



76 Broadway
Sacramento, California 95818

May 7, 2010

Barbara Jakub
Alameda County Health Agency
1131 Harbor Bay parkway, Suite250
Alameda, California 94502-577

Re: *Additional Assessment Report, Monitoring Well Installation Workplan & Storm Sewer Repair Comments*
76 Service Station # 5781 RO # 253
3535 Pierson Street
Oakland, CA

Dear Ms. Jakub:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

Barbara, as we have discussed this is time sensitive due to the on-going Storm Sewer evaluation/repair. Your immediate review and approval of the Well Installation Workplan would be greatly appreciated.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

A handwritten signature in black ink, appearing to read 'Terry L. Grayson', written over a horizontal line.

Terry L. Grayson
Site Manager
Risk Management & Remediation

May 7, 2010

Ms. Barbara Jakub
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

**RE: ADDITIONAL ASSESSMENT REPORT, MONITORING
WELL INSTALLATION WORKPLAN AND STORM
SEWER REPAIR COMMENTS
76 Service Station No. 5781
3535 Pierson Street
Oakland, California
Case No. RO0000253**



Dear Ms. Jakub:

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) has prepared this *Additional Assessment Report, Monitoring Well Installation Workplan and Storm Sewer Repair Comments* to assess residual petroleum hydrocarbon constituents in soil and groundwater beneath 76 Service Station Number 5781, located at 3535 Pierson Street, Oakland, CA (the Site). A site location map is included as Figure 1.

This investigation was performed as outlined in Delta's *Work Plan for Additional Assessment* dated September 24, 2009. The work was originally recommended by Delta in a *Site Conceptual Model* (SCM) dated November 21, 2008. This investigation was performed in accordance with an email from Alameda County Environmental Health dated December 21, 2009 (Attachment A).

Please contact Jan Wagoner at (916) 503-1275 if you have questions.

Sincerely,

DELTA CONSULTANTS

Jan W. Wagoner
Project Manager

Enclosures

cc: Mr. Terry Grayson – COP (electronic copy only)

**ADDITIONAL ASSESSMENT REPORT, MONITORING WELL
INSTALLATION WORKPLAN AND STORM SEWER REPAIR
COMMENTS**

**76 Service Station No. 5781
3535 Pierson Street
Oakland, California**

May 7, 2010

**Prepared for
ConocoPhillips Company
76 Broadway
Sacramento, California**

The material and data in this report were prepared under the supervision and direction of the undersigned.

DELTA CONSULTANTS



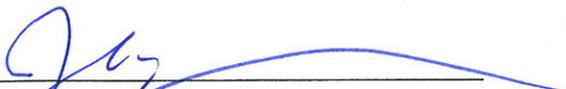
Alan Buehler
Staff Geologist



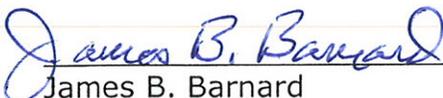
Caitlin Morgan
Staff Scientist



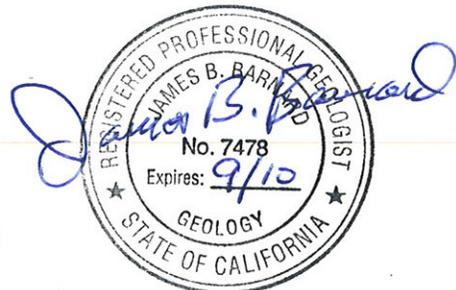
Nadine Periat
Senior Staff Geologist



Jan Wagoner
Project Manager



James B. Barnard
California Registered Professional Geologist No. 7478



1.0 INTRODUCTION

This investigation consisted of advancing four soil borings in the vicinity of the former waste oil tanks and in the vicinity of the current fuel underground storage tanks (USTs). Boring locations were selected to collect confirmation soil and groundwater samples in locations with the highest historical petroleum hydrocarbon concentrations. Details regarding targeted historical samples are discussed in Delta's most recent work plan.

A site location map is included as Figure 1. There is currently one monitoring well (MW-A) at the Site, shown on Figure 2.

2.0 GENERAL SITE DESCRIPTION

The Site is currently an active 76 branded service station with two 12,000-gallon fuel USTs (Figure 2). Other site features include a station building and two gasoline dispenser islands under a single canopy. The station building consists of a vehicle service area with two hoists and a market and office area. City of Oakland sewer easements cross the west and east corners of the site. The site is at an elevation of approximately 150 feet above mean sea level (ft MSL).

2.1 Site Background

Historical documents indicate that the site has been a service station since 1947. Renovation of the site first occurred in 1967, when the size of the site expanded to its current configuration.

Historical analytical tables for soil and grab groundwater are presented as Attachment B. A site plan identifying historical sampling points is included as Figure 3.

1989 Two 10,000-gallon gasoline USTs, one 280-gallon waste oil UST and product piping were removed from the site. Confirmation soil samples collected from the UST pit indicated low residual maximum concentrations of total petroleum hydrocarbons as gasoline (TPHg), benzene, and total oil and grease (TOG). After confirmation soil sampling, approximately 5,000 gallons of groundwater were removed from the UST pit and disposed offsite. A groundwater sample was collected and analyzed after recharge of the UST pit and contained TPHg at 7,900 parts per billion (ppb) and benzene at 850 ppb. Confirmation soil samples collected from the product piping trench reported residual concentrations of TPHg and benzene at or near the laboratory's indicated reporting limits.

February 1990 The waste oil UST pit was over-excavated to 16 feet bgs and 35 feet to the east, 10 feet to the west, 15 feet to the south, and 2 feet to the north. Soil samples were collected from the base of the deepened excavation (W01-16) along with four sidewall samples (SWA through SWD). TOG was reported in samples SWA (adjacent to the site building) at 17,000 milligrams per kilogram

(mg/kg); sample SWB at 4,100 mg/kg; and in sample SWD at 6,400 mg/kg. TOG was detected in sample WO-16 at 910 mg/kg. The highest concentrations of total petroleum hydrocarbons as diesel (TPHd), TPHg, and benzene were reported in sample SWA at 1,400 mg/kg, 220 mg/kg, and 2.3 mg/kg, respectively. Further excavation was terminated due to the presence of underground sewer and gas lines to the south and west and the site building to the north side.

April 1990 Three exploratory borings (MW-1, MW-2, and MW-3) were advanced onsite with the intention that they would be converted into monitoring wells, however no groundwater was encountered down to a depth of 40-50 feet below ground surface (bgs). Wells were not installed and the borings were backfilled.

July 1990 Two exploratory borings (EB-1, EB-2) were advanced onsite to 34.5 and 38ft bgs, respectively near the location of the former waste oil UST pit. Groundwater was encountered at 33.5 and 36.7 feet bgs. Groundwater samples were collected from each boring. The borings were backfilled with neat cement. TPHd was reported in the groundwater sample collected from EB-1 at 6.7 ppb, benzene was also reported in the groundwater sample from EB-1 at 0.61 ppb. Toluene (1.5 ppb) and xylenes (1.0 ppb) were reported in groundwater at equal concentrations from both borings.

December 1990 A 2" diameter monitoring well was installed onsite (MW-A) to a depth of 45 feet. Groundwater was encountered at 33 feet bgs during the well installation.

December 1990 – March 2008 Well MW-A was sampled on a semi-annual/annual schedule. Groundwater samples were analyzed for TPHg, TPHd, benzene, toluene, ethyl-benzene, total xylenes (BTEX), methyl-tert butyl ether (MTBE) (MTBE since 1997). TPHg, benzene, and ethyl-benzene have not been reported above the laboratory's indicated reporting limits in MW-A since its construction. TPHd, toluene, total xylenes and MTBE have been primarily below the laboratory's reporting limits since the well's construction, except for reported concentrations up to 120 micrograms per liter ($\mu\text{g/L}$), 1.01 $\mu\text{g/L}$, 2.1 $\mu\text{g/L}$ and 0.54 $\mu\text{g/L}$, respectively.

October 2003 Site environmental consulting responsibilities were transferred to TRC. TRC performed a baseline site assessment, advancing five soil borings onsite (SB-1 through SB-5). Four of the soil borings were clustered around the location of the dispenser islands and USTs, and one near the waste oil tank. Maximum boring depth ranged from 24 feet to 54 feet bgs. Groundwater was encountered at depths ranging from 19.5 feet to 39 feet bgs in borings SB-1, SB-4, and SB-5 and was not encountered in borings SB-2 and SB-3 to a total depth of 54 feet bgs. Soil samples collected from the borings were reported to contain up to 1,100 mg/kg of total purgeable petroleum hydrocarbons (TPPH). The only constituent reported from groundwater samples collected from borings SB-1, SB-4, SB-5 and MW-A was lead at 0.18 milligrams per liter (mg/L) in SB-5.

April 2008: The second generation waste oil tank (WOT) was removed and a total of four soil samples were collected from the WOT cavity (WO1 – WO4). One base

sample was collected from beneath the WOT at a depth of 9.0 feet bgs, and three sidewall samples were collected at a depth of either 6.5 or 7.0 feet bgs. A fourth sidewall sample, from the southeast wall of the pit, was unable to be collected due to proximity of the station building. A composite soil sample (Composite) was also collected from materials stockpiled during removal and sampling activities.

