to the pressure recorded on the chain-of-custody for quality control purposes.



NOTE: All fittings swagelok

SOIL VAPOR SAMPLE TRAIN

ERAS Environmental Inc.

ERAS 03-12-08 Soil Vapor Sample Train.dwg

STANDARD OPERATING PROCEDURE – SUBSLAB SOILGAS SAMPLING

A sub slab soil-gas sample will not be collected within seven days following a measurable precipitation event.

A core will be removed from the building slab. Dirt and base rock will be removed to approximately 1 foot bellow the base of the slab. A particulate filter will be installed on the bottom of sample tubing and place in the hole. A 2/12 Sand pack is placed around the vapor tip to approximately 6 inches below the surface of the slab. Hydrated bentonite is placed around the sample tub to the surface or the slab to prevent surface air migrating under the slab. The bentonite will be allowed to hydrate and expand prior to purging the sample line.

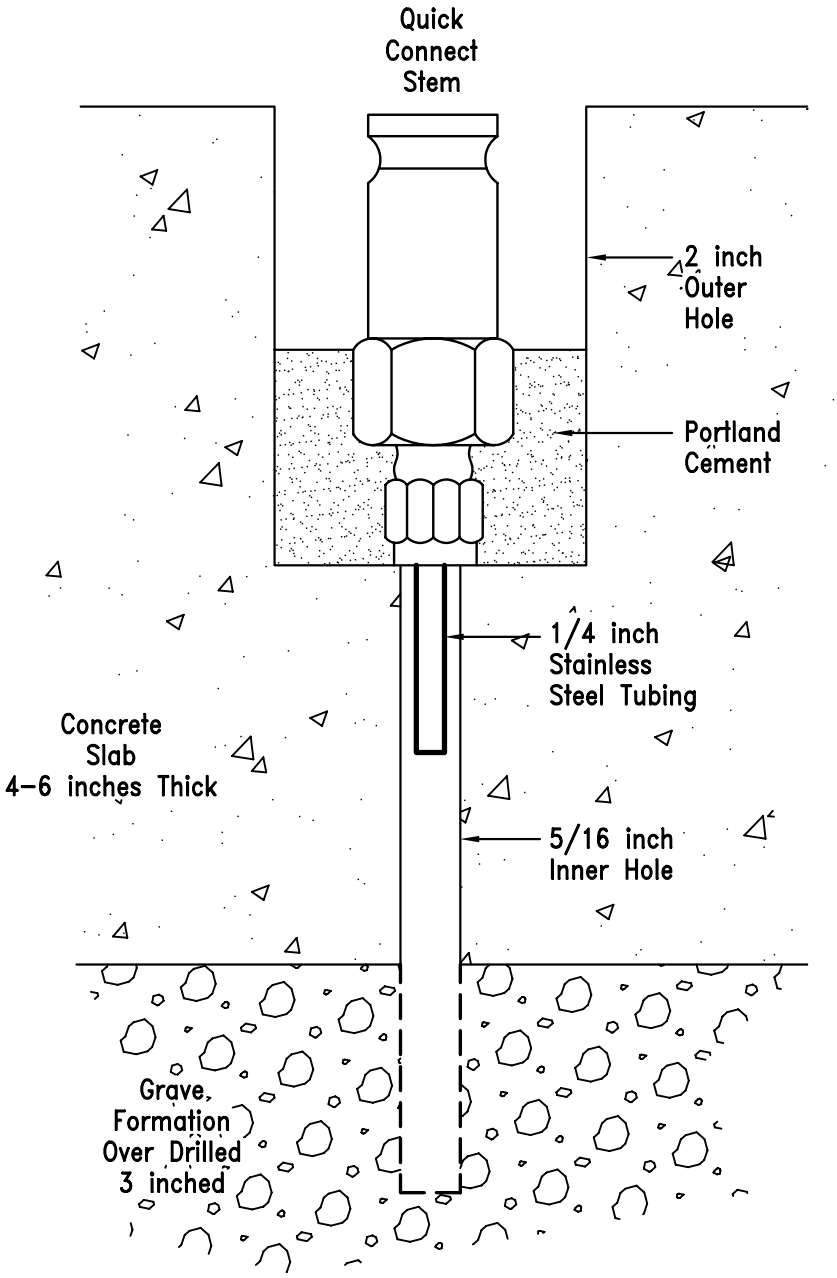
The sub slab sample is then collected into a Summa canister. A summa canister is a stainless steel vessel which has had the internal surfaces specially passivated using a "Summa" process. The Summa canister arrives pre-cleaned from the laboratory and with an internal vacuum between 25" Hg and 20" Hg. Prior to use, the pressure in the summa canister is checked with a pressure gauge to ensure a vacuum of at least 25" Hg for quality control purposes.

As a check for air leaks a paper towel or rag wetted with isopropyl alcohol will be placed on all sample line fittings and the top of the inside of the bentonite sealed slab. Analysis of the sample for isopropyl alcohol will indicate if ambient air entered the sample.

A vacuum is applied to the tubing to purge the ambient air from the sample tubing. Once the tubing has been purged of ambient air, it is connected to a summa canister. A particulate filter is used in-line to filter out particles and liquids.

In areas of fine-grained soils, a flow controller is placed in line between the filter and the canister to maintain a low purge rate.

The valve on the summa canister is opened, and the sub slab soil-gas sample is drawn into the canister. The sample tubing will be checked for condensation. If observed, the sample will be discarded. The flow controller will stop drawing in air after a pre-set time interval. The remaining canister vacuum should be about 5-inches Hg. The vacuum left inside the canister is recorded on the chain-of-custody. The sub slab soil-gas samples will be transferred under chain-of-custody procedures to a state certified laboratory for analyses. Upon receipt, the laboratory will check the pressure in the canister and compare it to the pressure recorded on the chain-of-custody for quality control purposes.



SOIL VAPOR SAMPLE PORT

ERAS Environmental Inc.

ERAS 07-30-08 Sub-Slab Port.dwg

STANDARD OPERATING PROCEDURE ---

GROUNDWATER MONITORING WELL CONSTRUCTION

The boreholes for monitor wells are usually drilled using a truck-mounted hollow-stem auger drill rig. The hollow-stem auger drilling method allows the well screen, casing and filter pack to be installed through the auger, thereby limiting boring cave-in during well installation. The borehole is logged by a geologist during drilling. Soil samples are collected for logging in a split spoon sampler lined with brass tubes at a maximum interval of five feet. Soil samples selected for chemical analyses are sealed at each end with Teflon sheets and plastic end caps, labeled and stored in a cooler with ice.

Well casing typically consists of flush-threaded schedule 40 PVC; however, schedule 80 PVC, Teflon, or stainless steel may be used depending on site conditions. The screened interval usually consists of machined slots for PVC and Teflon casing and continuous wire-wrap for stainless steel screen. The slot or screen size is selected by the geologist according to filter pack grain size and hydrogeologic formation characteristics. The most commonly used slot sizes are 0.010 inch and 0.020 inch. Either a threaded end cap or a PVC slip cap fastened with stainless steel screws is placed at the bottom of the casing. No solvents or cements are used to join casing sections.

The casing is set inside the hollow-stem auger and sand or gravel filter pack material is slowly poured into the annular space from the bottom of the boring to about 2 ft above the top of the well screen while withdrawing the auger. The filter pack grain size is selected by the geologist to conform to the formation grain size and estimated hydraulic conductivity. A 1-ft to 2-ft thick seal composed of hydrated bentonite pellets is placed above the filter pack to prevent grout from infiltrating into the filter pack. Portland cement grout used to seal the annular space form the top of the bentonite seal to about 6 inches below the surface. The grout is pumped under pressure through a pipe if the bentonite seal is below water. A lockable plastic expansion cap is placed at the top of the casing. Traffic-rated vault boxes are set in concrete around well heads in paved areas. Locking steel monument covers are usually installed over wellheads in unpaved areas.

STANDARD OPERATING PROCEDURE ---

GROUNDWATER MONITORING WELL DEVELOPMENT

Groundwater monitoring wells are developed after installation to improve well yield by removing fine material, including formation material or drilling mud, from the well casing, filter pack and boring annulus/formation interface. Fine material is also removed and soil grains aligned in the formation surrounding the well screen, thereby increasing porosity and hydraulic conductivity.

Prior to well development, the initial static water level is measured using a water level or interface probe. Standard procedure is to develop wells using a WaTerra surge block and an electric submersible pump. Well development may also be performed by hand using surge blocks and bailers, or by a truck-mounted development rig. The well is the surged along the entire screened interval using a surge block. This creates a back-washing effect that draws fine material from the formation and filter pack into the well casing and aligns the formation grains. Following surging, the well is then purged by using and electric submersible pump to remove fine suspended solids. The purging is continued until the purged water is relatively free of suspended solids and measurements of the groundwater pH, and conductivity have stabilized. "Stabilized" is defined as three consecutive readings within 10% of one another. Typically the amount of water purged is a minimum of 10 casing volumes. Data including well yield purge time and rate, clarity, pH, and conductivity are recorded.

After purging is completed, water levels are measured and recorded while recovering to static level. All development equipment is either steam-cleaned or washed in non-phosphate detergent solution and double-rinsed with de-ionized (DI) water between wells.

The purged water is contained on-site in drums or tanks until properly disposed.

APPENDIX E

BORING LOGS

ERAS Environmental	Log of Pit 3 SE
PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *3 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
			Pit3E 1.25–1.5				Sand (SW), brown (7.5YR 4/6), damp, medium dense, fine to coarse well graded sand, no HC odor	
			Pit3E 2.75–3				Silty Clay (CL), very dark brown (7.5YR 2.5/3), damp, medium stiff, medium plasticity, no HC odor	
5								
10								
15								
20								

ERAS Environmental

Log of Pit 3 E

PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *3 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
			Pit3E 1.25–1.5				Sand (SW), brown (7.5YR 4/6), damp, medium dense, fine to coarse well graded sand, no HC odor	
			Pit3E 2.75–3				Silty Clay (CL), very dark brown (7.5YR 2.5/3), damp, medium stiff, medium plasticity, no HC odor	
5								
10								
15								
20								

ERAS Environmental	Log of Pit 3 NW
PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *2.5 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
			Pit3NW 1.25–1.5				Gravely Sand (SW), strong brown (7.5YR 4/6), damp, medium dense, 60% sand, fine to coarse, 40% 1/8"–1" gravel, no HC odor	
			Pit3NW 2.25–2.5				Silty Clay (CL), dark brown (7.5YR 2.5/3), damp, medium stiff, medium plasticity, no HC odor	
5								
10								
15								
20								

ERAS Environmental

Log of Pit 3 SE

PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *3 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
			Pit3SE 1.25–1.5				Sandy Gravel (GW), brown (7.5YR 4/4), damp, medium dense, 40% fine to coarse well graded sand, 60% 1/8"–2" rock, no HC odor	
			Pit3SE 2.75–3				Silty Clay (CL), dark brown (7.5YR 3/4), damp, medium stiff, medium plasticity, no HC odor	
5								
10								
15								
20								

ERAS Environmental	Log of Pit 4 E
PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *3.25 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
			Pit4E 1.25-1.5				Sandy Gravel (GW), brown (7.5YR 4/4), damp, medium dense, 40% fine to coarse well graded sand, 60% 1/8'-2" rock	
			Pit4E 3-3.25				Silty Clay (CL), brown (7.5YR 4/4), damp, medium dense, no HC odor	
5								
10								
15								
20								

ERAS Environmental

Log of Pit 4 NW

PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *3.5 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							3" Asphalt	
			Pit4NW 1.25-1.5				Sandy Gravel baserock (GW), 70% rock, 30% fine to coarse well graded sand	
			Pit4NW 2.75-3				Silty Clay (CL), brown (7.5YR 4/4), damp, medium dense, no HC odor	
5								
10								
15								
20								

ERAS Environmental

Log of Pit 4 SE

PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-03*	LOCATION: *RR tracks*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): – DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *3.5 feet*
DRILLING METHOD: *Hand Auger*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *ERAS*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
			Pit4SE 1-1.25				Sandy Gravel (GW), dark brown (7.5YR 3/4), damp, medium dense, 40% fine to coarse well graded sand, 60% 1/8"-3" rock	
			Pit4SE 3.25-3.5				Silty Clay (CL), dark brown (7.5YR 3/4), damp, medium stiff, medium plasticity, no HC odor	
5								
10								
15								
20								

ERAS Environmental	Log of Boring GP1
PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *NW corner close to transformer*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): *15'* DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *40 feet*
DRILLING METHOD: *Direct-Push*	GEOLOGIST: *Gail Jones, RG*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Asphalt – 1 foot	
							Silty Sand (SM), olive brown (2.5Y 3/3), damp, low to medium plasticity, 35%–45% fines, some clay, fine–coarse sand, common caliche, no HC odor	
5							at 5' – in shoe abundant caliche	
							Silty Clay (CL), dark olive brown (2.5Y 3/3), damp, 10%–15% sand, fine grained, no HC odor, medium–high plasticity, stiff	
							Silty w/Clay (ML), light olive brown (2.5Y 5/4), damp, little or no sand, stiff, low plasticity, rootlet holes, minor black organics	
							Silty Clay (CL), dark olive brown (2.5Y 3/3), damp, stiff, 10%–15% fine sand	
							below 9' – some caliche	
10	10' 0							
							Silt (ML), light olive brown (2.5Y 5/6), moist, low plasticity fines, no clay, medium stiff, no HC odor	
							no water entered borehole at 10–15 foot drive	
15						▽	at 15' – same as above, wet	
				NR			Water rose to 13.5', not static level	
				NR			Borehole collapsed 16'–20'	
				NR			Water sample collected from temporary piezometer with 5' screen (11'–16' interval)	
				NR				
				NR				
				NR				
				NR				
20								

ERAS Environmental	**Log of Boring GP1**
PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *NW corner close to transformer*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): *15'* DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *40 feet*
DRILLING METHOD: *Direct-Push*	GEOLOGIST: *Gail Jones, RG*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Silt (ML), light yellow brown (2.5Y 6/4), wet, soft, 15%-25% fine to medium sand, no HC odor, minor caliche HP water sample attempt at 18'-22' in adjacent boring no water entered boring	
							Sandy Clay (CL), light olive brown (2.5Y 5/6), damp, 10%-20% fine sand, low plasticity, no HC odor, medium stiff	
25							Sand (SP), olive brown (2.5Y 4/4), wet, no fines, fine to medium sand, no HC odor, medium dense HP water sample 24'-28' in adjacent boring	
				NR			Gravelly Sand (SW), olive brown (2.5Y 4/4), wet, <5% silt, fine to coarse sand, 35%-45% gravel to 3/4" subrounded, no HC odor, medium dense	
				NR				
				NR				
				NR		?	? - - - - - - - - - -	
30				NR			Clayey Sand (SC), light olive brown (2.5Y 5/6), damp, medium dense, medium plasticity, 25%-35% fines, mostly fine to medium sand, some coarse upto 1/4", no HC odor	
							Sand (SP), light olive brown (2.5Y 4/3), wet, <5% silt, fine to medium sand, no HC odor HP water sample 32'-36' in adjacent boring	
							Sandy Silt (ML), olive brown (2.5Y 5/6), wet, no clay, low plasticity, fines, 20%-30% fine to medium sand, no HC odor	
35							Silty Gravel (GM), dark yellow brown (10YR 4/4), damp, medium dense, 10%-20% silt, 20%-30% fine to coarse sand, gravel to 1.5" subrounded, no odor	
							Sand (SP), light olive brown (2.5Y 5/6), wet, loose, <10% silt, fine sand, no odor	
				NR			Silty Gravel (GM), dark yellow brown (10YR 4/4), damp, medium dense, 10%-20% silt, 20%-30% fine to coarse sand, gravel to 1.5" subrounded, no odor	
				NR				
				NR				
				NR				
				NR				
40							Bottom of boring 40 feet - 06-12-08	