Petroleum hydrocarbons (including TPHd) or fuel oxygenates, TOG, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), or polychlorinated biphenyls (PCBs) were below the laboratory's indicated reporting limits in each of the four soil samples and the composite sample collected. Samples were also analyzed for CAM 17 metals. Each of the five samples contained arsenic at concentrations ranging from 3.2 mg/kg to 6.2 mg/kg. Although these reported concentrations exceed the California Regional Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Level (ESL) of 1.5 mg/kg (commercial), the reported concentrations appear to represent background conditions at the site and are consistent with regional arsenic concentrations. Analytical data from soil samples collected in the bay area by geologists of the United States Geological Survey (USGS) show that regional arsenic concentrations range from 4.1 to 10.0 parts per million (ppm) regionally. (USGS, 1984) All other reported CAM 17 metal concentrations were below the commercial ESLs set by the RWQCB. (Delta, 2008).

No over-excavation activities were conducted, the WOT was not replaced, and the stockpiled materials were backfilled into the remaining cavity following receipt of laboratory results. (Delta, 2008)

2.2 Sensitive Receptor Survey

The California Department of Water Resources database indicates the presence of four active water supply wells nearby the site. The four active wells are reported to be located in East Bay Regional Park District land, located approximately 2,193 feet northeast of the site.

3.0 SOIL AND GROUNDWATER INVESTIGATION

On March 12th, 2010, Delta oversaw the advancement of three soil borings in the vicinity of former waste oil underground storage tanks near the west corner of the station building, and one soil boring to the east of the site's current fuel USTs.

3.1 Pre-Field Activities

Prior to field activities, Delta produced a Site Health and Safety Plan, which was reviewed daily by field personnel. Prior to drilling, Delta marked all proposed boring locations and contacted Underground Service Alert (USA ticket number 041480) to request the locating and marking of all underground utilities at, or adjacent to, the proposed boring locations. Delta also employed a private utility locator to identify possible private underground utilities in the vicinity of the proposed boring locations. Additionally, on March 11, 2010 all boring locations

were cleared, utilizing air-vacuum equipment (air-knife), to depths ranging from five to ten feet bgs prior to drilling. The purpose of using air-knife technology for borehole clearance was to ensure that unmarked underground utilities would not be encountered during drilling. Delta obtained necessary permits from the Alameda County Public Works Agency (ACPWA) for soil borings (Attachment C).

3.2 Soil Borings

Soil borings were advanced in the following locations:

- Boring SWC-2 was advanced southeast of sidewall sample SWC, located near the sewer line easement to the southwest of the station building.
- Boring SWD-2 was advanced west of the previous sidewall sample SWD located near the gas line at the west corner of the station building.
- Boring SB-6 was advanced near the northeast corner of the fuel USTs near former boring SB-3.
- Boring SB-7 was advanced northwest of the station building, to the north of the former waste oil tank removed in 2008, adjacent to former boring SB-5.

Borings were advanced using hollow stem auger drilling equipment provided and operated by Gregg Drilling and Testing (License C57- 485165). Soil samples were collected using a split spoon sampler equipped with brass sleeves. Discreet soil samples were collected at 5-foot depth intervals. Borings SWD-2 and SWC-2 were advanced to 20 feet bgs, SB-6 was advanced to 40 feet, and SB-7 was advanced to 15 feet bgs. The samples were logged by the field geologist, utilizing the Unified Soil Classification System by the American Society for Testing and Materials (ASTM) method D-2487, dated May 2000. A photo-ionization detector (PID) was used to measure concentrations of volatile organic compounds in soil samples collected from the boreholes.

To obtain a PID reading, a soil sample from each sampling interval was placed in a sealed plastic bag. After approximately five minutes, the PID probe was inserted into the plastic bag and soil gas allowed to pass through the PID until readings stabilized. The resulting concentration reading was recorded in the geologist's field log. Soil Boring Logs with PID readings are presented as Attachment D.

Boring logs are presented in Attachment D and cross sections are presented as Figure 4 and Figure 5.

Soil encountered during drilling generally exhibited varying degrees of sandy clay and clayey sand from ground surface to the maximum depth explored of 40 feet bgs (SB-6).

In borings SB-7 and SWD-2, clay was encountered until approximately 15 feet bgs where soil conditions transitioned to clayey sand. Boring SWC-2 is believed to be advanced in non-native fill which consisted of clayey sand with gravel to a depth of approximately 15 feet bgs. Below this depth, lean clay with sand and gravel was reported to the final depth of 20 feet bgs. Historical maps identifying waste oil tank over-excavation limits indicate that SWC-2 was advanced within the excavation

area, which was reported to be approximately 16 feet deep directly under the waste oil UST. Since the ground surface slopes downward from the former waste oil tank to the location of SWC-2, the 15 foot sample is likely out of the excavation limits, and the 20 foot sample is more certainly out of the excavation limits.

Boring SB-6 encountered clayey sand to a depth of 15 feet, at which point fractured gravel was encountered, and is believed to extend to 20 feet bgs due to a sampler which had no recovery at 20 feet bgs. At 25 feet bgs, sandy clay was encountered. The amount of sand decreased with depth to 40 feet bgs.

Boring SB-7 was advanced to 15 feet, where groundwater was encountered. Soil samples from 5 and 10 feet were collected and submitted for laboratory analysis in addition to one groundwater sample.

Borings SWD-2 and SWC-2 were pre-cleared to a depth of 10 feet bgs due to proximity to a nearby sewer line. Soil samples were collected in each boring from depths of 10 feet, 15 feet and 20 feet bgs. Since groundwater was encountered in SWC-2, a groundwater sample was collected and submitted for laboratory analysis. Boring SB-6 was pre-cleared to five feet bgs, and soil samples were collected at 5 foot intervals to the total depth of 40 feet. No samples were recovered from the split-spoon sampler at 15 feet and 20 feet bgs. One groundwater sample was collected from SB-6.

Groundwater was encountered in SB-6, SB-7 and SWD-2 at a depth of approximately 13 feet bgs. All soil from SWD-2 was observed to be wet below a depth of 9 feet bgs, though groundwater was first observed at 13 feet bgs.

Borings were subsequently sealed by grouting with Portland cement using a Tremie pipe to a depth of approximately 6 inches bgs. The upper 6 inches of each boring was capped with concrete and dyed black to match surrounding asphalt.

3.3 Soil and Groundwater Sampling

Soil samples from SWC-2, SWD-2 and SB-7 were analyzed for TPHg, BTEX compounds and MTBE by EPA Method 8260B, TPHd with silica gel cleanup by EPA Method 8015M, and TOG by EPA Method 1664. Soil samples from SB-6 were analyzed for TPHg, BTEX compounds, MTBE, DIPE, ETBE, TAME, TBA, EDB, EDC and Ethanol by EPA Method 8260B. For waste disposal purposes, one composite sample was collected by randomly sampling four separate waste drums. The four-part composite soil sample was analyzed for the full scan VOCs by EPA Method 8260B, total lead, TPH Normal Carbon Chain Hydrocarbons (C10 through C40) by EPA Method 8015 CC, CAM 17 Metals by EPA Method 6010B, and Polychlorinated Biphenyls (PCBs) by EPA Method 8082.

Groundwater samples from SWC-2 and SB-6 were analyzed for TPHg, BTEX compounds and MTBE by EPA Method 8260B, TPHd with silica gel cleanup by EPA Method 8015M, TOG by EPA Method 1664, and dissolved lead by EPA Method 6010B. The groundwater sample collected from SB-6 was analyzed for TPHg, BTEX

compounds, MTBE, DIPE, ETBE, TAME, TBA, EDB, EDC and Ethanol by EPA Method 8260B.

Soil samples selected for laboratory analysis based on PID readings or field observations were capped with a Teflon[®] sheet and plastic end caps and immediately placed on ice. The samples were then logged on to chain-of-custody (COC) forms, and submitted to BC Labs in Bakersfield, California for chemical analyses. The groundwater samples were decanted into 40-milliliter glass VOA bottles preserved with hydrochloric acid (HCL), one liter amber glass bottles, and 500mL plastic bottles. The bottles were placed on ice for transportation to the laboratory. COC protocol was followed, providing a continuous record of sample possession before analysis.

3.4 Soil Analytical Results

The following section includes a narrative summary of soil analytical results. A summary of discreet soil sample data is presented as Table 1, a summary of reported concentrations in the composite soil sample is presented in Table 1a. The laboratory analytical report containing complete lists of analytes and reporting limits is contained in Attachment E.

TPHg was reported in the ten-foot samples from borings SWC-2 and SWD-2 at concentrations of 0.23 and 0.58 mg/kg, respectively. TPHg was also reported in the composite soil sample at a concentration of 3.7 mg/kg. All noted concentrations of TPHg are below the ESL of 83 mg/kg.

TOG was reported in the ten-foot samples from borings SWC-2 and SWD-2 at concentrations of 7,700 mg/kg and 870 mg/kg, respectively. Currently there is no established ESL for TOG.

TPHd was reported in the ten and fifteen foot samples from SWC-2 and in the ten-foot sample from SWD-2 at concentrations of 62 mg/kg, 2.5 mg/kg and 270 mg/kg, respectively. The concentration reported in the ten foot sample from SWD-2 is above the ESL of 83 mg/kg.

Xylenes were reported in the ten-foot sample from SWC-2 at a concentration of 0.025 mg/kg, which is below the ESL of 2.3 mg/kg.