ERAS Environmental	**Log of Boring GP2**
PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *SE of UST (east of MW-7)*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): *12'* DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *40 feet*
DRILLING METHOD: *Direct-Push*	GEOLOGIST: *Gail Jones, RG*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							6" concrete	
							12" asphalt	
							Clay (CL), black (_____ ___/___), damp, stiff, medium plasticity, trace fine sand, very slight odor	
5	5' 10			NR NR				
							Clay (CL), dark olive gray (5Y 3/2), dry, _____stiff, no sand, no odor	
							HC odor begins at about 8'	
							Clay (CL), mottled light olive brown & dak olive brown (2.5Y 5/6 & 3/3), damp, stiff, no sand, strong HC odor	
10	10' 1100		GP2 9.5-10					
						▽	Sandy Silt (ML), olive (5Y 4/4), damp, low plasticity, some clay, 10%-20% fine sand, HC odor	
							Silty Sand (SM), dark olive gray (5Y 3/2), wet, soft, loose, no clay, 35%-45% fines, 55%-65% very fine sand, HC odor	
15	15' 0						Clay (CL), olive (5Y 5/6, 5/1), damp, very stiff, no sand, no odor	
							Silty Sand (SM), olive gray (5Y 4/2), wet, 20%-30% silt, no clay, fine sand, slight odor	
							Silty Clay (CL), light olive (2.5Y 5/3-5/6), damp, stiff, medium plasticity, minor black organics	
20								

ERAS Environmental	**Log of Boring GP2**
PROJECT: *Former Paco Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *SE of UST (east of MW-7)*
DATE STARTED: *06-12-08*	First Water (ft. bgs.): *12'* DATE: *06-12-08*
DATE FINISHED: *06-12-08*	TOTAL DEPTH: *40 feet*
DRILLING METHOD: *Geoprobe*	GEOLOGIST: *Gail Jones, RG*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Silty Sand (SM), light olive brown (2.5Y 5/4), wet, 30%-40% fines w/some clay, fine sand, slight HC odor	
							Sandy Silt (ML), olive (5Y 5/4), damp, medium stiff, medium plasticity, 25%-35% fine sand, no odor	
							Silty Gravel (GM), olive (5Y 4/4), damp, 15%-25% fines, 25%-35% fine to coarse sand, gravel to 1", no odor	
25				NR			Sand (SP), olive (5Y 4/4), wet, medium dense, no odor	
				NR				
				NR				
				NR				
				NR				
				NR				
				NR				
				NR				
				NR				
30				NR			Medium Sand (SP), olive brown (2.5Y 4/4), wet, medium dense, fine to medium sand, no odor	
							Gravel (GM), olive (2.5Y 4/4), wet, medium dense, <10% silt and fine sand, 20%-30% medium to coarse sand, gravel to 2" sub_____, no odor	
				NR				
35				NR			Gravelly Sand (SW), olive (2.5Y 4/4), wet, medium dense, 10% silt, fine to coarse sand, angular 15%-25% gravel to 1.5" sub_____	
				NR				
				NR				
				NR				
				NR				
				NR				
				NR				
				NR				
40							Bottom of boring 40 feet - 06-12-08	

ERAS Environmental

Log of Boring GP-3

PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *NW corner of operations building*
DATE STARTED: *06-13-08*	First Water (ft. bgs.): *19.5'* DATE: *06-13-08*
DATE FINISHED: *06-13-08*	TOTAL DEPTH: *35 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Asphalt over concrete + bedrock	
							Silty Clay (CL), black (2.5Y 2.5/1), damp, medium stiff, medium plasticity, no HC odor	
	3' 3.1			NR				
				NR				
				NR				
5				NR				
							at 6' – color change to olive brown (2.5Y 4/3)	
			GP-3 9.5-10					
10	10' 2.0						at 11' – color change to light olive brown (2.5Y 5/3)	
15	15' 0.9						at 16' – color change to light olive brown (2.5Y 5/3)	
	18.5' 0.7							
						▽	moist at 19.5'	
20	20' 0.7						Hydropunch 25'-29', 31'-35'	

ERAS Environmental

Log of Boring GP-4

PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *NE of UST*
DATE STARTED: *06-13-08*	First Water (ft. bgs.): *13'* DATE: *06-13-08*
DATE FINISHED: *06-13-08*	TOTAL DEPTH: *35 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Asphalt over concrete + bedrock	
	3.5' 12.7			NR			Silty Clay (CL), black (2.5Y 2.5/1), damp, medium stiff, medium plasticity, slight HC odor	
5				NR				
				NR			at 6' – color change to dark gray (2.5Y 4/1), damp, slight HC odor	
							at 9' – strong HC odor	
10	10' 530		GP-4 9.5-10					
	12.5' 3474					▽	Clay Silt (ML), dark gray (2.5Y 4/1), wet, medium stiff, low plasticity, strong HC odor	
							at 14' – Silt (ML), olive brown (2.5Y 4/3), wet, medium stiff, low plasticity, strong HC odor	
15	15' 8.1						Hydropunch 25'-29', 31'-35'	
20								

ERAS Environmental

Log of Boring GP-6

PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *Inside building*
DATE STARTED: *06-16-08*	First Water (ft. bgs.): *13.5'* DATE: *06-16-08*
DATE FINISHED: *06-16-08*	TOTAL DEPTH: *35 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Concrete + Baserock	
	2.25' 25.2			NR NR			Silty Clay (CL), black (2.5Y 2.5/1), damp, medium stiff, medium plasticity, slight HC odor	
5	6' 70.2						at 7' – color change to dark gray (2.5Y 4/1)	
							at 8' – odor gets stronger	
	9' 307							
10	12' 2307		GP-6 11.5-12					
							Silty Sand (SM), gray (2.5Y 5/1), wet, medium dense, 40% fines, 60% fine grain sand poorly graded, strong HC odor	
15	15' 16.2						at 16' – very wet	
							Hydropunch 25'-29', Refusal at 30 feet	
20								

ERAS Environmental	Log of Boring GP-8
PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *by RR tracks*
DATE STARTED: *06-16-08*	First Water (ft. bgs.): – DATE: *06-16-08*
DATE FINISHED: *06-16-08*	TOTAL DEPTH: *35 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Sandy Gravel (GW), light olive brown (2.5Y 5/3), damp, 40% fine to coarse well graded sand, 60% 1/8"–2" gravel, no HC odor	
	3' 2.4			NR			Silty Clay (CL), black (2.5Y 2.5/1), damp, medium stiff, medium plasticity, no HC odor	
				NR				
				NR				
5				NR			at 5' – color change to olive brown (2.5Y 4/4)	
10	10' 2.8		GP-8 9.5–10					
							at 12' – color change to dark gray (2.5Y 4/1)	
							Clayey Silt (ML), dark grayish brown (2.5Y 4/2), damp to moist, medium stiff, low to medium plasticity, no HC odor	
15	15' 0.1						Boring caved below 15 feet, could not collect water sample at 15'–20' interval.	
							Attempted Hydropunch sample 16'–20', no water entered barrel.	
20	20' 0						Hydropunch 20'–29', 31'–35'	

ERAS Environmental	Log of Boring SG-1
PROJECT: *Former PACO Pumps*	ADDRESS: *9201 San Leandro Street*
JOB NUMBER: *07-001-04*	LOCATION: *SW of MW-3*
DATE STARTED: *06-16-08*	First Water (ft. bgs.): – DATE: *06-16-08*
DATE FINISHED: *06-16-08*	TOTAL DEPTH: *15 feet*
DRILLING METHOD: *Hydraulic Push*	GEOLOGIST: *Andrew Savage*
DRILLING COMPANY: *Vironex*	Reviewed By: *Gail Jones, RG*

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
5				NR			Silty Clay (CL), dark gray (2.5Y 4/1), damp, medium stiff, medium plasticity, strong HC odor	
	8' 1364							
10	10' 2922		SG-1 9.5-10				at 13.5' – moist, grater silt content, low to medium plasticity	
	12.5' 3479							
15	15' 97.4						Bottom of boring 15 feet, 06-16-08	
20								

APPENDIX F

FIELD FORMS

Groundwater Level Summary

Project Location: 9201 San Leandro St. Date: 6.17.08

Project Number: 07-001-04 Inspector: KC

Meter Type (WLM/IFP) WLM Measure Point (TOC or other)

Well Number	Time Open	Time Measured	Time Sample (NP only)	Total Depth (Standard Purge only)	Depth to LNAPL	Depth to Water	Comments
							Last
9MW1	8:32	9:47				9.04	8.50
9MW2	8:56	9:49				9.57	8.94
9MW3	8:54	10:00				9.81	9.21
9MW4	9:25	9:55				8.31	7.61
9MW5	8:54	9:44				8.75	8.16

GROUNDWATER SAMPLE DATA

Well #	**9MW1**		
Project #	**07-001-04**	Project Location	**9201 San Leandro St.**
Purge Date	**6.17.08**	Personnel	**KC**
Purge Method	**Bailer**	Purge Rate (pump only)	
Parameter Meter	**Oakton**		

Depth to Bottom	- Depth to Water	= Casing volume	* Volume Factor 0.75"=.023 2"=0.17 4"=0.66	= Gallons per CV
20	9.04	10.96	0.66	7.23

Time (24 hour clock)	Gallons Removed	EC (uS/cm)	Temp [C]	pH	Sheen (Y,N,U)	NOTES
10:45	START					
10:50	8	65.3	18.6	7.95		
10:55	16	73.0	18.0	7.89		
11:00	24	73.9	17.7	7.92		
11:04	SAMPLE					

Well Dewatered (Y/N)	Total Volume Removed (gal)	Casing Vol removed
N	24	3

Depth to Water at Sampling	Date Sampled	Time Sampled	Sample Method	#/type containers
✓	6.17.08	11:04	[redacted] Bailer	4/VOA

Well # **9MW1**

GROUNDWATER SAMPLE DATA

Well #	9MW2		
Project #	07-001-04	Project Location	9201 San Leandro St.
Purge Date	6.17.08	Personnel	KC
Purge Method	Bailer	Purge Rate (pump only)	
Parameter Meter	Oakton		

Depth to Bottom	- Depth to Water	= Casing volume	* Volume Factor 0.75"=.023 2"=0.17 4"=0.66	= Gallons per CV
19.9	~~5.87~~ 5.57	~~10.04~~ 10.39	0.66	~~6.625~~ 6.85

Time (24 hour clock)	Gallons Removed	EC (uS/cm)	Temp [C]	pH	Sheen (Y,N,U)	NOTES
12:22	START					
12:29	7	93.6	19.2	7.70		
12:34	15	95.6	18.6	7.79		
12:38	22	97.0	18.5	7.84		
12:40	SAMPLE					

Well Dewatered (Y/N)	Total Volume Removed (gal)	Casing Vol removed
N	22	3

Depth to Water at Sampling	Date Sampled	Time Sampled	Sample Method	#/type containers
✓	6.17.08	12:40	Bailer	4/VOA

Well # 9MW2

GROUNDWATER SAMPLE DATA

Well #	9MW# 3		
Project #	07-001-01	Project Location	9201 San Leandro St.
Purge Date	11.14.07	Personnel	KC
Purge Method	Bailer	Purge Rate (pump only)	
Parameter Meter	Oakton		

Depth to Bottom	- Depth to Water	= Casing volume	* Volume Factor 0.75"=.023 2"=0.17 4"=0.66	= Gallons per CV
	9.89	10.09		6.65
20	~~9.97~~	~~10.04~~	0.66	~~6.62~~

Time (24 hour clock)	Gallons Removed	EC (uS/cm)	Temp [C]	pH	Sheen (Y,N,U)	NOTES
12:52	START					
12:54	7	111.5	18.9	7.74		
13:03	14	116.1	18.8	7.79		
13:15	21	117.1	19.3	7.75		
13:18	SAMPLE					

Well Dewatered (Y/N)	Total Volume Removed (gal)	Casing Vol removed
N	21	3

Depth to Water at Sampling	Date Sampled	Time Sampled	Sample Method	#/type containers
/	11.14.07	13:18	[redacted] Bailer	4/VOA

Well # 9MW# 3

GROUNDWATER SAMPLE DATA

Well #	**9MW4**		
Project #	**07-001-04**	Project Location	**9201 San Leandro St.**
Purge Date	**6.17.08**	Personnel	**KC**
Purge Method	**Bailer**	Purge Rate (pump only)	
Parameter Meter	**Oakton**		

Depth to Bottom	- Depth to Water	= Casing volume	* Volume Factor 0.75"=.023 2"=0.17 4"=0.66	= Gallons per CV
19.9	8.31	11.59	0.66	7.64

Time (24 hour clock)	Gallons Removed	EC (uS/cm)	Temp [C]	pH	Sheen (Y,N,U)	NOTES
11:27	START					
11:31	8	82.0	17.6	7.80		
11:36	16	81.5	17.0	7.83		
11:41	24	81.2	16.5	7.88		
11:44	SAMPLE					

Well Dewatered (Y/N)	Total Volume Removed (gal)	Casing Vol removed
N	24	3

Depth to Water at Sampling	Date Sampled	Time Sampled	Sample Method	#/type containers
—	6.17.08	11:44	Bailer	4/VOA

Well # **9MW4**

GROUNDWATER SAMPLE DATA

Well #	**9MW4**		
Project #	**07-001-04**	Project Location	**9201 San Leandro St.**
Purge Date	**6.18.08**	Personnel	**KC**
Purge Method	**Bailer**	Purge Rate (pump only)	
Parameter Meter	**Oakton**		

Depth to Bottom	- Depth to Water	= Casing volume	* Volume Factor 0.75"=.023 2"=0.17 4"=0.66	= Gallons per CV
19.9	8.31	11.59	0.66	7.64

Time (24 hour clock)	Gallons Removed	EC (uS/cm)	Temp [C]	pH	Sheen (Y,N,U)	NOTES
10:15	START					
10:21	8	663	18.1	7.75		
10:26	10	651	18.1	7.83		
10:28	12	635	17.2	7.82		
10:35	SAMPLE					

Well Dewatered (Y/N)	Total Volume Removed (gal)	Casing Vol removed
N	12	1 1/2

Depth to Water at Sampling	Date Sampled	Time Sampled	Sample Method	#/type containers
—	6.18.08	10:35	Bailer	2/liter

Well # **9MW4**

GROUNDWATER SAMPLE DATA

Well #	**9MW5**		
Project #	**07-001-04**	Project Location	**9201 San Leandro St.**
Purge Date	**6.17.08**	Personnel	**KC**
Purge Method	**Bailer**	Purge Rate (pump only)	
Parameter Meter	**Oakton**		

Depth to Bottom	- Depth to Water	= Casing volume	* Volume Factor 0.75"=.023 2"=0.17 4"=0.66	= Gallons per CV
19.9	8.75	11.15	0.66	7.35

Time (24 hour clock)	Gallons Removed	EC (uS/cm)	Temp [C]	pH	Sheen (Y,N,U)	NOTES
10:07	START					
10:20	8	53.9	19.0	7.75		
10:26	16	53.8	18.5	7.89		
10:34	24	53.7	18.5	7.90		
10:38	SAMPLE					

Well Dewatered (Y/N)	Total Volume Removed (gal)	Casing Vol removed
N	3	24

Depth to Water at Sampling	Date Sampled	Time Sampled	Sample Method	#/type containers
✓	6.17.08	10:38	Bailer	4/VOA

Well # **9MW5**

APPENDIX G

LABORATORY REPORT AND CHAIN OF CUSTODY FORM FOR HAND-AUGER SOIL SAMPLES

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
	Client Contact: Andrew Savage	Date Reported: 06/20/08
	Client P.O.:	Date Completed: 06/19/08

WorkOrder: 0806416

June 20, 2008

Dear Andrew:

Enclosed within are:

1) The results of the **24** analyzed samples from your project: **#07-001-03; 9201 San Leandro St,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0806416

CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: Rush | 24Hr | 48 Hr | 72 Hr | 5 Day (X)

Geotracker: PDF | Excel | Write On (DW

Report To: ERAS **Bill To:** ERAS

Company: ERAS Environmental, Inc.