MTBE was reported in SB-6 at a depth of 25 feet at a concentration of 0.02 mg/kg which is below the ESL of 0.023 mg/kg.

N-propylbenzene was reported in the composite soil sample at a concentration of 0.09 mg/kg. Currently there is no established ESL for n-propylbenzene.

Total TPH ranging from carbon chain C9 to C44+ was reported at 190 mg/kg in the composite soil sample. A breakdown of individual carbon chain concentrations is included in Table 1a.

Arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium and zinc were reported above laboratory reporting limits in the composite soil sample. Of the reported concentrations, arsenic was the only metal which exceeded its respective ESL of 1.6 mg/kg at a reported concentration of 4.4 mg/kg.

Due to the reported concentrations of total lead and total chromium (110 mg/kg and 32 mg/kg, respectively), soluble threshold limit concentration (STLC) and toxicity characteristic leaching procedure (TCLP) analysis were performed for lead, and a STLC analysis performed for chromium. Individual metal concentrations are summarized on Table 1a.

3.5 Groundwater Analytical Results

TPHg was reported in a grab groundwater sample collected from boring SB-6 at a concentration of 2,500 µg/l. TPHg was below the laboratory's indicated reporting limits in grab groundwater samples collected from borings SWC-2 and SB-7.

TPHd was reported in grab groundwater samples collected from borings SWC-2 and SB-7 at concentrations of 200 µg/l and 65 µg/l, respectively. TPHd was not analyzed in the grab groundwater sample collected from boring SB-6.

Benzene, ethyl-benzene, toluene and xylenes were reported in SB-6 at concentrations of 160 µg/l, 310 µg/l, 110 µg/l and 690 µg/l, respectively. BTEX compounds were below the laboratory's indicated reporting limits in grab groundwater samples collected from borings SWC-2 and SB-7.

MTBE and fuel oxygenates were analyzed in the grab groundwater sample collected from boring SB-6 only and were below the laboratory's indicated reporting limits in this sample.

TOG was analyzed in the grab groundwater samples collected from borings SWC-2 and SB-7. Reported concentrations were below the laboratory's indicated reporting limits in both of these samples.

Concentrations of TPHg reported in SB-6, and TPHd in SWC-2 exceed residential ESLs of 100 µg/l. Benzene, ethyl-benzene, toluene and xylenes concentrations in SB-6 exceed residential ESLs of 1 µg/l, 40 µg/l, 30 µg/l and 20 µg/l, respectively. No other analytes were reported above laboratory reporting limits.

3.6 Storm Drain Investigation

On February 16, 2010, Delta was onsite with Cruz Brothers Locators, a private utility locator, in preparation for drilling activities. A storm drain located southwest of the fuel USTs in the sidewalk along Pierson Street was opened in order to evaluate any possible boring location conflicts with the storm drain line. Immediately upon opening the storm drain manhole cover, a pronounced hydrocarbon odor was observed emanating from the storm drain manhole. The manhole cover was immediately replaced and the ConocoPhillips was notified.

Delta returned to the site on February 17, 2010 to measure and record PID readings in the storm drain manhole. A PID reading of 495 ppm was measured in the storm drain.

On March 5, 2010 an Unauthorized Release Report (URR) was prepared and submitted by ConocoPhillips to the Alameda County Department of Environmental Health.

On March 11, 2010, Delta returned to the site for air knife activities in preparation for the assessment activities presented in this report and recorded PID readings in four additional storm drain manholes and inlets in the vicinity of the site. PID readings ranged from 11 ppm to 258 ppm.

On March 17, 2010, Delta returned to the site to collect PID readings and LEL measurements at varying depths in each storm drain manhole and inlet in the vicinity of the site. PID readings ranged from approximately 15 ppm to 282 ppm.

On April 9, 2010 a ConocoPhillips representative met with the station owner and representatives of the Oakland Fire Department at the service station site to review the storm drain. At that time, water was observed seeping into the storm drain manhole from the service station side of the manhole. On April 21st, a Delta representative met with representatives of the Oakland Fire, Innovative Construction Solutions (ICS) and the station owner to prepare for permanently patching the leaking storm drain.

On April 28th, 2010 ICS placed a permanent patch on the portion of the storm drain manhole seeping water into the storm drain. Mr. Mike Fahey of the Oakland Fire Department and representatives from Delta and ConocoPhillips were on-site to observe this repair. Follow-up inspections of the repaired storm drain are planned to ensure the patch remains intact.

3.7 Conclusions

As identified during the March 2010 additional assessment activities, residual petroleum hydrocarbons remain onsite.

TPHg is present at 2,500 µg/L in a grab groundwater sample collected from boring SB-6 indicating residual TPHg in the area southeast of the USTs.

TOG is present in soils samples collected at 10 feet bgs in samples collected from borings SWC-2 and SWD-2 near the former waste oil USTs at concentrations of 7,700 µg/L and 870 µg/L, respectively. **However, samples collected from these borings at 15 ft bgs were at or below the laboratory's indicated reporting limits. Also, groundwater samples collected from borings SB-7 and SWC-2 reported TOG levels below laboratory indicated reporting limits.** The only other petroleum hydrocarbon reported in groundwater above the laboratory's indicated reporting limits was TPHd in borings SWC-2 and SWC-2 at 200 µg/L and

65 µg/l, respectively. **This indicates that petroleum hydrocarbons are not migrating vertically in soil or laterally in groundwater and no additional assessment is needed in the vicinity of the former waste oil USTs.**

3.8 Recommendations

To additionally assess the presence of the above noted constituents, **Delta recommends that further assessment be performed in the area southwest of the gasoline USTs.** Delta proposes to perform this additional assessment by installing two groundwater monitoring wells in the vicinity of the USTs, as detailed below.

4.0 PROPOSED MONITORING WELL INSTALLATION

4.1 Permitting, Utility Notification, and Borehole Clearance

Before commencing field activities Delta will prepare a Health and Safety Plan in accordance with state and federal requirements for use during on-site assessment activities. Drilling permits will be obtained for the groundwater monitoring wells from ACPWA. Prior to drilling, Delta will review available as-built drawings, notify Underground Service Alert (USA) and contract a private utility locator as required to clear the proposed drilling locations for underground utilities. Prior to drilling, air or water vacuum clearance will be completed to 5 feet bgs to minimize potential impact to underground utilities.

4.2 Proposed Scope of Work

Delta proposes to advance two monitoring wells using a truck mounted drill rig equipped with 10-inch hollow stem augers adjacent to the existing UST pit in the southeast corner of the station property (Figure 2). The borings, MW-4 and MW-5, will be advanced to depth of approximately 20 feet bgs, and completed as monitoring wells screened from 10 to 20 feet bgs, though these parameters may be adjusted based on field observations.

The monitoring wells will be constructed using 4-inch schedule 40 polyvinyl chloride (PVC) with 0.010-inch slot size. The annular space will be backfilled with RMC Lonestar sand #2/16, or equivalent, from total depth to 2 feet above top of the screened interval (approximately 20 feet bgs to approximately 8 feet bgs). The holes will be sealed with 2 feet of bentonite placed from approximately 8 feet bgs to approximately 6 feet bgs and hydrated in place, with neat cement grout from approximately 6 feet bgs to approximately 1 foot below the surface. The wells will be completed with a COP approved traffic-rated well box set in concrete dyed to match the surrounding surface conditions. Proposed specifications may vary slightly based on field observations. A well construction diagram is included as Figure 6.

4.3 Soil Sampling

Soils encountered in the boring will be classified in accordance with the Unified Soil Classification System (USCS). Soil samples will be collected at 5-foot intervals from just below air-vacuum clearance to total depth (at approximately 5 feet, 10 feet, 15 feet, and 20 feet bgs), using a split-spoon sampler loaded with 2-inch stainless steel or brass liners. Samples will be pre-screened for hydrocarbons using a pre-calibrated Photo-Ionization Detector (PID). Collected soil samples will be capped with Teflon sheeting and tight-fitting plastic end caps, labeled with an identification number, and placed on ice pending delivery to a California-certified analytical laboratory along with proper chain of custody documentation.

Samples exhibiting the highest PID readings will be selected for laboratory analysis for the following analytes: TPHg and TPHd by EPA Method 8015M, BTEX, MTBE, DIPE, ETBE, TAME, TBA, EDB, EDC and Ethanol by EPA Method 8260B.

4.4 Well Development, Monitoring, and Sampling

The proposed wells will be developed a minimum of 72 hours after construction. A minimum of 10 casing volumes of groundwater will be removed from the monitoring wells during development.

Subsequent to installation and development of the monitoring wells, they will be incorporated into the existing monitoring and sampling program for this site, and will be monitored and sampled quarterly for at least one hydro-geologic cycle. Initial monitoring and sampling will be done a minimum of 48 hours after development.

Groundwater samples will be analyzed for TPHg by EPA Method 8015M, BTEX, MTBE, DIPE, ETBE, TAME, TBA, EDB, EDC and Ethanol by EPA Method 8260B, and TPHd with silica gel cleanup and Methanol by EPA Method 8015M.

4.5 Well Head Survey

Following completion of the new monitoring wells, a California licensed surveyor will survey the northing and easting of the three on-site monitoring wells using positioning datum NAD83. The monitoring well elevations will be surveyed relative to elevation datum NAVD88. A global positioning system (GPS) will also be used to survey in the latitude and longitude of the wells to be uploaded into California's GeoTracker database system. The survey of the well locations will be to sub-meter accuracy.

4.6 Disposal of Drill Cuttings and Wastewater

Drill cuttings and any wastewater generated during field activities will be placed into properly labeled 55-gallon Department of Transportation (DOT)-approved steel drums and stored on the service station site. Representative samples of the drill cuttings and wastewater will be collected and submitted to a California-certified

laboratory where they will be analyzed for TPHg and TPHd by EPA Method 8015M, BTEX and MTBE by EPA Test Method 8260B. Soil cuttings will also be analyzed for total California Title-22 (CAM 17) metals. Pending laboratory analytical results, the drummed drill cuttings and wastewater will be profiled, transported, and disposed at a COP-approved facility. If available at the time of report submittal, a copy of the waste disposal manifest(s) will be included in the investigation report.

4.7 Report

Delta will prepare and submit a report summarizing the additional site characterization findings once all field activities have been completed and all laboratory results have been received. The report will contain a description of the activities performed, and will include a site plan showing the boring locations, copies of the boring logs, laboratory analytical reports, waste manifests, and recommendations for future activities at the site.

5.0 LIMITATIONS

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Consultants:

DELTA CONSULTANTS

Figures:

Figure 1 - Site Location Map

Figure 2 - Site Map with Current Borings, Existing Wells, and Proposed Wells

Figure 3 - Site Plan with Historical Borings

Figure 4 - Geologic Cross Section A-A'

Figure 5 - Geologic Cross Section B-B'

Figure 6 - Monitoring Well Construction Diagram

Tables:

Table 1 - Soil Analytical Data

Table 1a - Composite Soil Sample Analytical Data

Table 2 - Groundwater Analytical Data

Attachments:

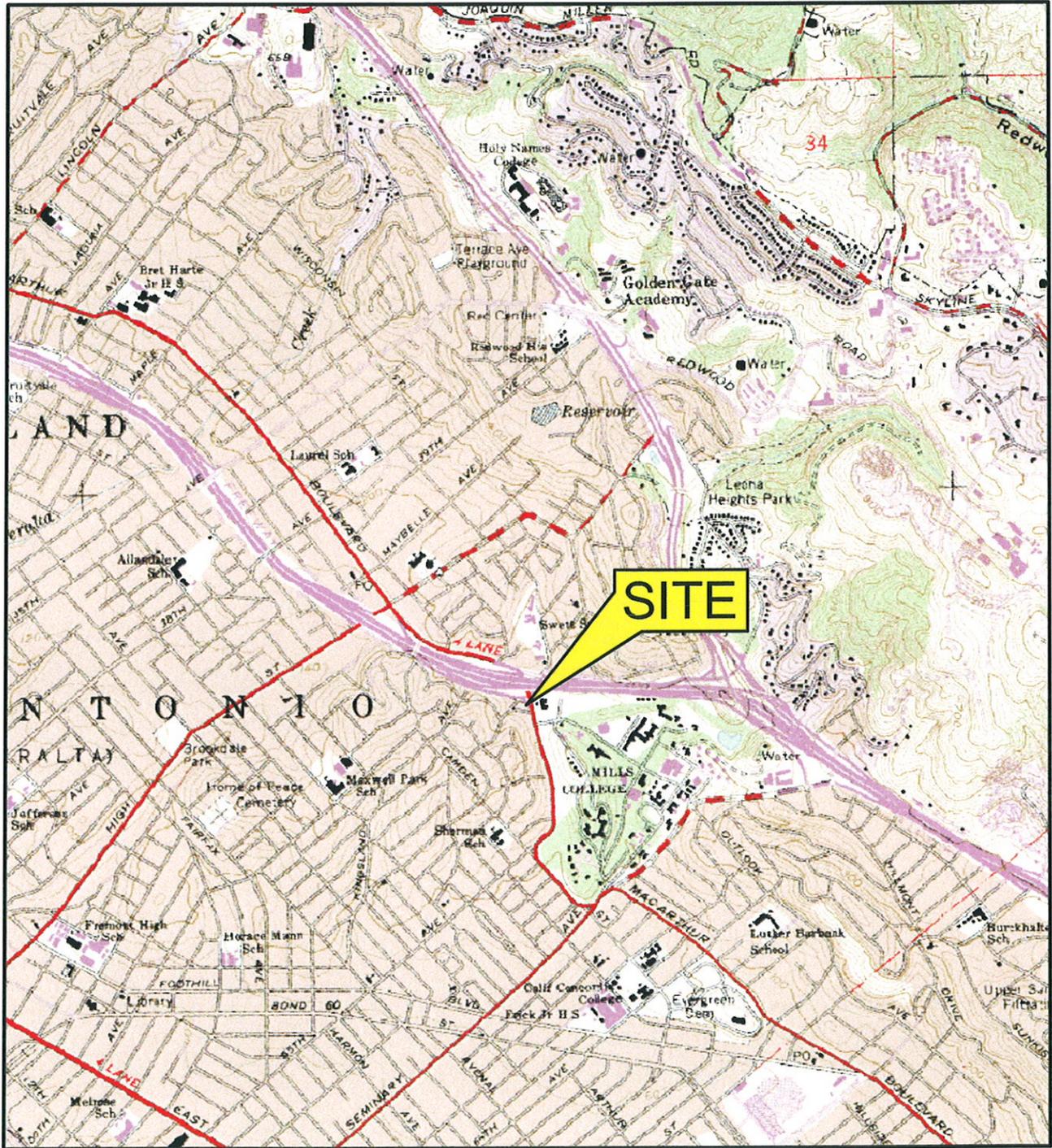
- Attachment A – ACEH Letter Dated December 21, 2009
- Attachment B - Historical Soil and Grab Groundwater Data
- Attachment C – ACPWA Permits
- Attachment D - Boring Logs
- Attachment E - Laboratory Analytical Reports

REFERENCES:

- Shacklette, H.T., and Boerngen, J.G., Element concentrations in soils and Other Surficial Materials of the Conterminous United States: U.S. Geological Survey Professional Paper 1270, 1984
- Kaprealian Engineering Incorporated, *Preliminary Subsurface Investigation at Unocal Service Station #5781, 3535 Pierson Street, Oakland, California*, May 21, 1990.
- Kaprealian Engineering Incorporated, *Supplementary Subsurface Investigation at Unocal Service Station #5781, 3535 Pierson Street, Oakland, California*, August 23, 1990
- Kaprealian Engineering Incorporated, *Quarterly Summary Report, First Quarter—1991 (December 1991 – February 1992) Unocal Service Station #5781, 3535 Pierson Street, Oakland, California*, date unknown.
- 76 Products Company, Baseline Due Diligence Data, Store #255781, February 10, 1997.
- Kaprealian Engineering Incorporated, *Preliminary Ground Water Investigation at Unocal Service Station #5781, 3535 Pierson Street, Oakland, California,,* January 21, 1991.
- TRC, *Baseline Site Assessment Report, 76 Station #5781, 3535 Pierson Street, Oakland, California*, December 3, 2003.
- California Regional Quality Control Board, San Francisco Bay Region. *Screening For Environmental Concerns at Site with Contaminated Soil and Groundwater*, May 2008.
- Delta Consultants, *Site Conceptual Model, 76 Station #5781, 3535 Pierson Street, Oakland, California*, November 20, 2008.
- TRC, *Annual Monitoring Report, 76 Station #5781, 3535 Pierson Street, Oakland, California, April 2009 through March 2010*, April 7, 2010.

Figures

Figure 1 - Site Location Map



OAKLAND EAST QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)