Email: info@eras.biz

Telephone: 510-247-9885 **Fax:** 510-886-5399

Project # 07-001-03

Project location: 9201 San Leandro St

Sampler: Andrew and Dave

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	MTBE/BTEW& TPHg (602,/8021 + 8015)	MTBE/BTEX only (EPA 602/8021)	TPH as Diesel/Motor Oil (8015) with silica gel strip	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2/601/8010/8021 (VOC's)	EPA 505/608/8081 (CI Pesticides	EPA 608/8082 PCB's ONLY; Aroclors/Congeners	EPA 507/8141 (NP Perticides)	EPA 515/8151 (Acidic CI Herbicides)	EPA 524.2/624/8260 (VOC's)	EPA 525.2/625/8270 (SVOC's)	EPA 8270 SIM/8310 (PAHs/PNAS) + Creosote	CAM 17 Metals (200.7/200.8/6010/6020)	LUFT 5 Metals (200.7/200.8/6010/6020)	Lead (200.7/200.8/6010/6020)	Other	Comments
Pit3SE,1.25-1.5	PIT3SE	6/12/2008	10:42	1	tube	X						X	X	X										X						Filter Samples for Metals Anaysis
Pit3SE,2.75-3	PIT3SE	6/12/2008	10:58	1	tube	X						X	X	X										X						Yes No
Pit3E,1.25-1.5	PIT3E	6/12/2008	11.06	1	tube	X						X	X	X										X						
Pit3E,2.75-3	PIT3E	6/12/2008	11:13	1	tube	X						X	X	X										X						
Pit3NW,1.25-1.5	PIT3NW	6/12/2008	11:21	1	tube	X						X	X	X										X						
Pit3NW,2.25-2.5	PIT3NW	6/12/2008	11:32	1	tube	X						X	X	X										X						
Pit4SE,1-1.25	PIT4SE	6/12/2008	9:15	1	tube	X						X	X	X										X						
Pit4SE,3.25-3.5	PIT4SE	6/12/2008	9:48	1	tube	X						X	X	X										X						
Pit4E1.25-1.5	PIT4E	6/12/2008	10:02	1	tube	X						X	X	X										X						
Pit4E,3-3.25	PIT4E	6/12/2008	10:22	1	tube	X						X	X	X										X						
Pit4NW,1.25-1.5	PIT4NW	6/12/2008	8:35	1	tube	X						X	X	X										X						
Pit4NW,2.75-3	PIT4NW	6/12/2008	8:59	1	tube	X						X	X	X										X						

RELINQUISHED BY:

Relinquished by:	Date:	Time:
Gail Wong	6/13/08	13:34
Derek Carter	6-13	1838

RECEIVED BY:

Recieved by:	
Derek Carter	

ICE/t°	5.1
Condition	
Head space absent	
Dechlorinated in lab	
Appropriate containers	
Preserved in Lab	
Preservation	VOA's O&G Metals Other pH<2

PDF & EDF T0608564059 *

* Should BE T0600101592

CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: Rush | 24Hr | 48 Hr | 72 Hr | 5 Day (X)

Geotracker: PDF | Excel | Write On (DW

Report To: ERAS **Bill To:** ERAS

Company: ERAS Environmental, Inc.

Email: info@eras.biz

Telephone: 510-247-9885 **Fax:** 510-886-5399

Project # 07-001-03

Project location: 9201 San Leandro St

Sampler: Andrew and Dave

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Matrix:	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative:
HA-1,1.25-1.5	HA-1	6/12/2008	13:03	1	tube	X							X	
HA-1,3-3.25	HA-1	6/12/2008	13:16	1	tube	X							X	
HA-2,1.25-1.5	HA-2	6/12/2008	13:30	1	tube	X							X	
HA-2,2.5-2.75	HA-2	6/12/2008	13:45	1	tube	X							X	
HA-3,1.25-1.5	HA-3	6/12/2008	14:02	1	tube	X							X	
HA-3,2.5-2.75	HA-3	6/12/2008	14:11	1	tube	X							X	
HA-4,1-1.25	HA-4	6/12/2008	14:40	1	tube	X							X	
HA-4,2.75-3	HA-4	6/12/2008	14:50	1	tube	X							X	
HA-5,1-1.25	HA-5	6/12/2008	15:26	1	tube	X							X	
HA-5,2.75-3	HA-5	6/12/2008	15:32	1	tube	X							X	
HA-6,1-1.25	HA-6	6/12/2008	15:00	1	tube	X							X	
HA-6, 2.75-3	HA-6	6/12/2008	15:10	1	tube	X							X	

Analysis Requested

MTBE/BTEW& TPHg (602,/8021 + 8015)	MTBE/BTEX only (EPA 602/8021)	TPH as Diesel/Motor Oil/Kerozene (8015) with silica strip	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2/601/8010/8021 (VOC's)	EPA 505/608/8081 (CI Pesticides	EPA 608/8082 PCB's ONLY; Aroclors/Congeners	EPA 507/8141 (NP Perticides)	EPA 515/8151 (Acidic CI Herbicides)	EPA 524.2/624/8260 (VOC's)	EPA 525.2/625/8270 (SVOC's)	EPA 8270 SIM/8310 (PAHs/PNAS) + Creosote	CAM 17 Metals (200.7/200.8/6010/6020)	LUFT 5 Metals (200.7/200.8/6010/6020)	Lead (200.7/200.8/6010/6020)	Other	Other	Other	Comments
							X												
							X												
							X												
							X												
							X												
							X												
		X								X									
		X								X									
		X								X									
		X								X									
		X								X									
		X								X									

Filter Samples for Metals Anaysis

Yes No

RELINQUISHED BY:

Relinquished by:	Date:	Time:
Grad Worker	6.13.08	1334
Derek Carter	6-13	1838

RECEIVED BY:

Recieved by:	
Derek Carter	

ICE/t°	
Condition	
Head space absent	
Dechlorinated in lab	
Appropriate containers	
Preserved in Lab	
Preservation	VOA's O&G Metals Other pH<2

PDF & EDF T0608564059 *

*Should Be T0600101592

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806416 **ClientCode: ERAS**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX (510) 886-5399

Email: info@eras.biz
cc: gale@eras.biz
PO:
ProjectNo: #07-001-03; 9201 San Leandro St

Bill to:
Gail Jones
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days

Date Received: **06/13/2008**
Date Printed: **06/19/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0806416-001	Pit3SE,1.25-1.5	Soil	6/12/2008 10:42	☐			A	A	A	A						
0806416-002	Pit3SE,2.75-3	Soil	6/12/2008 10:58	☐			A	A		A						
0806416-003	Pit3E,1.25-1.5	Soil	6/12/2008 11:06	☐			A	A		A						
0806416-004	Pit3E,2.75-3	Soil	6/12/2008 11:13	☐			A	A		A						
0806416-005	Pit3NW,1.25-1.5	Soil	6/12/2008 11:21	☐			A	A		A						
0806416-006	Pit3NW,2.25-2.5	Soil	6/12/2008 11:32	☐			A	A		A						
0806416-007	Pit4SE,1-1.25	Soil	6/12/2008 9:15	☐			A	A		A						
0806416-008	Pit4SE,3.25-3.5	Soil	6/12/2008 9:48	☐			A	A		A						
0806416-009	Pit4E1.25-1.5	Soil	6/12/2008 10:02	☐			A	A		A						
0806416-010	Pit4E,3-3.25	Soil	6/12/2008 10:22	☐			A	A		A						
0806416-011	Pit4NW,1.25-1.5	Soil	6/12/2008 8:35	☐			A	A		A						
0806416-012	Pit4NW,2.75-3	Soil	6/12/2008 8:59	☐			A	A		A						
0806416-013	HA-1,1.25-1.5	Soil	6/12/2008 13:03	☐	A											
0806416-014	HA-1,3-3.25	Soil	6/12/2008 13:16	☐	A											

Test Legend:

1	8082A_PCB_S	2	8260B_S	3	8270D-PNA_S	4	G-MBTEX_S	5	PREDF REPORT
6	TPH(DKMO)WSG_S	7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806416 **ClientCode: ERAS**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX (510) 886-5399

Email: info@eras.biz
cc: gale@eras.biz
PO:
ProjectNo: #07-001-03; 9201 San Leandro St

Bill to:
Gail Jones
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days

Date Received: **06/13/2008**
Date Printed: **06/19/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0806416-015	HA-2,1.25-1.5	Soil	6/12/2008 13:30	☐	A											
0806416-016	HA-2,2.5-2.75	Soil	6/12/2008 13:45	☐	A											
0806416-017	HA-3,1.25-1.5	Soil	6/12/2008 14:02	☐	A											
0806416-018	HA-3,2.5-2.75	Soil	6/12/2008 14:11	☐	A											
0806416-019	HA-4,1-1.25	Soil	6/12/2008 14:40	☐		A				A						
0806416-020	HA-4,2.75-3	Soil	6/12/2008 14:50	☐		A				A						
0806416-021	HA-5,1-1.25	Soil	6/12/2008 15:26	☐		A				A						
0806416-022	HA-5,2.75-3	Soil	6/12/2008 15:32	☐		A				A						
0806416-023	HA-6,1-1.25	Soil	6/12/2008 15:00	☐		A				A						
0806416-024	HA-6,2.75-3	Soil	6/12/2008 15:10	☐		A				A						

Test Legend:

1	8082A_PCB_S	2	8260B_S	3	8270D-PNA_S	4	G-MBTEX_S	5	PREDF REPORT
6	TPH(DKMO)WSG_S	7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.**
Date and Time Received: **06/13/08 9:11:02 PM**

Project Name: **#07-001-03; 9201 San Leandro St**
Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **0806416** Matrix Soil
Carrier: Derik Cartan (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 5.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/16/08-06/17/08

Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD*

Extraction Method: SW3550C Analytical Method: SW8082A Work Order: 0806416

Lab ID	0806416-013A	0806416-014A	0806416-015A	0806416-016A	Reporting Limit for DF =1	
Client ID	HA-1,1.25-1.5	HA-1,3-3.25	HA-2,1.25-1.5	HA-2,2.5-2.75		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
Aroclor1016	ND	ND	ND	ND	0.025	NA
Aroclor1221	ND	ND	ND	ND	0.025	NA
Aroclor1232	ND	ND	ND	ND	0.025	NA
Aroclor1242	ND	ND	ND	ND	0.025	NA
Aroclor1248	ND	ND	ND	ND	0.025	NA
Aroclor1254	ND	ND	ND	0.050	0.025	NA
Aroclor1260	ND	ND	ND	ND	0.025	NA
PCBs, total, as DCB	ND	ND	ND	0.050	0.025	NA
Surrogate Recoveries (%)						
%SS:	89	116	120	112		
Comments	h4			h4		

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h4) sulfuric acid permanganate (EPA 3665) cleanup

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/16/08-06/23/08

Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD*

Extraction Method: SW3550C Analytical Method: SW8082A Work Order: 0806416

Lab ID	0806416-017A	0806416-018A			Reporting Limit for DF =1	
Client ID	HA-3,1.25-1.5	HA-3,2.5-2.75				
Matrix	S	S				
DF	1	3			S	W
Compound	**Concentration**				mg/kg	ug/L
Aroclor1016	ND	ND<0.075			0.025	NA
Aroclor1221	ND	ND<0.075			0.025	NA
Aroclor1232	ND	ND<0.075			0.025	NA
Aroclor1242	ND	ND<0.075			0.025	NA
Aroclor1248	ND	ND<0.075			0.025	NA
Aroclor1254	ND	ND<0.075			0.025	NA
Aroclor1260	ND	0.14			0.025	NA
PCBs, total, as DCB	ND	0.14			0.025	NA
Surrogate Recoveries (%)						
%SS:	118	113				
Comments		h4				

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h4) sulfuric acid permanganate (EPA 3665) cleanup

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
1533 B Street	Client Contact: Andrew Savage	Date Extracted: 06/13/08
Hayward, CA 94541	Client P.O.:	Date Analyzed 06/16/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806416

Lab ID	0806416-019A
Client ID	HA-4,1-1.25
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	0.12	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	100	%SS2:	115
%SS3:	103		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
1533 B Street	Client Contact: Andrew Savage	Date Extracted: 06/13/08
Hayward, CA 94541	Client P.O.:	Date Analyzed 06/16/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806416

Lab ID	0806416-020A
Client ID	HA-4,2.75-3
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	0.20	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	0.026	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	100	%SS2:	101
%SS3:	105		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
1533 B Street	Client Contact: Andrew Savage	Date Extracted: 06/13/08
Hayward, CA 94541	Client P.O.:	Date Analyzed 06/17/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806416

Lab ID	0806416-021A
Client ID	HA-5,1-1.25
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<0.20	4.0	0.05	tert-Amyl methyl ether (TAME)	ND<0.020	4.0	0.005
Benzene	ND<0.020	4.0	0.005	Bromobenzene	ND<0.020	4.0	0.005
Bromochloromethane	ND<0.020	4.0	0.005	Bromodichloromethane	ND<0.020	4.0	0.005
Bromoform	ND<0.020	4.0	0.005	Bromomethane	ND<0.020	4.0	0.005
2-Butanone (MEK)	ND<0.080	4.0	0.02	t-Butyl alcohol (TBA)	ND<0.20	4.0	0.05
n-Butyl benzene	0.20	4.0	0.005	sec-Butyl benzene	0.16	4.0	0.005
tert-Butyl benzene	ND<0.020	4.0	0.005	Carbon Disulfide	ND<0.020	4.0	0.005
Carbon Tetrachloride	ND<0.020	4.0	0.005	Chlorobenzene	ND<0.020	4.0	0.005
Chloroethane	ND<0.020	4.0	0.005	Chloroform	ND<0.020	4.0	0.005
Chloromethane	ND<0.020	4.0	0.005	2-Chlorotoluene	ND<0.020	4.0	0.005
4-Chlorotoluene	ND<0.020	4.0	0.005	Dibromochloromethane	ND<0.020	4.0	0.005
1,2-Dibromo-3-chloropropane	ND<0.016	4.0	0.004	1,2-Dibromoethane (EDB)	ND<0.016	4.0	0.004
Dibromomethane	ND<0.020	4.0	0.005	1,2-Dichlorobenzene	ND<0.020	4.0	0.005
1,3-Dichlorobenzene	ND<0.020	4.0	0.005	1,4-Dichlorobenzene	ND<0.020	4.0	0.005
Dichlorodifluoromethane	ND<0.020	4.0	0.005	1,1-Dichloroethane	ND<0.020	4.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND<0.016	4.0	0.004	1,1-Dichloroethene	ND<0.020	4.0	0.005
cis-1,2-Dichloroethene	ND<0.020	4.0	0.005	trans-1,2-Dichloroethene	ND<0.020	4.0	0.005
1,2-Dichloropropane	ND<0.020	4.0	0.005	1,3-Dichloropropane	ND<0.020	4.0	0.005
2,2-Dichloropropane	ND<0.020	4.0	0.005	1,1-Dichloropropene	ND<0.020	4.0	0.005
cis-1,3-Dichloropropene	ND<0.020	4.0	0.005	trans-1,3-Dichloropropene	ND<0.020	4.0	0.005
Diisopropyl ether (DIPE)	ND<0.020	4.0	0.005	Ethylbenzene	ND<0.020	4.0	0.005
Ethyl tert-butyl ether (ETBE)	ND<0.020	4.0	0.005	Freon 113	ND<0.40	4.0	0.1
Hexachlorobutadiene	ND<0.020	4.0	0.005	Hexachloroethane	ND<0.020	4.0	0.005
2-Hexanone	ND<0.020	4.0	0.005	Isopropylbenzene	0.056	4.0	0.005
4-Isopropyl toluene	ND<0.020	4.0	0.005	Methyl-t-butyl ether (MTBE)	ND<0.020	4.0	0.005
Methylene chloride	ND<0.020	4.0	0.005	4-Methyl-2-pentanone (MIBK)	ND<0.020	4.0	0.005
Naphthalene	0.067	4.0	0.005	n-Propyl benzene	0.13	4.0	0.005
Styrene	ND<0.020	4.0	0.005	1,1,1,2-Tetrachloroethane	ND<0.020	4.0	0.005
1,1,2,2-Tetrachloroethane	ND<0.020	4.0	0.005	Tetrachloroethene	ND<0.020	4.0	0.005
Toluene	ND<0.020	4.0	0.005	1,2,3-Trichlorobenzene	ND<0.020	4.0	0.005
1,2,4-Trichlorobenzene	ND<0.020	4.0	0.005	1,1,1-Trichloroethane	ND<0.020	4.0	0.005
1,1,2-Trichloroethane	ND<0.020	4.0	0.005	Trichloroethene	ND<0.020	4.0	0.005
Trichlorofluoromethane	ND<0.020	4.0	0.005	1,2,3-Trichloropropane	ND<0.020	4.0	0.005
1,2,4-Trimethylbenzene	0.73	4.0	0.005	1,3,5-Trimethylbenzene	0.36	4.0	0.005
Vinyl Chloride	ND<0.020	4.0	0.005	Xylenes	0.11	4.0	0.005