QUADRANGLE LOCATION

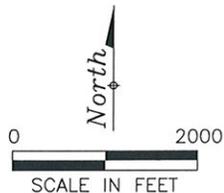


FIGURE 1
SITE LOCATION MAP
CONOCOPHILLIPS SITE NO. 5781
3535 PIERSON STREET
OAKLAND, CALIFORNIA

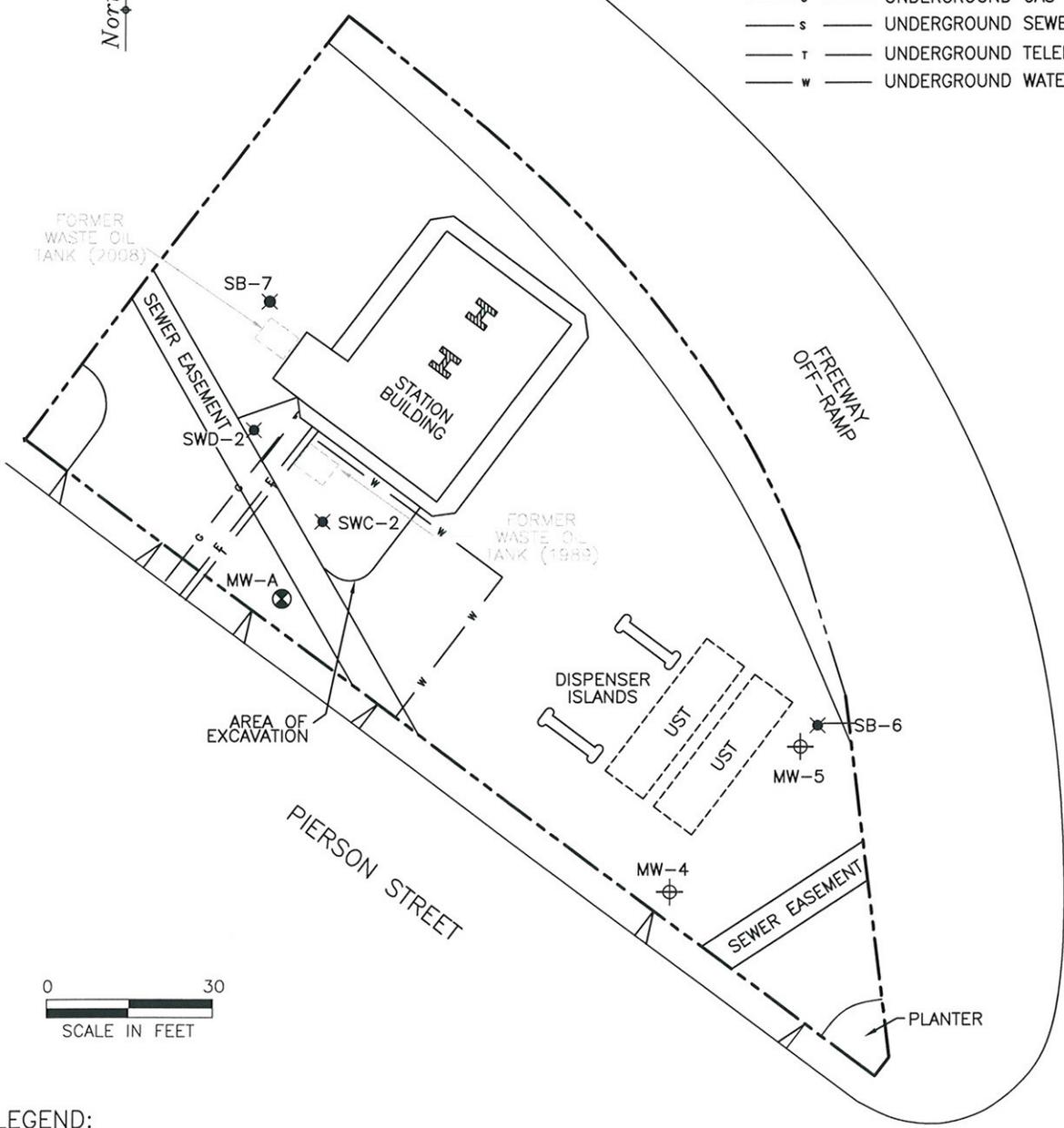
PROJECT NO. C105781	PREPARED BY DB	DRAWN BY DD
DATE 11/18/08	REVIEWED BY	FILE NAME 5781-SL



Figure 2 - Site Map with Current and Proposed Locations

UTILITIES:

- E — UNDERGROUND ELECTRIC LINE
- G — UNDERGROUND GAS LINE
- S — UNDERGROUND SEWER LINE
- T — UNDERGROUND TELEPHONE LINE
- W — UNDERGROUND WATER LINE



LEGEND:

- APPROXIMATE PROPERTY LINE
- HYDRAULIC LIFT
- CURRENT MONITORING WELL
- SOIL BORING (MARCH 2010)
- PROPOSED MONITORING WELL LOCATION

FIGURE 2
SITE MAP WITH CURRENT AND
PROPOSED WELL LOCATIONS
CONOCOPHILLIPS STATION NO. 5781
3535 PIERSON STREET
OAKLAND, CALIFORNIA

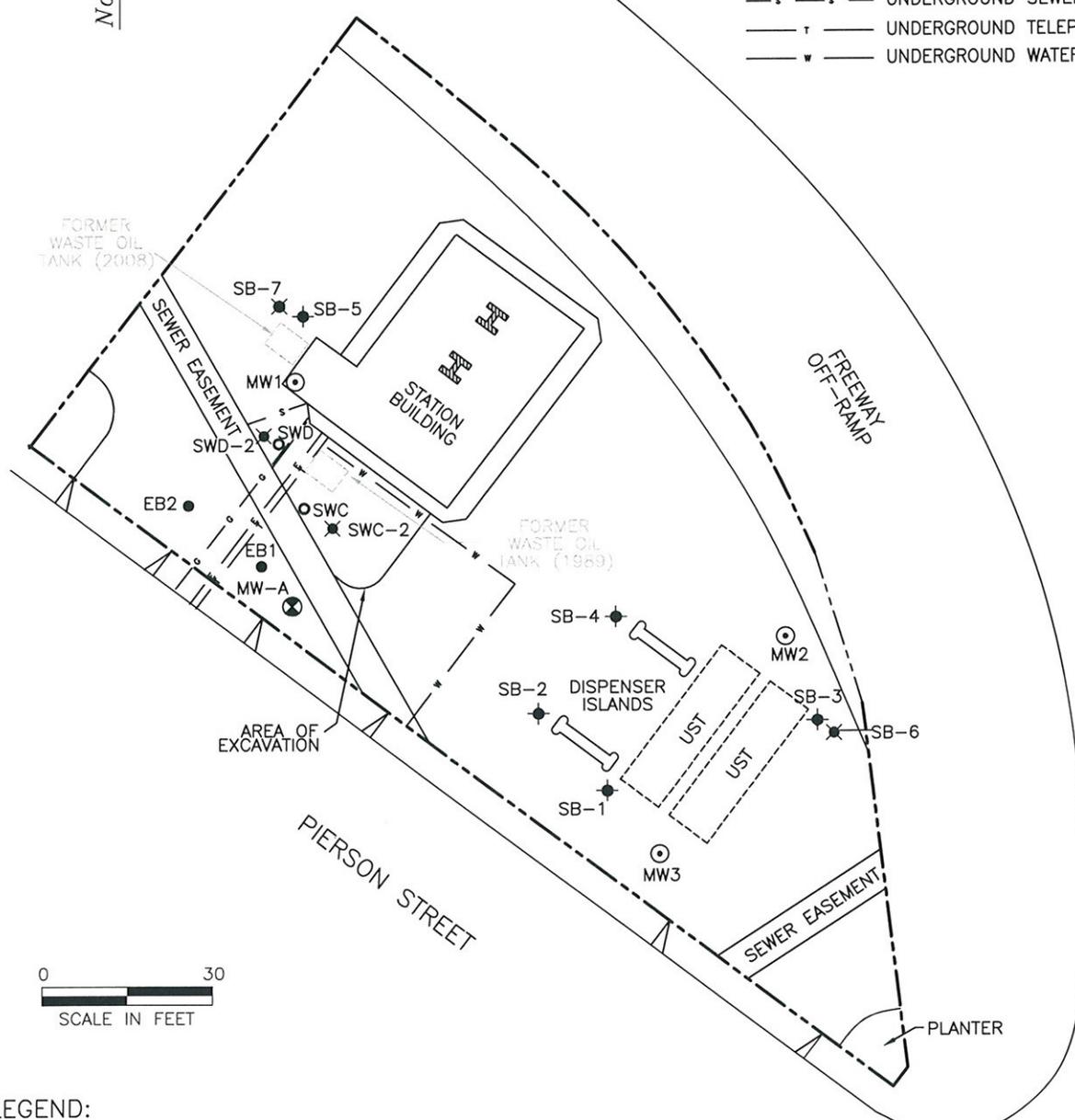
PROJECT NO. C105781	PREPARED BY AB	DRAWN BY DD/JH
DATE 05/06/10	REVIEWED BY LH	FILE NAME 5781-Site



Figure 3 - Site Plan with Historical Borings

UTILITIES:

- e — UNDERGROUND ELECTRIC LINE
- o — UNDERGROUND GAS LINE
- s — UNDERGROUND SEWER LINE
- r — UNDERGROUND TELEPHONE LINE
- w — UNDERGROUND WATER LINE



LEGEND:

- APPROXIMATE PROPERTY LINE
- HYDRAULIC LIFT
- MONITORING WELL
- SOIL BORING (MARCH 2010)
- SOIL BORING (OCTOBER 2003)
- EXPLORATORY BORING (APRIL 1990)
(NOT CONVERTED TO MONITORING WELL)
- EXPLORATORY BORING (JULY 1990)
- SOIL SAMPLE LOCATION (FEBRUARY 1990)

FIGURE 3
SITE PLAN WITH HISTORIC BORING LOCATIONS
CONOCOPHILLIPS STATION NO. 5781
3535 PIERSON STREET
OAKLAND, CALIFORNIA

PROJECT NO. C105781	PREPARED BY NP	DRAWN BY DD/JH	
DATE 03/22/10	REVIEWED BY LH	FILE NAME 5781-Site	

Figure 4 – Geologic Cross Section A-A'

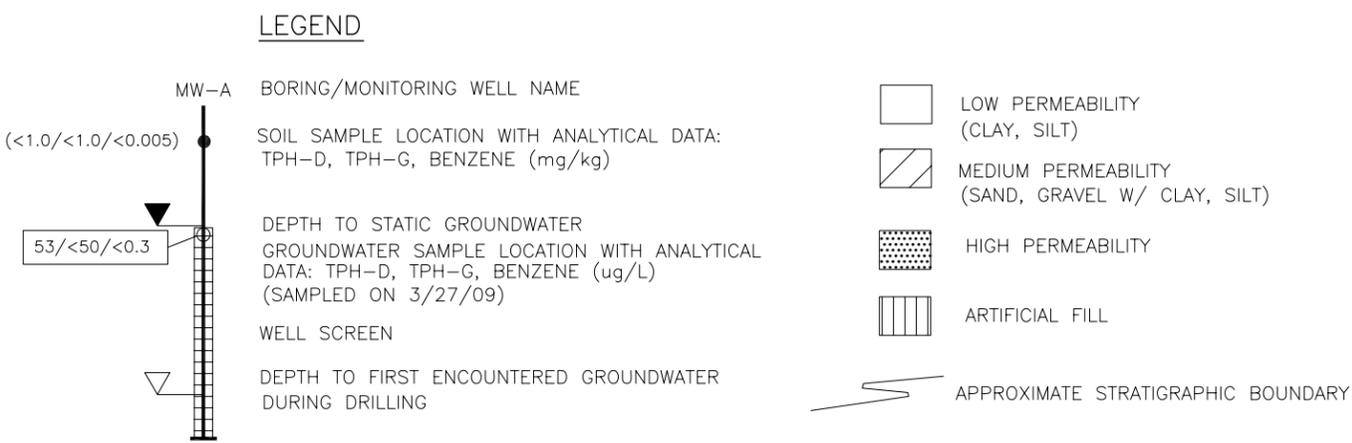
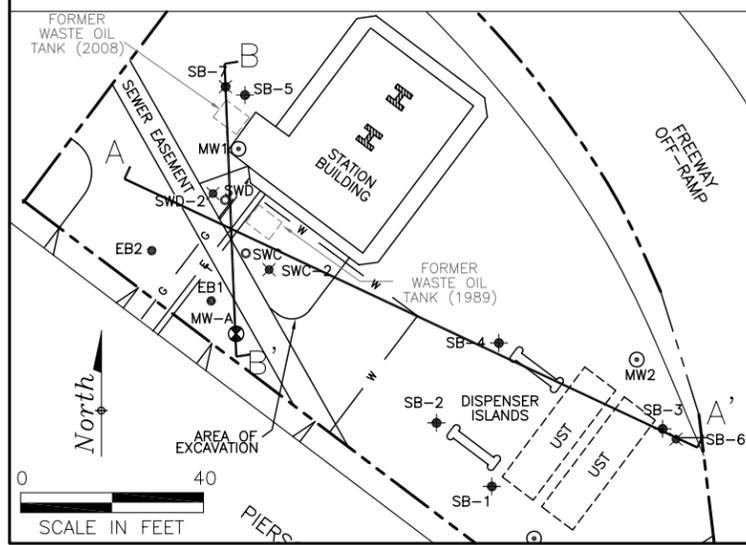
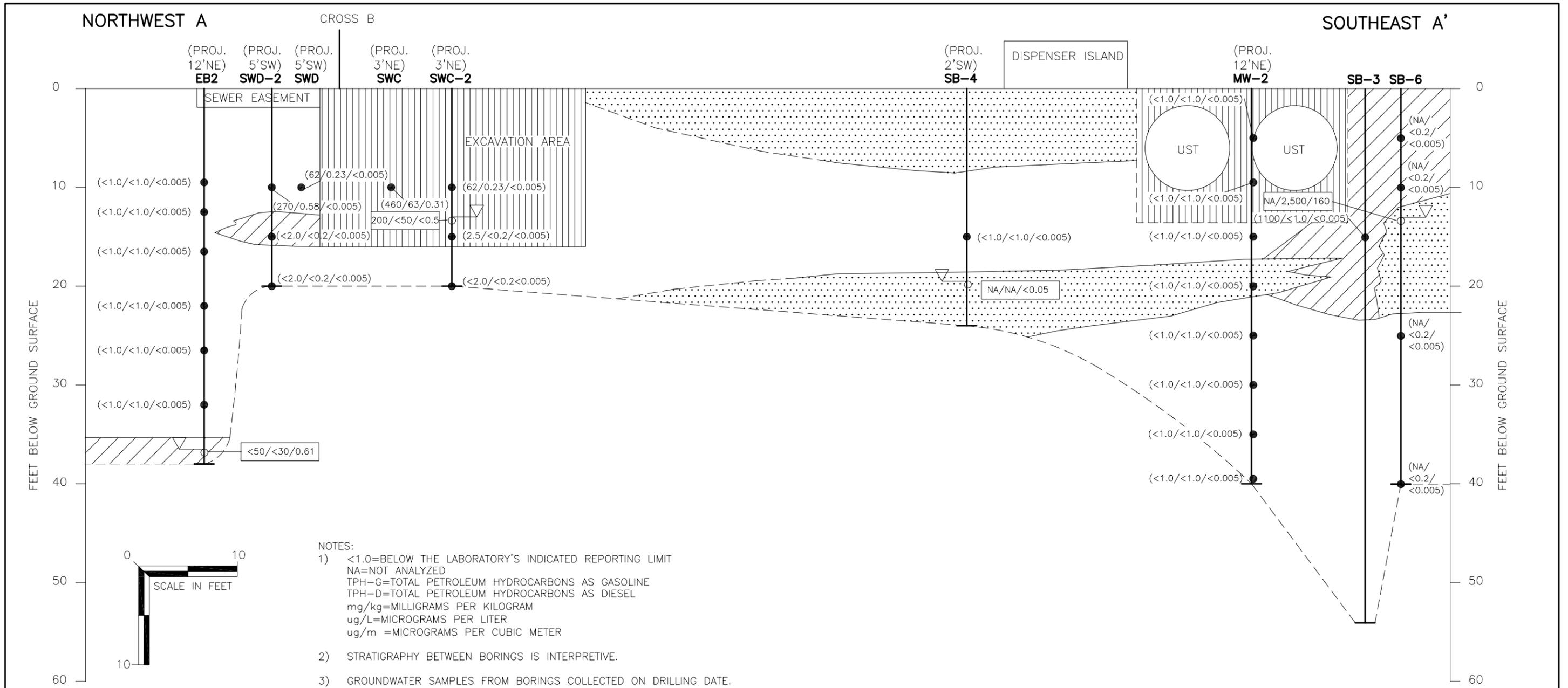
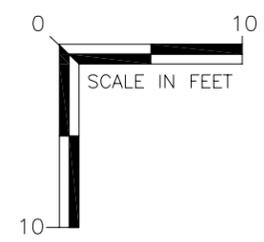
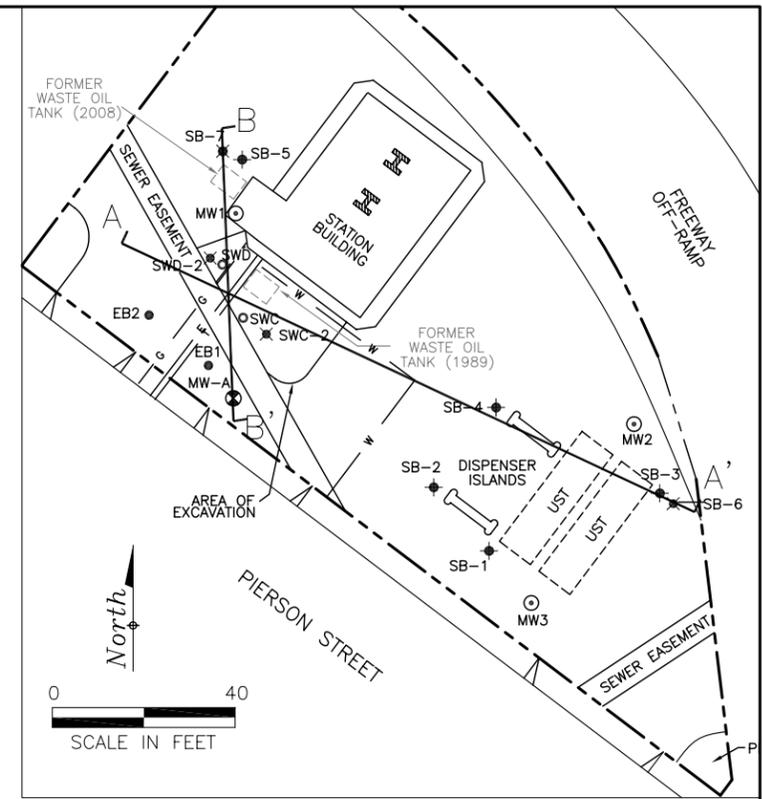
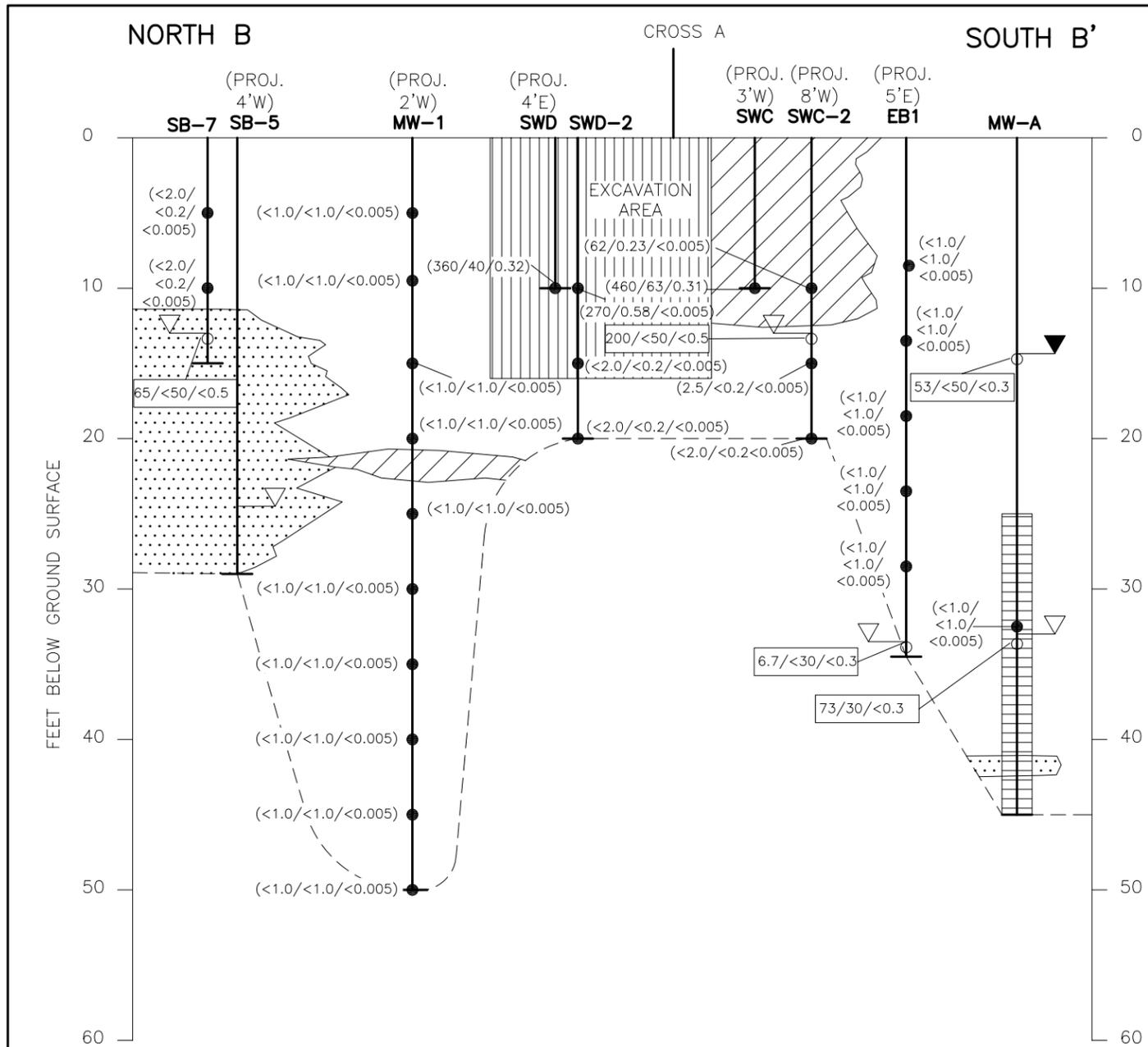