Surrogate Recoveries (%)

%SS1:	99	%SS2:	95
%SS3:	107		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
1533 B Street	Client Contact: Andrew Savage	Date Extracted: 06/13/08
Hayward, CA 94541	Client P.O.:	Date Analyzed 06/16/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806416

Lab ID	0806416-022A
Client ID	HA-5,2.75-3
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	0.077	1.0	0.005	sec-Butyl benzene	0.084	1.0	0.005
tert-Butyl benzene	0.010	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	0.0079	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	0.030	1.0	0.005
4-Isopropyl toluene	0.035	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	0.011	1.0	0.005	n-Propyl benzene	0.057	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	0.032	1.0	0.005	1,3,5-Trimethylbenzene	0.046	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	0.015	1.0	0.005

Surrogate Recoveries (%)

%SS1:	101	%SS2:	95
%SS3:	70		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
1533 B Street	Client Contact: Andrew Savage	Date Extracted: 06/13/08
Hayward, CA 94541	Client P.O.:	Date Analyzed 06/16/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806416

Lab ID	0806416-023A
Client ID	HA-6,1-1.25
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	0.019	1.0	0.005	sec-Butyl benzene	0.045	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	0.0073	1.0	0.005
4-Isopropyl toluene	0.021	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	0.012	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	0.042	1.0	0.005	1,3,5-Trimethylbenzene	0.015	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	0.0086	1.0	0.005

Surrogate Recoveries (%)

%SS1:	100	%SS2:	118
%SS3:	108		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
1533 B Street	Client Contact: Andrew Savage	Date Extracted: 06/13/08
Hayward, CA 94541	Client P.O.:	Date Analyzed 06/16/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806416

Lab ID	0806416-024A
Client ID	HA-6,2.75-3
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	101	%SS2:	106
%SS3:	101		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
1533 B Street		Date Received: 06/13/08
Hayward, CA 94541	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/16/08-06/18/08

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS*

Extraction Method: SW3550C Analytical Method: SW8270C Work Order: 0806416

Lab ID	0806416-001A	0806416-002A	0806416-003A	0806416-004A	Reporting Limit for DF =1	
Client ID	Pit3SE,1.25-1.5	Pit3SE,2.75-3	Pit3E,1.25-1.5	Pit3E,2.75-3		
Matrix	S	S	S	S		
DF	50	1	5	1	S	W
Compound	**Concentration**				mg/kg	ug/L
Acenaphthene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Acenaphthylene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Anthracene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Benzo(a)anthracene	ND<0.25	0.010	ND<0.025	ND	0.005	NA
Benzo(a)pyrene	ND<0.25	0.012	ND<0.025	ND	0.005	NA
Benzo(b)fluoranthene	ND<0.25	0.012	ND<0.025	ND	0.005	NA
Benzo(g,h,i)perylene	ND<0.25	0.011	ND<0.025	ND	0.005	NA
Benzo(k)fluoranthene	ND<0.25	0.012	ND<0.025	ND	0.005	NA
Chrysene	ND<0.25	0.014	ND<0.025	ND	0.005	NA
Dibenzo(a,h)anthracene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Fluoranthene	ND<0.25	0.014	ND<0.025	ND	0.005	NA
Fluorene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Indeno (1,2,3-cd) pyrene	ND<0.25	0.0073	ND<0.025	ND	0.005	NA
1-Methylnaphthalene	ND<0.25	ND	ND<0.025	ND	0.005	NA
2-Methylnaphthalene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Naphthalene	ND<0.25	ND	ND<0.025	ND	0.005	NA
Phenanthrene	ND<0.25	0.011	ND<0.025	ND	0.005	NA
Pyrene	ND<0.25	0.014	ND<0.025	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1	107	78	98	79		
%SS2	120	73	98	75		
Comments	a1		a1			

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

a1) sample diluted due to matrix interference

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1533 B Street		Date Received: 06/13/08
Hayward, CA 94541	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/16/08-06/18/08

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS*

Extraction Method: SW3550C Analytical Method: SW8270C Work Order: 0806416

Lab ID	0806416-005A	0806416-006A	0806416-007A	0806416-008A	Reporting Limit for DF =1	
Client ID	Pit3NW,1.25-1.5	Pit3NW,2.25-2.5	Pit4SE,1-1.25	Pit4SE,3.25-3.5		
Matrix	S	S	S	S		
DF	5	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
Acenaphthene	ND<0.025	ND	ND	ND	0.005	NA
Acenaphthylene	ND<0.025	ND	ND	ND	0.005	NA
Anthracene	0.036	ND	0.0057	ND	0.005	NA
Benzo(a)anthracene	0.15	ND	0.032	ND	0.005	NA
Benzo(a)pyrene	0.15	ND	0.042	ND	0.005	NA
Benzo(b)fluoranthene	0.13	ND	0.031	ND	0.005	NA
Benzo(g,h,i)perylene	0.12	ND	0.035	ND	0.005	NA
Benzo(k)fluoranthene	0.14	ND	0.032	ND	0.005	NA
Chrysene	0.19	ND	0.042	ND	0.005	NA
Dibenzo(a,h)anthracene	0.042	ND	0.014	ND	0.005	NA
Fluoranthene	0.19	ND	0.030	ND	0.005	NA
Fluorene	ND<0.025	ND	ND	ND	0.005	NA
Indeno (1,2,3-cd) pyrene	0.078	ND	0.025	ND	0.005	NA
1-Methylnaphthalene	ND<0.025	ND	ND	ND	0.005	NA
2-Methylnaphthalene	ND<0.025	ND	ND	ND	0.005	NA
Naphthalene	ND<0.025	ND	ND	ND	0.005	NA
Phenanthrene	0.15	ND	0.017	ND	0.005	NA
Pyrene	0.23	ND	0.042	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1	97	79	80	78		
%SS2	99	75	75	72		
Comments						

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

a1) sample diluted due to matrix interference

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Angela Rydelius, Lab Manager

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
		Date Received: 06/13/08
	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/16/08-06/18/08

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS*

Extraction Method: SW3550C Analytical Method: SW8270C Work Order: 0806416

Lab ID	0806416-009A	0806416-010A	0806416-011A	0806416-012A	Reporting Limit for DF =1	
Client ID	Pit4E1.25-1.5	Pit4E,3-3.25	Pit4NW,1.25-1.5	Pit4NW,2.75-3		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
Acenaphthene	ND	ND	ND	ND	0.005	NA
Acenaphthylene	ND	ND	ND	ND	0.005	NA
Anthracene	ND	ND	ND	ND	0.005	NA
Benzo(a)anthracene	ND	ND	0.018	ND	0.005	NA
Benzo(a)pyrene	ND	ND	0.020	ND	0.005	NA
Benzo(b)fluoranthene	0.0082	ND	0.033	ND	0.005	NA
Benzo(g,h,i)perylene	ND	ND	0.016	ND	0.005	NA
Benzo(k)fluoranthene	0.0058	ND	0.021	ND	0.005	NA
Chrysene	ND	ND	0.021	ND	0.005	NA
Dibenzo(a,h)anthracene	ND	ND	0.0065	ND	0.005	NA
Fluoranthene	0.011	ND	0.021	ND	0.005	NA
Fluorene	ND	ND	ND	ND	0.005	NA
Indeno (1,2,3-cd) pyrene	ND	ND	0.011	ND	0.005	NA
1-Methylnaphthalene	ND	ND	ND	ND	0.005	NA
2-Methylnaphthalene	ND	ND	ND	ND	0.005	NA
Naphthalene	ND	ND	ND	ND	0.005	NA
Phenanthrene	ND	ND	0.013	ND	0.005	NA
Pyrene	0.0081	ND	0.025	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1	78	78	79	79		
%SS2	76	72	75	72		
Comments						

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

a1) sample diluted due to matrix interference

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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ERAS Environmental, Inc.	Client Project ID: #07-001-03; 9201 San Leandro St	Date Sampled: 06/12/08
1533 B Street		Date Received: 06/13/08
Hayward, CA 94541	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/14/08-06/17/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0806416

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Pit3SE,1.25-1.5	S	---	ND	ND	ND	ND	ND	1	89
002A	Pit3SE,2.75-3	S	---	ND	ND	ND	ND	ND	1	83
003A	Pit3E,1.25-1.5	S	---	ND	ND	ND	ND	ND	1	80
004A	Pit3E,2.75-3	S	---	ND	ND	ND	ND	ND	1	86
005A	Pit3NW,1.25-1.5	S	---	ND	ND	ND	ND	ND	1	88
006A	Pit3NW,2.25-2.5	S	---	ND	ND	ND	ND	ND	1	88
007A	Pit4SE,1-1.25	S	---	ND	ND	ND	ND	ND	1	96
008A	Pit4SE,3.25-3.5	S	---	ND	ND	ND	ND	ND	1	92
009A	Pit4E1.25-1.5	S	---	ND	ND	ND	ND	ND	1	95
010A	Pit4E,3-3.25	S	---	ND	ND	ND	ND	ND	1	83
011A	Pit4NW,1.25-1.5	S	---	ND	ND	ND	ND	ND	1	92
012A	Pit4NW,2.75-3	S	---	ND	ND	ND	ND	ND	1	85

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram

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Angela Rydelius, Lab Manager

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		Date Received: 06/13/08
	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed 06/15/08-06/19/08

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method SW3550C/3630C Analytical methods SW8015C Work Order: 0806416

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	TPH-Kerosene (C9-C18)	DF	% SS
019A	HA-4,1-1.25	S	2.8,e7,e4	21	2.1	1	106
020A	HA-4,2.75-3	S	16,e7,e2	69	2.5	2	106
021A	HA-5,1-1.25	S	1000,e7,e11	1600	1200	100	118
022A	HA-5,2.75-3	S	78,e7,e11	180	61	10	101
023A	HA-6,1-1.25	S	7600,e7,e11	20,000	2700	100	118
024A	HA-6,2.75-3	S	2.3,e7,e2	9.6	ND	1	99

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	ug/L
	S	1.0	5.0	1.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern
e4) gasoline range compounds are significant.
e7) oil range compounds are significant
e11) stoddard solvent/mineral spirit

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		Date Received: 06/13/08
	Client Contact: Andrew Savage	Date Extracted: 06/13/08
	Client P.O.:	Date Analyzed: 06/15/08-06/18/08

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550C/3630C Analytical methods: SW8015C Work Order: 0806416

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS
0806416-001A	Pit3SE,1.25-1.5	S	140,e7,e2	550	10	98
0806416-002A	Pit3SE,2.75-3	S	11,e7,e2	31	1	106
0806416-003A	Pit3E,1.25-1.5	S	2.3,e7,e10	6.5	1	103
0806416-004A	Pit3E,2.75-3	S	4.7,e7,e2	22	1	106
0806416-005A	Pit3NW,1.25-1.5	S	55,e7,e2	170	1	100
0806416-006A	Pit3NW,2.25-2.5	S	2.3,e7,e2	6.0	1	106
0806416-007A	Pit4SE,1-1.25	S	6.5,e7,e2	25	1	106
0806416-008A	Pit4SE,3.25-3.5	S	ND	ND	1	98
0806416-009A	Pit4E1.25-1.5	S	71,e7,e2	170	10	101
0806416-010A	Pit4E,3-3.25	S	2.8,e7,e2	12	1	90
0806416-011A	Pit4NW,1.25-1.5	S	8.2,e7,e2	26	1	105
0806416-012A	Pit4NW,2.75-3	S	ND	ND	1	105

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern
e7) oil range compounds are significant
e10) fuel oil

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806416

EPA Method SW8021B/8015Cm **Extraction SW5030B** **BatchID: 36273** **Spiked Sample ID: 0806354-009A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	99.9	95.2	4.75	106	118	11.2	70 - 130	20	70 - 130	20
MTBE	ND	0.10	108	114	6.14	108	96.8	10.6	70 - 130	20	70 - 130	20
Benzene	ND	0.10	89.8	87.5	2.54	92.6	96.6	4.16	70 - 130	20	70 - 130	20
Toluene	ND	0.10	96	93	3.07	107	114	6.47	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	99.4	94.9	4.65	101	108	6.22	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	109	105	3.88	112	120	6.75	70 - 130	20	70 - 130	20
%SS:	75	0.10	95	89	6.07	92	97	5.62	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36273 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806416-001A	06/12/08 10:42 AM	06/13/08	06/17/08 5:31 AM	0806416-002A	06/12/08 10:58 AM	06/13/08	06/15/08 8:16 AM
0806416-003A	06/12/08 11:06 AM	06/13/08	06/16/08 5:09 PM	0806416-004A	06/12/08 11:13 AM	06/13/08	06/16/08 6:42 PM
0806416-005A	06/12/08 11:21 AM	06/13/08	06/17/08 6:04 AM	0806416-006A	06/12/08 11:32 AM	06/13/08	06/14/08 6:55 PM
0806416-007A	06/12/08 9:15 AM	06/13/08	06/15/08 12:59 AM	0806416-008A	06/12/08 9:48 AM	06/13/08	06/15/08 12:29 AM
0806416-009A	06/12/08 10:02 AM	06/13/08	06/15/08 2:29 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806416