FIGURE 4
GEOLOGIC CROSS SECTION A-A'
CONOCOPHILLIPS STATION NO. 5781
3535 PIERSON STREET
OAKLAND, CALIFORNIA

PROJECT NO. C105781	PREPARED BY NP	DRAWN BY DD/JH
DATE 04/30/10	REVIEWED BY LH	FILE NAME 5781-Site

Figure 5 – Geologic Cross Section B-B'



LEGEND

- MW-A BORING/MONITORING WELL NAME
- SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPH-D, TPH-G, BENZENE (mg/kg)
- DEPTH TO STATIC GROUNDWATER
- GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPH-D, TPH-G, BENZENE (ug/L) (SAMPLED ON 3/27/09)
- WELL SCREEN
- DEPTH TO FIRST ENCOUNTERED GROUNDWATER DURING DRILLING
- LOW PERMEABILITY (CLAY, SILT)
- MEDIUM PERMEABILITY (SAND, GRAVEL W/ CLAY, SILT)
- HIGH PERMEABILITY
- ARTIFICIAL FILL
- APPROXIMATE STRATIGRAPHIC BOUNDARY

- NOTES:
- 1) <1.0=BELOW THE LABORATORY'S INDICATED REPORTING LIMIT
 NA=NOT ANALYZED
 TPH-G=TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 TPH-D=TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 mg/kg=MILLIGRAMS PER KILOGRAM
 ug/L=MICROGRAMS PER LITER
 ug/m =MICROGRAMS PER CUBIC METER
 - 2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.
 - 3) GROUNDWATER SAMPLES FROM BORINGS COLLECTED ON DRILLING DATE.

FIGURE 5
GEOLOGIC CROSS SECTION B-B'
CONOCOPHILLIPS STATION NO. 5781
3535 PIERSON STREET
OAKLAND, CALIFORNIA

PROJECT NO. C105781	PREPARED BY NP	DRAWN BY DD/JH	
DATE 04/30/10	REVIEWED BY LH	FILE NAME 5781-Site	

Figure 6 – Monitoring Well Construction Diagram

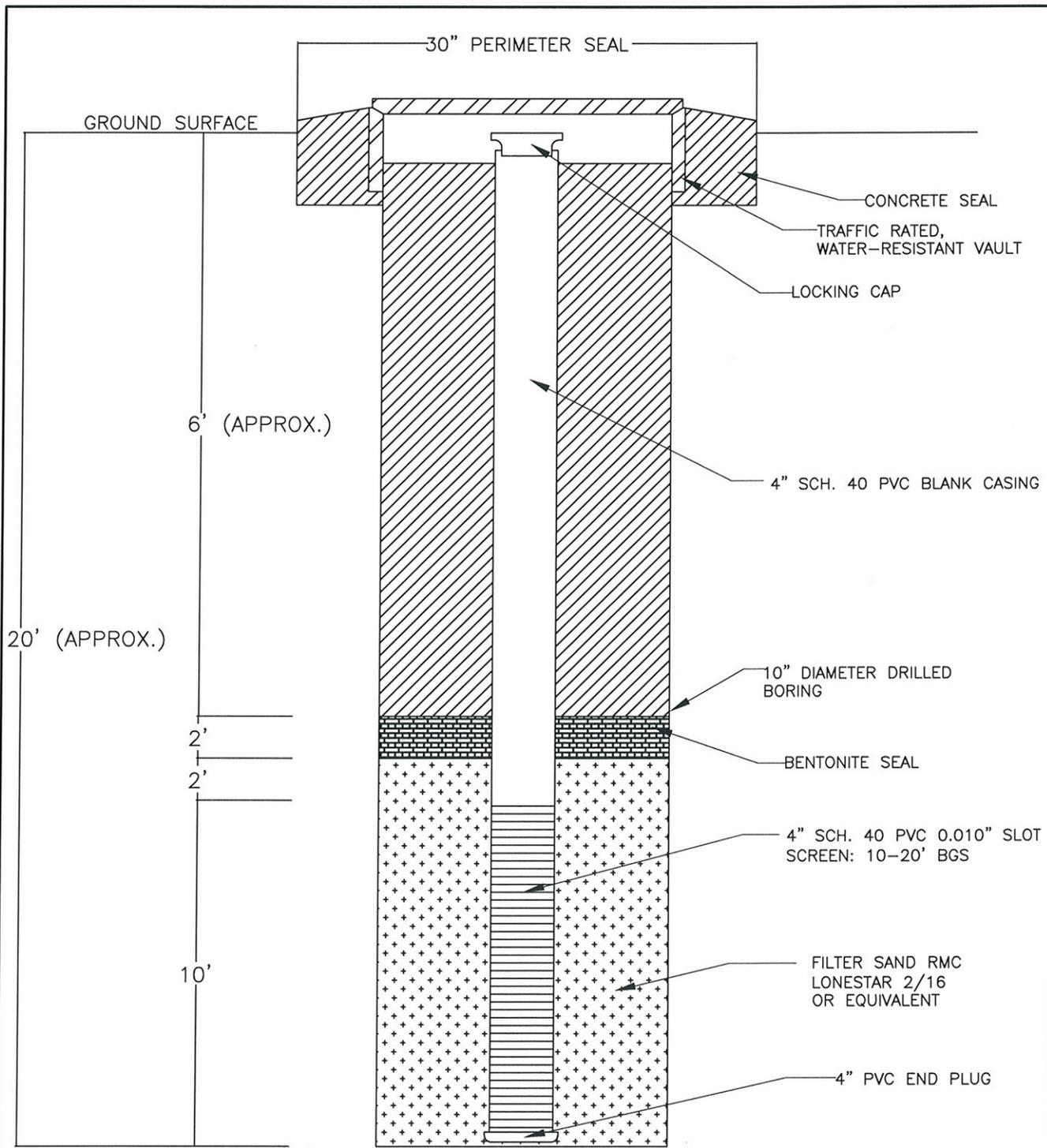


FIGURE 6
PROPOSED GROUNDWATER MONITORING
WELL CONSTRUCTION DETAIL
CONOCOPHILLIPS STATION NO. 5781
3535 PIERSON STREET
OAKLAND, CALIFORNIA