EPA Method SW8260B **Extraction SW5030B** **BatchID: 36274** **Spiked Sample ID: 0806354-009A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	99.5	100	0.713	91.5	92.4	0.950	60 - 130	30	60 - 130	30
Benzene	ND	0.050	95.8	94	1.86	92.5	92.8	0.381	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	96.9	95.1	1.92	81.2	88.1	8.08	60 - 130	30	60 - 130	30
Chlorobenzene	ND	0.050	96.9	93.7	3.37	86	86.5	0.545	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	108	104	3.17	92.7	92.1	0.645	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	104	104	0	95.5	96.2	0.723	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	97.5	98	0.473	95.1	97.1	2.08	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	101	101	0	94.3	95.3	1.04	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	106	106	0	95	96.4	1.53	60 - 130	30	60 - 130	30
Toluene	ND	0.050	94.8	90.8	4.26	85.9	85.5	0.470	60 - 130	30	60 - 130	30
Trichloroethene	ND	0.050	106	103	2.85	94.8	92.5	2.51	60 - 130	30	60 - 130	30
%SS1:	101	0.12	101	102	0.983	101	99	1.54	70 - 130	30	70 - 130	30
%SS2:	100	0.12	99	97	1.38	96	95	0.881	70 - 130	30	70 - 130	30
%SS3:	120	0.12	105	105	0	98	96	2.45	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36274 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806416-019A	06/12/08 2:40 PM	06/13/08	06/16/08 1:42 PM	0806416-020A	06/12/08 2:50 PM	06/13/08	06/16/08 2:25 PM
0806416-021A	06/12/08 3:26 PM	06/13/08	06/17/08 6:31 PM	0806416-022A	06/12/08 3:32 PM	06/13/08	06/16/08 3:50 PM
0806416-023A	06/12/08 3:00 PM	06/13/08	06/16/08 4:32 PM	0806416-024A	06/12/08 3:10 PM	06/13/08	06/16/08 5:15 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806416

EPA Method SW8082A	Extraction SW3550C	BatchID: 36286	Spiked Sample ID: 0805307-003A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	ND	0.075	103	103	0	98	100	2.04	70 - 130	20	70 - 130	20
%SS:	125	0.050	119	119	0	114	116	1.92	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36286 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806416-013A	06/12/08 1:03 PM	06/13/08	06/17/08 11:37 PM	0806416-014A	06/12/08 1:16 PM	06/13/08	06/16/08 10:29 PM
0806416-015A	06/12/08 1:30 PM	06/13/08	06/17/08 8:03 PM	0806416-016A	06/12/08 1:45 PM	06/13/08	06/17/08 1:13 AM
0806416-017A	06/12/08 2:02 PM	06/13/08	06/16/08 11:24 PM	0806416-018A	06/12/08 2:11 PM	06/13/08	06/17/08 2:08 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806416

EPA Method SW8021B/8015Cm Extraction SW5030B BatchID: 36305 Spiked Sample ID: 0806416-012A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	94.7	96.2	1.61	94.7	94.6	0.0883	70 - 130	20	70 - 130	20
MTBE	ND	0.10	117	116	1.10	109	116	6.27	70 - 130	20	70 - 130	20
Benzene	ND	0.10	90.4	92.3	2.13	91.4	88.1	3.68	70 - 130	20	70 - 130	20
Toluene	ND	0.10	96.8	98.9	2.14	101	97.4	4.05	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	98	101	2.77	99.9	96.2	3.85	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	109	112	2.53	111	107	3.80	70 - 130	20	70 - 130	20
%SS:	85	0.10	100	102	2.02	94	95	1.40	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36305 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806416-010A	06/12/08 10:22 AM	06/13/08	06/14/08 11:57 PM	0806416-011A	06/12/08 8:35 AM	06/13/08	06/15/08 3:49 AM
0806416-012A	06/12/08 8:59 AM	06/13/08	06/15/08 1:01 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806416

EPA Method SW8270C	Extraction SW3550C	BatchID: 36285	Spiked Sample ID: 0806416-012A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzo(a)pyrene	ND	0.10	81.8	82.5	0.876	83.8	83.5	0.451	30 - 130	30	30 - 130	30
Chrysene	ND	0.10	71.2	71.5	0.450	76.2	75.1	1.41	30 - 130	30	30 - 130	30
1-Methylnaphthalene	ND	0.10	77.3	77	0.444	85.7	84.1	1.82	30 - 130	30	30 - 130	30
2-Methylnaphthalene	ND	0.10	71.9	72	0.161	81.5	79.5	2.46	30 - 130	30	30 - 130	30
Phenanthrene	ND	0.10	76.3	76.7	0.511	84.2	82.3	2.23	30 - 130	30	30 - 130	30
Pyrene	ND	0.10	82.2	82.6	0.479	85.3	87.5	2.59	30 - 130	30	30 - 130	30
%SS1:	79	0.050	79	79	0	81	80	1.17	30 - 130	30	30 - 130	30
%SS2:	72	0.050	71	71	0	73	72	1.33	30 - 130	30	30 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36285 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806416-001A	06/12/08 10:42 AM	06/13/08	06/18/08 12:11 AM	0806416-002A	06/12/08 10:58 AM	06/13/08	06/17/08 1:39 AM
0806416-003A	06/12/08 11:06 AM	06/13/08	06/17/08 6:10 PM	0806416-004A	06/12/08 11:13 AM	06/13/08	06/17/08 3:11 AM
0806416-005A	06/12/08 11:21 AM	06/13/08	06/17/08 9:09 PM	0806416-006A	06/12/08 11:32 AM	06/13/08	06/17/08 4:43 AM
0806416-007A	06/12/08 9:15 AM	06/13/08	06/17/08 6:14 AM	0806416-008A	06/12/08 9:48 AM	06/13/08	06/17/08 7:46 AM
0806416-009A	06/12/08 10:02 AM	06/13/08	06/17/08 9:16 AM	0806416-010A	06/12/08 10:22 AM	06/13/08	06/17/08 10:48 AM
0806416-011A	06/12/08 8:35 AM	06/13/08	06/17/08 12:18 PM	0806416-012A	06/12/08 8:59 AM	06/13/08	06/16/08 9:05 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806416

EPA Method SW8015C	Extraction SW3550C/3630C	BatchID: 36306	Spiked Sample ID: 0806416-024A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	2.3	20	69.4, F1	69.4, F1	0	100	110	9.14	70 - 130	30	70 - 130	30
%SS:	99	50	109	109	0	108	119	9.15	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

F1 = MS / MSD outside of acceptance criteria. LCS - LCSD validate prep batch.

BATCH 36306 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806416-001A	06/12/08 10:42 AM	06/13/08	06/17/08 11:22 AM	0806416-002A	06/12/08 10:58 AM	06/13/08	06/16/08 1:16 PM
0806416-003A	06/12/08 11:06 AM	06/13/08	06/16/08 2:27 PM	0806416-004A	06/12/08 11:13 AM	06/13/08	06/15/08 6:59 PM
0806416-005A	06/12/08 11:21 AM	06/13/08	06/15/08 5:49 PM	0806416-005A	06/12/08 11:21 AM	06/13/08	06/17/08 3:15 AM
0806416-006A	06/12/08 11:32 AM	06/13/08	06/15/08 8:09 PM	0806416-007A	06/12/08 9:15 AM	06/13/08	06/15/08 5:49 PM
0806416-008A	06/12/08 9:48 AM	06/13/08	06/15/08 3:26 PM	0806416-009A	06/12/08 10:02 AM	06/13/08	06/16/08 9:36 PM
0806416-010A	06/12/08 10:22 AM	06/13/08	06/16/08 12:41 PM	0806416-011A	06/12/08 8:35 AM	06/13/08	06/18/08 11:45 PM
0806416-012A	06/12/08 8:59 AM	06/13/08	06/15/08 4:38 PM	0806416-019A	06/12/08 2:40 PM	06/13/08	06/15/08 2:15 PM
0806416-020A	06/12/08 2:50 PM	06/13/08	06/19/08 3:15 AM	0806416-021A	06/12/08 3:26 PM	06/13/08	06/19/08 12:55 AM
0806416-022A	06/12/08 3:32 PM	06/13/08	06/17/08 7:44 AM	0806416-023A	06/12/08 3:00 PM	06/13/08	06/17/08 5:21 PM
0806416-024A	06/12/08 3:10 PM	06/13/08	06/15/08 2:15 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

APPENDIX H

LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS FOR DIRECT-PUSH AND MONITOR WELL SAMPLES

McCampbell Analytical, Inc.
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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Reported: 06/24/08
	Client P.O.:	Date Completed: 06/24/08

WorkOrder: 0806485

June 24, 2008

Dear Andrew:

Enclosed within are:

1) The results of the **27** analyzed samples from your project: **#07-001-04; 9201 San Leandro Stre**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0806485 1/3

CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: Rush | 24Hr | 48 Hr | 72 Hr | X 5 Day

Geotracker: X PDF | Excel | X EDF

Report To: ERAS **Bill To:** ERAS

Company: ERAS Environmental, Inc.

Email: info@eras.biz

Telephone: 510-247-9885 **Fax:** 510-886-5399

Project # 07-001-04

Project location 9201 San Leandro Street

Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	TPH-g/BTEX/5 Oxygenates/12DCA/EDB 8260	TPH-d by EPA method 8015	Other	Comments
GP-3, 19.5-22	GP-3	6/13/2008	9:10	6	VOA		X						X	X			
GP-3, 19.5-22	GP-3	6/13/2008	9:10	1	1L		X						X		X		
GP-3, 25-29	GP-3	6/13/2008	10:51	6	VOA		X						X	X			
GP-3, 25-29	GP-3	6/13/2008	10:51	2	1L		X						X		X		
GP-3, 31-35	GP-3	6/13/2008	11:45	6	VOA		X						X	X			
GP-4, 13-15	GP-4	6/13/2008	12:35	6	VOA		X						X	X			
GP-4, 25-29	GP-4	6/13/2008	12:50	6	VOA		X						X	X			
GP-4, 31-35	GP-4	6/13/2008	13:10	6	VOA		X		X					X			
GP-5, 16-20	GP-5	6/13/2008	15:00	6	VOA		X		X					X			
GP-5, 25-29	GP-5	6/13/2008	15:10	6	VOA		X		X					X			
GP-5, 31-35	GP-5	6/13/2008	15:36	6	VOA		X		X					X			
GP-6, 13.5-18	GP-6	6/16/2008	10:03	6	VOA		X						X	X			
GP-6, 25-29	GP-6	6/16/2008	10:30	6	VOA		X						X	X			

ICE / t° 20
GOOD CONDITION ____ APPROPRIATE CONTAINERS ____
HEAD SPACE ABSENT ____ PRESERVED IN LAB ____
DECHLORINATED IN LAB ____
PRESERVATION | VOAS | O&G | METALS | OTHER

PER Gail Jones Gas by 8015.

RELINQUISHED BY: **RECEIVED BY:**

Relinquished by:	Date:	Time:	Recieved by:
	6-17-08	15:30	
Relinquished by:	Date:	Time:	Recieved by:
	6/17/08	1435	
Relinquished by:	Date:	Time:	Recieved by:

	VOA's	O&G	Metals	Other
ICE/t°				
Condition				
Head space absent				
Dechlorinated in lab				
Appropriate containers				
Preserved in Lab				
Preservation			pH<2	

Comments: Global ID # T0600101592 Also I wrote the wrong Job number on the samples the Job number is not 07-001-03 it is 07-001-04

CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: [ ] Rush [ ] 24Hr [ ] 48 Hr [ ] 72 Hr [X] 5 Day

Geotracker: [X] PDF [ ] Excel [X] EDF

Report To: ERAS **Bill To:** ERAS

Company: ERAS Environmental, Inc.

Email: info@eras.biz

Telephone: 510-247-9885 **Fax:** 510-886-5399

Project # 07-001-03

Project location 9201 San Leandro Street

Sampler: Andrew Savage

Analysis Requested: TPH-g/BTEX/5 Oxygenates/12DCA/EDB 8260; TPH-d by EPA method 8015; gas by 8015 per gale!

Comments: Filter Samples for Metals Anaysis Yes No

	Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	TPH-g/BTEX/5 Oxygenates/12DCA/EDB 8260	TPH-d by EPA method 8015
+10	GP-7, 13-15	GP-7	6/16/2008	12:42	6	VOA		X						X	X	
	GP-7, 13-15	GP-7	6/16/2008	12:42	2	1L		X						X		X
+15	GP-7, 25-29	GP-7	6/16/2008	12:50	6	VOA		X		X					X	
	GP-7, 25-29	GP-7	6/16/2008	12:50	2	1L		X						X		X
+10	GP-8, 20-24	GP-8	6/16/2008	14:34	6	VOA		X						X	X	
+20	GP-8, 25-29	GP-8	6/16/2008	16:05	6	VOA		X		X					X	
+10	GP-8, 31-35	GP-8	6/16/2008	16:31	6	VOA		X		X					X	
	GP-2,9.5-10	GP-2	6/12/2008	13:40	1	tube	X						X		X	
	SG-1, 9.5-10	SG-1	6/16/2008	10:32	1	tube	X						X		X	
	GP-3, 9.5-10	GP-3	6/13/2008	8:03	1	tube	X						X		X	X
	GP-4, 9.5-10	GP-4	6/13/2008	12:17	1	tube	X						X		X	
	GP-6, 11.5-12	GP-6	6/16/2008	9:45	1	tube	X						X		X	
	GP-8, 9.5-10	GP-8	6/16/2008	14:19	1	tube	X						X		X	

ICE/t° 2.0
GOOD CONDITION ___ APPROPRIATE
HEAD SPACE ABSENT ___ CONTAINERS ___
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___
VOAS | O & G | METALS | OTHER
PRESERVATION ___

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:
Relinquished by: [illegible signature]	6-17-08	15:30	Recieved by: [illegible signature]
Relinquished by: [illegible signature]	6/17/08	16:35	Recieved by: K. Burcs
Relinquished by:	Date:	Time:	Recieved by:

ICE/t°
Condition
Head space absent
Dechlorinated in lab
Appropriate containers
Preserved in Lab
VOA's O&G Metals Other
Preservation pH<2

Comments: Global ID # T0600101592 Also I wrote the wrong Job number on the samples the Job number is not 07-001-03 it is 07-001-04

3/3

CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: Rush | 24Hr | 48 Hr | 72 Hr | X 5 Day

Geotracker: X PDF | Excel | X EDF

Report To: ERAS **Bill To:**

Company: ERAS Environmental, Inc.

Email: info@eras.biz

Telephone: 510.247.9885 **Fax:** 510.886.5399

Project # 07-001-04

Project location 9201 San Leandro Street

Sampler: Kasey Cordoza

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	Analysis Requested: TPH-g/BTEX/5 Oxygenates/12DCA/EDB 8260
9MW1		6.17.08	11:04	4	VOA		X		X					X
9MW2		6.17.08	12:40	4	VOA		X		X					X
9MW3		6.17.80	13:18	4	VOA		X		X					X
9MW4		6.17.08	11:44	4	VOA		X		X					X
9MW5		6.17.08	10:38	4	VOA		X		X					X
9MW6														

Other

Comments: Filter Samples for Metals Anaysis — Yes No

per Gail Jones GAS by 8015.

ICE / t°
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION: VOAS | O&G | METALS | OTHER
APPROPRIATE CONTAINERS
PRESERVED IN LAB

RELINQUISHED BY: **RECEIVED BY:**

Relinquished by:	Date:	Time:	Recieved by:
	6.17.08	15:30	
Relinquished by:	Date:	Time:	Recieved by:
	6/17/08	1635	
Relinquished by:	Date:	Time:	Recieved by:

	VOA's	O&G	Metals	Other
ICE/t°				
Condition				
Head space absent				
Dechlorinated in lab				
Appropriate containers				
Preserved in Lab				
Preservation			pH<2	

Comments: Global ID # T0600101592 Report MTBE to MDL

* No Sample - 2.V 6/17/08

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806485 **ClientCode: ERAS**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX (510) 886-5399

Email: info@eras.biz
cc: gale@eras.biz
PO:
ProjectNo: #07-001-04; 9201 San Leandro Street

Bill to:
Gail Jones
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days

Date Received: **06/17/2008**
Date Printed: **06/19/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0806485-001	GP-3, 19.5-22	Water	6/13/2008 9:10	☐		A		B	A							
0806485-002	GP-3,25-29	Water	6/13/2008 10:51	☐		A		B								
0806485-003	GP-3, 31-35	Water	6/13/2008 11:45	☐		A		B								
0806485-004	GP-4, 13-15	Water	6/13/2008 12:35	☐		A		B								
0806485-005	GP-4, 25-29	Water	6/13/2008 12:50	☐		A		B								
0806485-006	GP-4, 31-35	Water	6/13/2008 13:10	☐		A		B								
0806485-007	GP-5, 16-20	Water	6/13/2008 15:00	☐		A		B								
0806485-008	GP-5, 25-29	Water	6/13/2008 15:10	☐		A		B								
0806485-009	GP-5, 31-35	Water	6/13/2008 15:36	☐		A		B								
0806485-010	GP-6, 13.5-18	Water	6/16/2008 10:03	☐		A		B								
0806485-011	GP-6, 25-29	Water	6/16/2008 10:30	☐		A		B								
0806485-012	GP-7, 13-15	Water	6/16/2008 12:42	☐		A		B								
0806485-013	GP-7, 25-29	Water	6/16/2008 12:50	☐		A		B								
0806485-014	GP-8, 20-24	Water	6/16/2008 14:34	☐		A		B								

Test Legend:

1	G-MBTEX_S	2	G-MBTEX_W	3	MBTEXOXY-8260B_S	4	MBTEXOXY-8260B_W	5	PREDF REPORT
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 012A, 013A, 019A contain testgroup.

Prepared by: Ana Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806485 **ClientCode: ERAS**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX (510) 886-5399

Email: info@eras.biz
cc: gale@eras.biz
PO:
ProjectNo: #07-001-04; 9201 San Leandro Street

Bill to:
Gail Jones
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days

Date Received: **06/17/2008**
Date Printed: **06/19/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0806485-015	GP-8, 25-29	Water	6/16/2008 16:05	☐		A		B								
0806485-016	GP-8, 31-35	Water	6/16/2008 16:31	☐		A		B								
0806485-017	GP-2, 9.5-10	Soil	6/12/2008 13:40	☐	A		A									
0806485-018	SG-1, 9.5-10	Soil	6/16/2008 10:32	☐	A		A									
0806485-019	GP-3, 9.5-10	Soil	6/13/2008 8:03	☐	A		A									
0806485-020	GP-4, 9.5-10	Soil	6/13/2008 12:17	☐	A		A									
0806485-021	GP-6, 11.5-12	Soil	6/16/2008 9:45	☐	A		A									
0806485-022	GP-8, 9.5-10	Soil	6/16/2008 14:19	☐	A		A									
0806485-023	9MW1	Water	6/17/2008 11:04	☐		A		B								
0806485-024	9MW2	Water	6/17/2008 12:40	☐		A		B								
0806485-025	9MW3	Water	6/17/2008 13:18	☐		A		B								
0806485-026	9MW4	Water	6/17/2008 11:44	☐		A		B								
0806485-027	9MW5	Water	6/17/2008 10:38	☐		A		B								

Test Legend:

1	G-MBTEX_S	2	G-MBTEX_W	3	MBTEXOXY-8260B_S	4	MBTEXOXY-8260B_W	5	PREDF REPORT
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 012A, 013A, 019A contain testgroup.

Prepared by: Ana Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.**

Date and Time Received: **6/17/08 7:35:52 PM**

Project Name: **#07-001-04; 9201 San Leandro Street**

Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **0806485** Matrix Soil/Water

Carrier: Michael Hernandez (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 2.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/12/08-06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/17/08
	Client P.O.:	Date Analyzed 06/18/08-06/21/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method SW5030B Analytical methods SW8015Cm Work Order: 0806485

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
017A	GP-2, 9.5-10	S	340,d1	20	113
018A	SG-1, 9.5-10	S	400,d1	20	97
019A	GP-3, 9.5-10	S	ND	1	88
020A	GP-4, 9.5-10	S	450,d1	20	115
021A	GP-6, 11.5-12	S	520,d1	20	120
022A	GP-8, 9.5-10	S	ND	1	77

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/21/08
	Client P.O.:	Date Analyzed 06/18/08-06/21/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method SW5030B Analytical methods SW8015Cm Work Order: 0806485

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
001A	GP-3, 19.5-22	W	ND	1	100
002A	GP-3,25-29	W	ND,b1	1	100
003A	GP-3, 31-35	W	ND,b1	1	104
004A	GP-4, 13-15	W	19,000,d1,b1	10	108
005A	GP-4, 25-29	W	12,000,d1,b1	10	103
006A	GP-4, 31-35	W	330,d1,b1	1	106
007A	GP-5, 16-20	W	ND,b1	1	99
008A	GP-5, 25-29	W	ND,b1	1	101
009A	GP-5, 31-35	W	ND,b1	1	92
010A	GP-6, 13.5-18	W	3100,d1,b1	10	88
011A	GP-6, 25-29	W	3000,d1,b1	10	88
012A	GP-7, 13-15	W	ND,b1	1	93
013A	GP-7, 25-29	W	ND,b1	1	109
014A	GP-8, 20-24	W	ND,b1	1	104
015A	GP-8, 25-29	W	ND,b1	1	101
016A	GP-8, 31-35	W	ND,b1	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/21/08
	Client P.O.:	Date Analyzed 06/18/08-06/21/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method SW5030B Analytical methods SW8015Cm Work Order: 0806485

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
023A	9MW1	W	ND	1	103
024A	9MW2	W	ND	1	101
025A	9MW3	W	13,000,d1	10	113
026A	9MW4	W	81,d1	1	101
027A	9MW5	W	ND	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/12/08-06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/17/08
	Client P.O.:	Date Analyzed: 06/19/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

Lab ID	0806485-017A	0806485-018A	0806485-019A	0806485-020A	Reporting Limit for DF =1	
Client ID	GP-2, 9.5-10	SG-1, 9.5-10	GP-3, 9.5-10	GP-4, 9.5-10		
Matrix	S	S	S	S		
DF	20	40	1	20	S	W
Compound	**Concentration**				mg/kg	ug/L
tert-Amyl methyl ether (TAME)	ND<0.10	ND<0.20	ND	ND<0.10	0.005	NA
Benzene	1.2	1.2	ND	0.72	0.005	NA
t-Butyl alcohol (TBA)	ND<1.0	ND<2.0	ND	ND<1.0	0.05	NA
1,2-Dibromoethane (EDB)	ND<0.080	ND<0.16	ND	ND<0.080	0.004	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.080	ND<0.16	ND	ND<0.080	0.004	NA
Diisopropyl ether (DIPE)	ND<0.10	ND<0.20	ND	ND<0.10	0.005	NA
Ethylbenzene	2.2	1.9	ND	2.1	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND<0.10	ND<0.20	ND	ND<0.10	0.005	NA
Methyl-t-butyl ether (MTBE)	ND<0.10	ND<0.20	ND	ND<0.10	0.005	NA
Toluene	0.19	2.8	ND	ND<0.10	0.005	NA
Xylenes	2.0	2.9	ND	1.4	0.005	NA
Surrogate Recoveries (%)						
%SS1:	92	99	101	100		
%SS2:	103	106	99	112		
%SS3:	97	103	108	108		
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/12/08-06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/17/08
	Client P.O.:	Date Analyzed: 06/19/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

					Reporting Limit for DF =1	
Lab ID	0806485-021A	0806485-022A				
Client ID	GP-6, 11.5-12	GP-8, 9.5-10				
Matrix	S	S				
DF	40	1			S	W
Compound	**Concentration**				mg/kg	ug/L
tert-Amyl methyl ether (TAME)	ND<0.20	ND			0.005	NA
Benzene	4.6	ND			0.005	NA
t-Butyl alcohol (TBA)	ND<2.0	ND			0.05	NA
1,2-Dibromoethane (EDB)	ND<0.16	ND			0.004	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.16	ND			0.004	NA
Diisopropyl ether (DIPE)	ND<0.20	ND			0.005	NA
Ethylbenzene	2.6	ND			0.005	NA
Ethyl tert-butyl ether (ETBE)	ND<0.20	ND			0.005	NA
Methyl-t-butyl ether (MTBE)	ND<0.20	ND			0.005	NA
Toluene	2.6	ND			0.005	NA
Xylenes	7.4	ND			0.005	NA
Surrogate Recoveries (%)						
%SS1:	100	101				
%SS2:	107	99				
%SS3:	107	107				
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/20/08
	Client P.O.:	Date Analyzed: 06/18/08-06/20/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

Lab ID	0806485-001B	0806485-002B	0806485-003B	0806485-004B	Reporting Limit for DF =1	
Client ID	GP-3, 19.5-22	GP-3,25-29	GP-3, 31-35	GP-4, 13-15		
Matrix	W	W	W	W		
DF	1	1	1	33	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND<17	NA	0.5
Benzene	ND	ND	ND	860	NA	0.5
t-Butyl alcohol (TBA)	2.1	ND	ND	ND<67	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND<17	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND<17	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND<17	NA	0.5
Ethylbenzene	ND	ND	ND	260	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND<17	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND<17	NA	0.5
Toluene	ND	ND	ND	670	NA	0.5
Xylenes	ND	ND	ND	420	NA	0.5
Surrogate Recoveries (%)						
%SS1:	100	103	102	104		
%SS2:	108	107	107	105		
%SS3:	127	130	130	108		
Comments		b1	b1	b1		

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/20/08
	Client P.O.:	Date Analyzed: 06/18/08-06/20/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

Lab ID	0806485-005B	0806485-006B	0806485-007B	0806485-008B	Reporting Limit for DF =1	
Client ID	GP-4, 25-29	GP-4, 31-35	GP-5, 16-20	GP-5, 25-29		
Matrix	W	W	W	W		
DF	10	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND<5.0	ND	ND	ND	NA	0.5
Benzene	240	15	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND<20	ND	ND	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND<5.0	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<5.0	ND	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND<5.0	ND	ND	ND	NA	0.5
Ethylbenzene	130	5.7	ND	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND<5.0	ND	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND<5.0	0.65	ND	ND	NA	0.5
Toluene	230	12	ND	0.69	NA	0.5
Xylenes	240	10	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	99	97	99	99		
%SS2:	104	102	104	104		
%SS3:	91	94	104	108		
Comments	b1	b1	b1	b1		

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/20/08
	Client P.O.:	Date Analyzed: 06/18/08-06/20/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

Lab ID	0806485-009B	0806485-010B	0806485-011B	0806485-012B	Reporting Limit for DF =1	
Client ID	GP-5, 31-35	GP-6, 13.5-18	GP-6, 25-29	GP-7, 13-15		
Matrix	W	W	W	W		
DF	1	10	10	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND<5.0	ND<5.0	ND	NA	0.5
Benzene	ND	170	160	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND<20	ND<20	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND<5.0	ND<5.0	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND<5.0	ND<5.0	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND<5.0	ND<5.0	ND	NA	0.5
Ethylbenzene	ND	22	40	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND<5.0	ND<5.0	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND<5.0	ND<5.0	0.93	NA	0.5
Toluene	ND	30	39	ND	NA	0.5
Xylenes	ND	35	75	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	102	103	101	99		
%SS2:	105	104	105	104		
%SS3:	116	107	97	107		
Comments	b1	b1	b1	b1		

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/20/08
	Client P.O.:	Date Analyzed: 06/18/08-06/20/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

Lab ID	0806485-013B	0806485-014B	0806485-015B	0806485-016B	Reporting Limit for DF =1	
Client ID	GP-7, 25-29	GP-8, 20-24	GP-8, 25-29	GP-8, 31-35		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	NA	0.5
Benzene	ND	ND	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.9	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND	NA	0.5
Ethylbenzene	ND	ND	ND	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	6.1	0.78	ND	NA	0.5
Toluene	ND	ND	ND	ND	NA	0.5
Xylenes	ND	ND	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	98	99	97	98		
%SS2:	95	95	95	95		
%SS3:	89	89	89	90		
Comments	b1	b1	b1	b1		

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/20/08
	Client P.O.:	Date Analyzed: 06/18/08-06/20/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

Lab ID	0806485-023B	0806485-024B	0806485-025B	0806485-026B	Reporting Limit for DF =1	
Client ID	9MW1	9MW2	9MW3	9MW4		
Matrix	W	W	W	W		
DF	1	1	200	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND<100	ND	NA	0.5
Benzene	ND	ND	4400	11	NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND<400	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND<100	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND<100	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND<100	ND	NA	0.5
Ethylbenzene	ND	ND	300	4.7	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND	ND<100	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	0.67	1.1	ND<100	ND	NA	0.5
Toluene	ND	ND	600	0.51	NA	0.5
Xylenes	ND	ND	150	1.6	NA	0.5
Surrogate Recoveries (%)						
%SS1:	97	97	102	103		
%SS2:	95	94	104	105		
%SS3:	88	89	106	107		
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/17/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/18/08-06/20/08
	Client P.O.:	Date Analyzed: 06/18/08-06/20/08

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0806485

					Reporting Limit for DF =1	
Lab ID	0806485-027B					
Client ID	9MW5					
Matrix	W					
DF	1				S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND				NA	0.5
Benzene	ND				NA	0.5
t-Butyl alcohol (TBA)	ND				NA	2.0
1,2-Dibromoethane (EDB)	ND				NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND				NA	0.5
Diisopropyl ether (DIPE)	ND				NA	0.5
Ethylbenzene	ND				NA	0.5
Ethyl tert-butyl ether (ETBE)	ND				NA	0.5
Methyl-t-butyl ether (MTBE)	ND				NA	0.5
Toluene	ND				NA	0.5
Xylenes	ND				NA	0.5
Surrogate Recoveries (%)						
%SS1:	104					
%SS2:	106					
%SS3:	108					
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/17/08
	Client P.O.:	Date Analyzed 06/20/08

Total Extractable Petroleum Hydrocarbons*

Extraction method SW3550C Analytical methods: SW8015C Work Order: 0806485

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0806485-019A	GP-3, 9.5-10	S	ND	1	118

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

DHS ELAP Certification 1644

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/13/08-06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/17/08
	Client P.O.:	Date Analyzed 06/20/08-06/24/08

Total Extractable Petroleum Hydrocarbons*

Extraction method SW3510C Analytical methods: SW8015C Work Order: 0806485

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0806485-001A	GP-3, 19.5-22	W	180,e7,e2	1	82
0806485-002A	GP-3,25-29	W	ND,b1	1	120
0806485-012A	GP-7, 13-15	W	280,e7,e2,b1	1	99
0806485-013A	GP-7, 25-29	W	ND,b1	1	107

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
e7) oil range compounds are significant
e2) diesel range compounds are significant; no recognizable pattern

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806485

EPA Method SW8015C	Extraction SW3550C	BatchID: 36314	Spiked Sample ID: 0806435-001A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	8300	20	NR	NR	NR	123	121	1.52	70 - 130	30	70 - 130	30
%SS:	118	50	109	116	5.97	120	119	1.35	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36314 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-019A	06/13/08 8:03 AM	06/17/08	06/20/08 12:10 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QA/QC Officer

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8015Cm **Extraction SW5030B** **BatchID: 36330** **Spiked Sample ID: 0806475-005A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	98.2	95.3	3.02	96	99.8	3.89	70 - 130	20	70 - 130	20
MTBE	ND	10	111	116	4.82	115	111	3.15	70 - 130	20	70 - 130	20
Benzene	ND	10	100	101	1.31	105	104	1.17	70 - 130	20	70 - 130	20
Toluene	ND	10	91.2	93.3	2.38	94.5	94.1	0.392	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	101	103	1.88	104	104	0	70 - 130	20	70 - 130	20
Xylenes	ND	30	101	101	0	101	100	1.04	70 - 130	20	70 - 130	20
%SS:	97	10	96	96	0	100	97	3.18	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36330 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-001A	06/13/08 9:10 AM	06/18/08	06/18/08 7:55 PM	0806485-002A	06/13/08 10:51 AM	06/18/08	06/18/08 8:26 PM
0806485-003A	06/13/08 11:45 AM	06/18/08	06/18/08 8:56 PM	0806485-004A	06/13/08 12:35 PM	06/18/08	06/18/08 9:27 PM
0806485-005A	06/13/08 12:50 PM	06/19/08	06/19/08 9:28 PM	0806485-006A	06/13/08 1:10 PM	06/19/08	06/19/08 9:59 PM
0806485-007A	06/13/08 3:00 PM	06/19/08	06/19/08 10:29 PM	0806485-008A	06/13/08 3:10 PM	06/21/08	06/21/08 2:11 AM
0806485-009A	06/13/08 3:36 PM	06/18/08	06/18/08 6:53 PM	0806485-010A	06/16/08 10:03 AM	06/19/08	06/19/08 3:03 AM
0806485-011A	06/16/08 10:30 AM	06/19/08	06/19/08 3:33 AM	0806485-012A	06/16/08 12:42 PM	06/18/08	06/18/08 7:26 PM
0806485-013A	06/16/08 12:50 PM	06/19/08	06/19/08 4:03 AM	0806485-014A	06/16/08 2:34 PM	06/19/08	06/19/08 4:34 AM
0806485-015A	06/16/08 4:05 PM	06/19/08	06/19/08 5:04 AM	0806485-016A	06/16/08 4:31 PM	06/21/08	06/21/08 3:11 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8015C	Extraction SW3510C	BatchID: 36331	Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	120	120	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	118	119	0.364	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36331 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-002A	06/13/08 10:51 AM	06/17/08	06/20/08 4:14 PM	0806485-013A	06/16/08 12:50 PM	06/17/08	06/22/08 1:17 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8260B **Extraction SW5030B** **BatchID: 36332** **Spiked Sample ID: 0806454-002C**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	95.8	93.7	2.29	96.8	101	4.26	70 - 130	30	70 - 130	30
Benzene	ND	10	93.7	93.3	0.443	94	99	5.18	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	85.4	83.6	2.22	81.9	87.2	6.24	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	90.7	88.6	2.25	93.7	95.7	2.18	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	98.7	97	1.74	99.4	106	6.44	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	105	102	2.19	104	110	5.13	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	100	97.6	2.47	100	105	4.74	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	98.2	96.7	1.53	98.2	103	5.26	70 - 130	30	70 - 130	30
Toluene	ND	10	82.8	84.6	2.10	83.4	87.2	4.45	70 - 130	30	70 - 130	30
%SS1:	98	25	94	93	1.03	97	98	0.935	70 - 130	30	70 - 130	30
%SS2:	101	25	95	97	1.62	95	94	0.777	70 - 130	30	70 - 130	30
%SS3:	115	25	89	92	2.80	94	93	0.978	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36332 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-001B	06/13/08 9:10 AM	06/18/08	06/18/08 5:04 PM	0806485-002B	06/13/08 10:51 AM	06/18/08	06/18/08 9:36 PM
0806485-003B	06/13/08 11:45 AM	06/18/08	06/18/08 10:27 PM	0806485-004B	06/13/08 12:35 PM	06/19/08	06/19/08 4:41 PM
0806485-005B	06/13/08 12:50 PM	06/19/08	06/19/08 10:33 PM	0806485-006B	06/13/08 1:10 PM	06/19/08	06/19/08 12:37 AM
0806485-007B	06/13/08 3:00 PM	06/19/08	06/19/08 11:59 PM	0806485-008B	06/13/08 3:10 PM	06/20/08	06/20/08 12:43 AM
0806485-009B	06/13/08 3:36 PM	06/19/08	06/19/08 2:47 AM	0806485-010B	06/16/08 10:03 AM	06/19/08	06/19/08 3:30 AM
0806485-011B	06/16/08 10:30 AM	06/19/08	06/19/08 4:14 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8260B **Extraction SW5030B** **BatchID: 36347** **Spiked Sample ID: 0806476-009A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND<2.5	10	108	111	2.97	95.7	96.1	0.367	70 - 130	30	70 - 130	30
Benzene	ND<2.5	10	120	123	2.55	104	105	0.196	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND<10	50	97.6	103	4.96	90.2	93.2	3.34	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND<2.5	10	115	117	2.45	100	97.3	3.03	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND<2.5	10	119	122	2.78	103	105	1.99	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND<2.5	10	117	120	2.57	105	108	3.62	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND<2.5	10	126	129	2.30	113	116	3.05	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND<2.5	10	118	121	2.36	105	106	1.07	70 - 130	30	70 - 130	30
Toluene	ND<2.5	10	108	109	0.777	95.9	94.7	1.26	70 - 130	30	70 - 130	30
%SS1:	101	25	101	102	0.810	97	97	0	70 - 130	30	70 - 130	30
%SS2:	106	25	106	106	0	94	95	0.337	70 - 130	30	70 - 130	30
%SS3:	109	25	107	108	0.400	111	113	1.37	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36347 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-012B	06/16/08 12:42 PM	06/19/08	06/19/08 4:57 AM	0806485-013B	06/16/08 12:50 PM	06/19/08	06/19/08 12:56 AM
0806485-014B	06/16/08 2:34 PM	06/19/08	06/19/08 1:39 AM	0806485-015B	06/16/08 4:05 PM	06/19/08	06/19/08 2:21 AM
0806485-016B	06/16/08 4:31 PM	06/19/08	06/19/08 3:03 AM	0806485-023B	06/17/08 11:04 AM	06/19/08	06/19/08 3:45 AM
0806485-024B	06/17/08 12:40 PM	06/19/08	06/19/08 4:27 AM	0806485-025B	06/17/08 1:18 PM	06/19/08	06/19/08 3:18 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8015Cm **Extraction SW5030B** **BatchID: 36353** **Spiked Sample ID: 0806485-027A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	101	100	1.19	98.3	96.4	1.95	70 - 130	20	70 - 130	20
MTBE	ND	10	113	105	7.84	110	111	0.781	70 - 130	20	70 - 130	20
Benzene	ND	10	107	105	1.76	103	99.4	3.20	70 - 130	20	70 - 130	20
Toluene	ND	10	96.6	96.6	0	92.2	89.6	2.95	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	107	107	0	102	98.9	3.09	70 - 130	20	70 - 130	20
Xylenes	ND	30	105	106	0.801	98.9	96.1	2.85	70 - 130	20	70 - 130	20
%SS:	102	10	97	98	0.656	98	98	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36353 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-023A	06/17/08 11:04 AM	06/19/08	06/19/08 6:04 AM	0806485-024A	06/17/08 12:40 PM	06/19/08	06/19/08 6:34 AM
0806485-025A	06/17/08 1:18 PM	06/20/08	06/20/08 1:30 AM	0806485-026A	06/17/08 11:44 AM	06/19/08	06/19/08 8:35 AM
0806485-027A	06/17/08 10:38 AM	06/19/08	06/19/08 9:05 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8260B	Extraction SW5030B	BatchID: 36354	Spiked Sample ID: 0806485-026B

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	98	105	7.08	94.4	97.9	3.65	70 - 130	30	70 - 130	30
Benzene	11	10	113	125	5.35	94.3	95.9	1.67	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	92.7	102	9.13	78.4	84.5	7.50	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	91.6	98.5	7.20	89.8	93.5	4.03	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	110	118	6.89	99.4	101	1.83	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	115	124	7.47	103	106	2.73	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	121	129	6.73	98.5	102	3.44	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	107	116	7.71	96.6	100	3.77	70 - 130	30	70 - 130	30
Toluene	0.55	10	91.7	97.3	5.61	83.7	85.1	1.54	70 - 130	30	70 - 130	30
%SS1:	103	25	99	101	2.01	96	97	0.445	70 - 130	30	70 - 130	30
%SS2:	105	25	96	96	0	95	95	0	70 - 130	30	70 - 130	30
%SS3:	107	25	113	111	1.89	91	93	1.75	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36354 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-026B	06/17/08 11:44 AM	06/19/08	06/19/08 3:57 PM	0806485-027B	06/17/08 10:38 AM	06/19/08	06/19/08 2:34 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806485

EPA Method SW8015Cm	Extraction SW5030B	BatchID: 36356	Spiked Sample ID: 0806485-019A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	109	120	9.57	103	99.8	2.66	70 - 130	20	70 - 130	20
MTBE	ND	0.10	109	105	3.13	108	106	2.22	70 - 130	20	70 - 130	20
Benzene	ND	0.10	94.8	91.1	3.90	93.5	94.2	0.758	70 - 130	20	70 - 130	20
Toluene	ND	0.10	108	101	5.64	108	110	1.05	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	106	103	2.57	103	104	1.01	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	116	116	0	115	116	0.965	70 - 130	20	70 - 130	20
%SS:	88	0.10	97	93	4.48	95	96	1.08	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36356 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-017A	06/12/08 1:40 PM	06/17/08	06/19/08 11:45 PM	0806485-018A	06/16/08 10:32 AM	06/17/08	06/20/08 12:15 AM
0806485-019A	06/13/08 8:03 AM	06/17/08	06/18/08 6:11 PM	0806485-020A	06/13/08 12:17 PM	06/17/08	06/20/08 12:46 AM
0806485-021A	06/16/08 9:45 AM	06/17/08	06/20/08 1:16 AM	0806485-022A	06/16/08 2:19 PM	06/17/08	06/21/08 8:10 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806485

EPA Method SW8260B	Extraction SW5030B	BatchID: 36322	Spiked Sample ID: 0806483-001A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	106	108	2.06	104	104	0	60 - 130	30	60 - 130	30
Benzene	ND	0.050	102	102	0	108	109	1.61	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	95.1	102	7.01	94.4	105	10.5	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	110	113	1.95	110	113	2.09	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	107	108	0.975	120	118	1.70	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	105	106	1.34	110	110	0	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	107	109	1.98	118	120	1.82	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	111	113	1.73	111	112	1.31	60 - 130	30	60 - 130	30
Toluene	ND	0.050	96.4	95.8	0.638	108	107	0.768	60 - 130	30	60 - 130	30
%SS1:	98	0.12	102	101	0.687	99	98	0.869	70 - 130	30	70 - 130	30
%SS2:	115	0.12	96	95	0.533	107	106	1.03	70 - 130	30	70 - 130	30
%SS3:	103	0.12	102	101	1.83	125	124	0.457	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36322 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-017A	06/12/08 1:40 PM	06/17/08	06/19/08 4:49 PM	0806485-018A	06/16/08 10:32 AM	06/17/08	06/19/08 5:37 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0806485

EPA Method SW8260B	Extraction SW5030B	BatchID: 36357	Spiked Sample ID: 0806485-022A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	83.8	82.4	1.70	95	97.8	2.91	60 - 130	30	60 - 130	30
Benzene	ND	0.050	80.7	79.2	1.83	91.1	92.4	1.48	60 - 130	30	60 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	74.3	73.8	0.679	84.5	91.2	7.59	60 - 130	30	60 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	90.6	88.1	2.79	99.1	102	2.71	60 - 130	30	60 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	83	81.1	2.37	93.6	96.8	3.35	60 - 130	30	60 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	86.4	85.1	1.55	92.8	95.3	2.64	60 - 130	30	60 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	85.3	84.5	1.04	95.8	97.6	1.90	60 - 130	30	60 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	86.5	85	1.75	98.7	102	3.32	60 - 130	30	60 - 130	30
Toluene	ND	0.050	79.7	77.5	2.74	86.1	87.4	1.47	60 - 130	30	60 - 130	30
%SS1:	101	0.12	98	97	0.580	100	100	0	70 - 130	30	70 - 130	30
%SS2:	99	0.12	100	100	0	96	96	0	70 - 130	30	70 - 130	30
%SS3:	107	0.12	97	95	1.77	101	101	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36357 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-019A	06/13/08 8:03 AM	06/17/08	06/19/08 9:13 PM	0806485-020A	06/13/08 12:17 PM	06/17/08	06/19/08 6:19 PM
0806485-021A	06/16/08 9:45 AM	06/17/08	06/19/08 7:02 PM	0806485-022A	06/16/08 2:19 PM	06/17/08	06/19/08 9:59 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806485

EPA Method SW8015C **Extraction SW3510C** **BatchID: 36331** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	120	120	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	118	119	0.364	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36331 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806485-001A	06/13/08 9:10 AM	06/17/08	06/24/08 3:20 PM	0806485-002A	06/13/08 10:51 AM	06/17/08	06/20/08 4:14 PM
0806485-012A	06/16/08 12:42 PM	06/17/08	06/24/08 11:37 AM	0806485-013A	06/16/08 12:50 PM	06/17/08	06/22/08 1:17 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/18/08
		Date Received: 06/19/08
	Client Contact: Kasey Cordoza	Date Reported: 06/24/08
	Client P.O.:	Date Completed: 06/23/08

WorkOrder: 0806550

June 24, 2008

Dear Kasey:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#07-001-04; 9201 San Leandro Stre**
2) A QC report for the above sample,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0806550

CHAIN OF CUSTODY FORM

McCampbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: Rush | 24Hr | 48 Hr | 72 Hr | X 5 Day

Geotracker: X PDF | Excel | X EDF

Report To: ERAS **Bill To:**

Company: ERAS Environmental, Inc.

Email: info@eras.biz

Telephone: 510.247.9885 **Fax:** 510.886.5399

Project # 07-001-04

Project location 9201 San Leandro Street

Sampler: Kasey Cordoza

Sample ID	Location/Field Point Name	Sampling Date	Sampling Time	# of Containers	Container Type	Matrix: Soil	Matrix: Water	Matrix: Waste	Preservative: HCL	Preservative: H2SO4	Preservative: HNO3	Preservative: ICE	Preservative: None	Analysis Requested: TPH-d	Other	Comments
9MW4		6.18.08	10:35											X		

+10

Filter Samples for Metals Anaysis

Yes No

RELINQUISHED BY:

Relinquished by:	Date: 6.19.08	Time: 12:37	Recieved by:
Relinquished by:	Date: 6/19/08	Time: 1730	Recieved by:
Relinquished by:	Date:	Time:	Recieved by:

RECEIVED BY:

ICE/t°	3.6
Condition	
Head space absent	
Dechlorinated in lab	
Appropriate containers	
Preserved in Lab	
Preservation	VOA's O&G Metals Other pH<2

Comments: Global ID # T0600101592 Report MTBE to MDL

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806550 **ClientCode: ERAS**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Kasey Cordoza
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX (510) 886-5399

Email: kasey@eras.biz
cc:
PO:
ProjectNo: #07-001-04; 9201 San Leandro Street

Bill to:
Gail Jones
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days

Date Received: **06/19/2008**
Date Printed: **06/19/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0806550-001	9MW4	Water	6/18/2008 10:35	☐	A	A										

Test Legend:

1	PREDF REPORT	2	TPH(D)_W	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.**

Date and Time Received: **6/19/08 6:45:11 PM**

Project Name: **#07-001-04; 9201 San Leandro Street**

Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **0806550** Matrix Water

Carrier: Michael Hernandez (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 3.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

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"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro Street	Date Sampled: 06/18/08
		Date Received: 06/19/08
	Client Contact: Kasey Cordoza	Date Extracted: 06/19/08
	Client P.O.:	Date Analyzed 06/20/08

Total Extractable Petroleum Hydrocarbons*

Extraction method SW3510C Analytical methods: SW8015C Work Order: 0806550

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS
0806550-001A	9MW4	W	ND,b1	1	120

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0806550

EPA Method SW8015C **Extraction SW3510C** **BatchID: 36371** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	118	118	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	110	110	0	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36371 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806550-001A	06/18/08 10:35 AM	06/19/08	06/20/08 11:04 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

APPENDIX I

LABORATORY REPORT AND CHAIN OF CUSTODY FORM FOR SOIL GAS SAMPLE

McCampbell Analytical, Inc.
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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Reported: 06/27/08
	Client P.O.:	Date Completed: 06/27/08

WorkOrder: 0806486

June 27, 2008

Dear Andrew:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#07-001-04; 9201 San Leandro,**
2) A QC report for the above sample,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0806486

McCAMPBELL ANALYTICAL INC.

1534 Willow Pass Road
Pittsburg, CA 94565-1701
www.main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No PDF

Report To: ERAS Bill To: ERAS

Company: ERAS Environmental, Inc.

E-Mail: info@eras.biz

Tele: (510) 247-9885 Fax: (510) 886-5399

Project #: 07-001-04 Project Name: 9201 San Leandro

Project Location: 9201 San Leandro Street

Sampler Signature:

Lab Use Only

Pressurized By	Date	Pressurization Gas	
		N2	He

Notes:

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Sampler Kit SN#	Analysis Requested	Indoor Air	Soil Gas	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
SG-1,5-5.5	6-16-08	9:51	4704	MAN316-687	TPH-g by TO-3 BTEX, MTBE & 2-propanol by TO-15 Oxygen, CO_2 Methane by ASTM 1945D		X	27	5		

Relinquished By:	Date:	Time:	Received By:
	6-17-08	15:30	
Relinquished By:	Date:	Time:	Received By:
	6/17/08	1635	
Relinquished By:	Date:	Time:	Received By:

Temp (°C): _____ Work Order #: _____

Condition: _____

Custody Seals Intact?: Yes _____ No _____ None _____

Shipped Via: _____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806486 **ClientCode: ERAS**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX (510) 886-5399

Email: info@eras.biz
cc: gale@eras.biz
PO:
ProjectNo: #07-001-04; 9201 San Leandro

Bill to:
Gail Jones
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days

Date Received: **06/17/2008**
Date Printed: **06/24/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0806486-001	SG-1,5-5.5	Soil Vapor	6/16/2008 9:51	☐	A	A	A									

Test Legend:

1	LG_SUMMA_SOILGAS	2	PREDF REPORT	3	TO3_SOILGAS	4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.**

Date and Time Received: **06/17/08 8:11:19 PM**

Project Name: **#07-001-04; 9201 San Leandro**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **0806486** Matrix Soil Vapor

Carrier: Michael Hernandez (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

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"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/25/08
	Client P.O.:	Date Analyzed: 06/25/08

Light Gases*

Extraction Method: ASTM D 1946-90 Analytical Method: ASTM D 1946-90 Work Order: 0806486

Lab ID	0806486-001A				Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SG-1,5-5.5					
Matrix	Soil Vapor					
Initial Pressure (psia)	12.08					
Final Pressure (psia)	24.1					
DF	1				SoilVapor	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	1100				250	NA
Methane	230				5.0	NA
Oxygen	200,000				500	NA

Surrogate Recoveries (%)

%SS:	N/A				
Comments					

* soil vapor samples are reported in µL/L.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/24/08
	Client P.O.:	Date Analyzed 06/24/08

Volatile Organics by P&T and GC/MS*

Extraction method SW5030B Analytical methods SW8260B Work Order: 0806486

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Benzene	DF	% SS
001A	SG-1,5-5.5	SoilVapor	12.08	24.1	11,000	1	108

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	SoilVapor	psia	psia	500	µg/m³

*soil vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/24/08
	Client P.O.:	Date Analyzed 06/24/08

Volatile Organics by P&T and GC/MS*

Extraction method SW5030B Analytical methods SW8260B Work Order: 0806486

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Benzene	DF	% SS
001A	SG-1,5-5.5	SoilVapor	12.08	24.1	3200	1	108

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	SoilVapor	psia	psia	150	nL/L

*soil vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/19/08
	Client P.O.:	Date Analyzed 06/19/08

Leak Check Compound*

Extraction method TO15 Analytical methods TO15 Work Order: 0806486

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Isopropyl Alcohol	DF	% SS
001A	SG-1,5-5.5	SoilVapor	12.08	24.1	ND	1	111

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	SoilVapor	psia	psia	10	µg/L

* leak check compound is reported in µg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

The IPA reference is:

DTSC, Advisory-Active Soil Gas Investigations, January 28, 2003, page 10, section 2.4.2

"Tracer compounds, such as ...isopropanol..., may be used as leak check compounds, if a detection limit of 10 ug/L or less can be achieved."
This implies that 10ug/L is the cut off definition for a leak, which equals 10,000 ug/m3.
The other low IPA hits may be due to extremely small leaks or may be naturally occuring in soil gas, particularly at biologically active sites.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/19/08
	Client P.O.:	Date Analyzed 06/19/08

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0806486

Lab ID	0806486-001A				Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2		
Client ID	SG-1,5-5.5						
Matrix	Soil Vapor						
Initial Pressure (psia)	12.08						
Final Pressure (psia)	24.1						
DF	1					SoilVapor	W
Compound	**Concentration**					µg/m³	ug/L
Ethylbenzene	780					8.8	NA
Isopropyl Alcohol	ND					25	NA
Methyl-t-butyl ether (MTBE)	ND					7.3	NA
Toluene	190					7.7	NA
Xylenes	530					27	NA
Surrogate Recoveries (%)							
%SS1:	111						
%SS2:	107						
%SS3:	113						
Comments							

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

DHS ELAP Certification 1644

_____ Angela Rydelius, Lab Manager

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/19/08
	Client P.O.:	Date Analyzed 06/19/08

Volatile Organic Compounds in nL/L*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0806486

					Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Lab ID	0806486-001A					
Client ID	SG-1,5-5.5					
Matrix	Soil Vapor					
Initial Pressure (psia)	12.08					
Final Pressure (psia)	24.1					
DF	1				SoilVapor	W
Compound	**Concentration**				nL/L	ug/L
Ethylbenzene	180				2.0	NA
Isopropyl Alcohol	ND				10	NA
Methyl-t-butyl ether (MTBE)	ND				2.0	NA
Toluene	49				2.0	NA
Xylenes	120				6.0	NA
Surrogate Recoveries (%)						
%SS1:	111					
%SS2:	107					
%SS3:	113					
Comments						

*vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

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Telephone: 877-252-9262 Fax: 925-252-9269

ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/23/08
	Client P.O.:	Date Analyzed 06/23/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline in µg/m³*

Extraction method TO3 Analytical methods TO3 Work Order: 0806486

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	TPH(g)	DF	% SS
001A	SG-1,5-5.5	SoilVapor	12.08	24.1	120,000	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	SoilVapor	psia	psia	1800	µg/m³

*soil vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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ERAS Environmental, Inc. 1533 B Street Hayward, CA 94541	Client Project ID: #07-001-04; 9201 San Leandro	Date Sampled: 06/16/08
		Date Received: 06/17/08
	Client Contact: Andrew Savage	Date Extracted: 06/23/08
	Client P.O.:	Date Analyzed 06/23/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline in nL/L*

Extraction method TO3 Analytical methods TO3 Work Order: 0806486

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	TPH(g)	DF	% SS
001A	SG-1,5-5.5	SoilVapor	12.08	24.1	34,000	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	SoilVapor	psia	psia	500	nL/L

*soil vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor WorkOrder: 0806486

EPA Method ASTM D 1946-90 Extraction ASTM D 1946-90 BatchID: 36361 Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µL/L	µL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Carbon Dioxide	N/A	1000	N/A	N/A	N/A	100	101	0.565	N/A	N/A	70 - 130	20
Methane	N/A	10	N/A	N/A	N/A	114	115	0.869	N/A	N/A	70 - 130	20
Oxygen	N/A	1000	N/A	N/A	N/A	96.3	97	0.808	N/A	N/A	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36361 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806486-001A	06/16/08 9:51 AM	06/18/08	06/25/08 11:24 AM	0806486-001A	06/16/08 9:51 AM	06/18/08	06/25/08 11:24 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor WorkOrder 0806486

EPA Method TO15 **Extraction TO15** **BatchID: 36345** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzene	N/A	25	N/A	N/A	N/A	101	105	3.74	N/A	N/A	70 - 130	30
Ethylbenzene	N/A	25	N/A	N/A	N/A	101	106	5.25	N/A	N/A	70 - 130	30
Isopropyl Alcohol	N/A	25	N/A	N/A	N/A	99.3	102	2.60	N/A	N/A	70 - 130	30
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	106	110	4.14	N/A	N/A	70 - 130	30
Toluene	N/A	25	N/A	N/A	N/A	103	108	4.62	N/A	N/A	70 - 130	30
Xylenes	N/A	75	N/A	N/A	N/A	106	111	4.30	N/A	N/A	70 - 130	30
%SS1:	N/A	500	N/A	N/A	N/A	104	109	3.99	N/A	N/A	70 - 130	30
%SS2:	N/A	500	N/A	N/A	N/A	102	106	4.67	N/A	N/A	70 - 130	30
%SS3:	N/A	500	N/A	N/A	N/A	105	110	4.11	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36345 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806486-001A	06/16/08 9:51 AM	06/18/08	06/19/08 6:31 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil Vapor QC Matrix: Water WorkOrder 0806486

EPA Method SW8260B **Extraction SW5030B** **BatchID: 36354** **Spiked Sample ID: 0806485-026B**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	98	105	7.08	94.4	97.9	3.65	70 - 130	30	70 - 130	30
Benzene	11	10	113	125	5.35	94.3	95.9	1.67	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	92.7	102	9.13	78.4	84.5	7.50	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	88.9	94.7	6.40	87.1	88.2	1.25	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	91.6	98.5	7.20	89.8	93.5	4.03	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	110	118	6.89	99.4	101	1.83	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	83.7	87.4	4.32	77.2	80	3.62	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	115	124	7.47	103	106	2.73	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	121	129	6.73	98.5	102	3.44	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	107	116	7.71	96.6	100	3.77	70 - 130	30	70 - 130	30
Toluene	0.55	10	91.7	97.3	5.61	83.7	85.1	1.54	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	99.5	106	5.98	92.3	94.2	2.07	70 - 130	30	70 - 130	30
%SS1:	103	25	99	101	2.01	96	97	0.445	70 - 130	30	70 - 130	30
%SS2:	105	25	96	96	0	95	95	0	70 - 130	30	70 - 130	30
%SS3:	107	25	113	111	1.89	91	93	1.75	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36354 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806486-001A	06/16/08 9:51 AM	06/24/08	06/24/08 1:43 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR TO3

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor WorkOrder 0806486

EPA Method TO3	Extraction TO3				BatchID: 36346			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(g)	N/A	1250	N/A	N/A	N/A	99	99.4	0.443	N/A	N/A	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 36346 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806486-001A	06/16/08 9:51 AM	06/18/08	06/23/08 1:59 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

APPENDIX J
GEOTRACKER UPLOAD CONFIRMATION

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

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Organization Name:	**ERAS Environmental, Inc.**
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PACO PUMPS INC
9201 SAN LEANDRO
OAKLAND, CA 94603

Regional Board - Case #: 01-1721
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0000320
ALAMEDA COUNTY LOP - **(JTW)**

CONF #	TITLE	QUARTER
4333375334	9201 - Subsurface Investigation & GWM EDF	Q2 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Kasey Cordoza	7/2/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	13
# FIELD POINTS WITH DETECTIONS	12
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	7
SAMPLE MATRIX TYPES	SOIL,WATER

METHOD QA/QC REPORT

METHODS USED	SW8015B,SW8021F,SW8260B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	N

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	N
- MATRIX SPIKE DUPLICATE	N
- BLANK SPIKE	Y
- SURROGATE SPIKE - NON-STANDARD SURROGATE USED	Y

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	N
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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Submittal Type: Soil & Water Investigation Report

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9201 SAN LEANDRO
OAKLAND, CA 94603

Regional Board - Case #: 01-1721
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0000320
ALAMEDA COUNTY LOP - **(JTW)**

CONF #	TITLE	QUARTER
2946302056	9201 - soil-gas EDF	Q2 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Kasey Cordoza	7/2/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	1
# FIELD POINTS WITH DETECTIONS	1
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	1
SAMPLE MATRIX TYPES	SOIL GAS

METHOD QA/QC REPORT

METHODS USED	D1946,ETO15,ETO3,SW8260B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	N

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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Facility Global ID: T0600101592
Facility Name: PACO PUMPS INC
Submittal Title: 9201 - Q2.08 TPH-d
Submittal Type: Soil & Water Investigation Report

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9201 SAN LEANDRO
OAKLAND, CA 94603

Regional Board - Case #: 01-1721
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0000320
ALAMEDA COUNTY LOP - **(JTW)**

CONF #	TITLE	QUARTER
4482598423	9201 - Q2.08 TPH-d	Q2 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Kasey Cordoza	7/2/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	1
# FIELD POINTS WITH DETECTIONS	0
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	0
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

METHODS USED	SW8015B
TESTED FOR REQUIRED ANALYTES?	N

MISSING PARAMETERS NOT TESTED:
- SW8015B REQUIRES MTBE TO BE TESTED
- SW8015B REQUIRES ETBE TO BE TESTED
- SW8015B REQUIRES TAME TO BE TESTED
- SW8015B REQUIRES DIPE TO BE TESTED
- SW8015B REQUIRES TBA TO BE TESTED
- SW8015B REQUIRES DCA12 TO BE TESTED
- SW8015B REQUIRES EDB TO BE TESTED
- SW8015B REQUIRES BZ TO BE TESTED
- SW8015B REQUIRES BZME TO BE TESTED
- SW8015B REQUIRES EBZ TO BE TESTED
- SW8015B REQUIRES XYLENES TO BE TESTED

LAB NOTE DATA QUALIFIERS: N

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	N
- MATRIX SPIKE DUPLICATE	N

- BLANK SPIKE	Y
- SURROGATE SPIKE - NON-STANDARD SURROGATE USED	Y

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	N
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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Submittal Title:	**9201 - Q2.08 Geo_well**
Facility Global ID:	**T0600101592**
Facility Name:	**PACO PUMPS INC**
Submittal Date/Time:	**7/2/2008 8:50:49 AM**
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Confirmation Number: 2086611688
Date/Time of Submittal: 7/2/2008 9:22:16 AM
Facility Global ID: T0600101592
Facility Name: PACO PUMPS INC
Submittal Title: 9201 - hand auger EDF
Submittal Type: Soil & Water Investigation Report

Click here to view the detections report for this upload.

PACO PUMPS INC
9201 SAN LEANDRO
OAKLAND, CA 94603

Regional Board - Case #: 01-1721
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0000320
ALAMEDA COUNTY LOP - **(JTW)**

CONF #	TITLE	QUARTER
2086611688	9201 - hand auger EDF	Q2 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Kasey Cordoza	7/2/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	12
# FIELD POINTS WITH DETECTIONS	11
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	5
SAMPLE MATRIX TYPES	SOIL

METHOD QA/QC REPORT

METHODS USED	SW8015B,SW8021F,SW8082,SW8260B,SW8270C
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	N

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE - NON-STANDARD SURROGATE USED	Y

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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