PROJECT NO. C105781	PREPARED BY AB	DRAWN BY DD/JH	
DATE 05/06/10	REVIEWED BY LH	FILE NAME 5781-Site	

Tables

Table 1 - Soil Analytical Data

**Table 1
Soil Analytical Data**

76 Service Station No. 5781
3535 Pierson Street, Oakland, California

Sample Point	Depth (feet below grade)	Date Sampled	Sorbed Phase Hydrocarbon Concentrations (mg/kg)														
			TPH-G	TOG	TPH-D	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TBA	TAME	DIPE	ETBE	EDB	EDC	Ethanol
SWC-2	10	3/12/10	0.23	7,700	62	<0.005	<0.005	<0.005	0.025	<0.005	NA	NA	NA	NA	NA	NA	NA
SWC-2	15	3/12/10	<0.2	<50	2.5	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
SWC-2	20	3/12/10	<0.2	<50	<2.0	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
SWD-2	10	3/12/10	0.58	870	270	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
SWD-2	15	3/12/10	<0.2	<50	<2.0	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
SWD-2	20	3/12/10	<0.2	<50	<2.0	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
SB-6	5	3/12/10	<0.2	NA	NA	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1
SB-6	10	3/12/10	<0.2	NA	NA	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1
SB-6	25	3/12/10	<0.2	NA	NA	<0.005	<0.005	<0.005	<0.01	0.02	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1
SB-6	40	3/12/10	<0.2	NA	NA	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1
SB-7	5	3/12/10	<0.2	<50	<2.0	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
SB-7	10	3/12/10	<0.2	<50	<2.0	<0.005	<0.005	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA
ESL	<10	--	83	None	83	0.044	2.9	2.3	2.3	.023	.075	None	None	None	0.00033	0.0045	None
	10 to 40	--	83	None	83	0.044	2.9	3.3	2.3	.023	.075	None	None	None	0.00033	0.0045	None

Definitions:

mg/kg Milligrams per Kiogram
 ND< Not detected above that laboratory reporting limit
 MTBE Methyl tert-butyl ether by method 8260B
 TBA Tert-butyl alcohol by method 8260B
 TPH-G Total petroleum hydrocarbons as gasoline (reported as GRO (C6-C12) by method 8260B
 TPH-D Total Petroleum Hydrocarbons as diesel
 ESL Environmental Screening Level - Leaching to groundwater; groundwater is current or potential source of drinking water.
 NA Not Analyzed
 TOG Total Oil and Grease by EPA Method 1664
 TAME teriary amyl methyl ether by EPA Method 8260B
 ETBE ethyl tertiary butyl ether
 DIPE di-isopropyl ether
 EDB 1, 2 Dibromoethane
 EDC 1, 2 Dichromoethane

Table 1a - Composite Soil Sample Analytical Data

Table 2 - Groundwater Analytical Data

**Table 2
Groundwater Analytical Data**

76 Service Station No. 5781
3535 Pierson Street, Oakland, California

Sample Point	Date Sampled	Dissolved Phase Hydrocarbon Concentrations (µg/l)															Dissolved Lead
		TPH-G	TOG	TPH-D	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TBA	TAME	DIPE	ETBE	EDB	EDC	Ethanol	
SWC-2	3/12/10	<50	<5	200	<0.5	<0.5	<0.5	<1.0	<0.5	NA	<50						
SB-6	3/12/10	2,500	NA	NA	160	310	110	690	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1200	NA
SB-7	3/12/10	<50	<5	65	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<50						
ESL	--	100	100	None	1	40	30	20	5.0	None	None	None	None	0.05	0.5	None	2.5

Definitions:

(µg/l)	Micrograms per Liter
ND<	Not detected above that laboratory reporting limit
EDB	1,2-Dibromoethane by EPA Method 8260B
EDC	1,2-Dichloroethane by EPA Method 8260B
TAME	tertiary amyl methyl ether by EPA Method 8260B
DIPE	di-isopropyl ether
ETBE	ethyl tertiary butyl ether
MTBE	Methyl tert-butyl ether by method 8260B
TBA	Tert-butyl alcohol by method 8260B
TPH-G	Total petroleum hydrocarbons as gasoline (reported as GRO (C6-C12) by method 8015
TPH-D	Total Petroleum Hydrocarbons as diesel by EPA method 8015M with silica gel cleanup
TOG	Total oil and grease by EPA method 1664
NA	Not Analyzed
ESL	Environmental Screening Level; Usable drinking water

Attachments

Attachment A – ACEH Letter Dated December 21, 2009

From: Jakub, Barbara, Env. Health
To: "Grayson, Terry L (DXT Services)";
Lia Holden;
Subject: RO253, 3535 Pierson St., work plan
Date: Monday, December 21, 2009 4:15:11 PM

Dear Mr. Grayson and Ms. Holden,

I have completed the resolution review for the site case. Alameda County Environmental Health is unable to send out directive letters until we complete all of our resolution reviews. However, the September 28, 2009 Work Plan for Additional Assessment appears to be sufficient. If you wish to proceed with work, we recommend that you ensure that in addition to the proposed sampling, you include analysis for all five oxygenates not just MTBE, the lead scavengers [ethylene dibromide (EDB), ethylene dichloride (EDC)] and ethanol (adjacent to the current fuel USTs only). Also, boring SB-6 appears to be located upgradient of SB-3 based on surface grade. Please consider placing this boring downgradient of SB-3 since soil results from MW-2 are below the detection limit.

Also, as I reviewed the site it appears that some over-excavation may have occurred when the USTs were removed. However, I could not locate any manifests for this soil or a report of the volume removed. If you have additional reports or information for this work, that is not in our case files please upload it to the ACEH ftp site.

Regards,

Barbara Jakub, P.G.
Alameda County Environmental Health
(510) 639-1287 (direct)
(510) 337-9335 (fax)
barbara.jakub@acgov.org

Online case files are available at the website below
<http://www.acgov.org/aceh/lop/resources.htm>

Attachment B - Historical Soil and Grab Groundwater Data

HISTORICAL SOIL ANALYTICAL DATA

ConocoPhillips Station No. 5781
3535 Pierson Street, Oakland, CA

Sample ID	Date	Sample Depth (feet)	TPH-O (mg/kg)	TPH-G (mg/kg)	TOG (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Oxygenates (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	ETHANOL (mg/kg)	OTHER (mg/kg)
UST and product piping samples														
A1	12/14/1989	12.5	NA	3.5	NA	<0.05	<0.1	<0.1	<0.1	NA	NA	NA	NA	
B1	12/14/1989	12.5	NA	<1.0	NA	<0.05	<0.1	<0.1	<0.1	NA	NA	NA	NA	
AZ/B2	12/14/1989	12.5	NA	5.8	NA	0.1	<0.1	<0.1	<0.1	NA	NA	NA	NA	
SW1	12/14/1989	10.5	NA	15	NA	<0.05	<0.1	<0.1	<0.1	NA	NA	NA	NA	
SW2	12/14/1989	10.5	NA	46	NA	0.65	<0.1	<0.1	<0.1	NA	NA	NA	NA	
P1	12/14/1989	5.5	NA	<1.0	NA	<0.05	<0.1	<0.1	<0.1	NA	NA	NA	NA	
P2	12/14/1989	6	NA	<1.0	NA	<0.05	<0.1	<0.1	<0.1	NA	NA	NA	NA	
HW1	12/14/1989	6	8,300	670	48,000	5.4	15	2.3	17	NA	NA	NA	NA	1,2-DCB (10), PCE (77), 1,1,1-TCA (15) Cr (8.3), Pb (340), Zn (70)
Over-excavation samples														
WQ (16)	2/22/1990	16	74	15	910	0.66	<0.10	0.10	2	NA	NA	NA	NA	All HVOCs below detection limit
SWA	2/22/1990	9	1,400	220	17,000	2.3	2.1	7.3	23	NA	NA	NA	NA	PCE (160)
SWB	2/22/1990	10	<1	2	<50	<0.05	<0.10	0.1	0.1	NA	NA	NA	NA	PCE (56); 1,1,1-TCA (5.8)
SWC	2/22/1990	10	460	63	4,100	0.31	0.33	1.3	2.2	NA	NA	NA	NA	PCE (56)
SWD	2/22/1990	10	360	40	6,400	0.32	<0.10	0.49	4	NA	NA	NA	NA	PCE (40), 1,1,1-TCA (5.8)
Soil borings														
MW1	4/9/1990	5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	9.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	15	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	20	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	25	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	30	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	35	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	40	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	45	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW1	4/9/1990	50	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
MW2	4/9/1990	5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	9.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	15	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	20	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	25	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	30	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	35	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW2	4/9/1990	39.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	10	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	15	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	20	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	25	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	30	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	35	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
MW3	4/10/1990	40	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
EB1	7/5/1990	8.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB1	7/5/1990	13.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB1	7/5/1990	18.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB1	7/5/1990	23.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB1	7/5/1990	28.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	1,1,1-TCA (6.2)
EB2	7/6/1990	9.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB2	7/6/1990	12.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB2	7/6/1990	16.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB2	7/6/1990	22	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB2	7/6/1990	26.5	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
EB2	7/6/1990	32.0	<1.0	<1.0	ND	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
SW-A	12/11/1990	32.5	<1.0	<1.0	36	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	All HVOCs below detection limit
SB-1	10/30/2003	35.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.005	<0.1	
SB-2	10/30/2003	15.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.005	<0.1	
SB-2	10/30/2003	50.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.005	<0.1	
SB-3	10/30/2003	15.0	1,100	<1.0	NA	<0.005	<0.005	16	50	ND	<0.005	<0.005	<0.1	
SB-3	10/30/2003	45.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.005	<0.1	
SB-4	10/30/2003	15.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.005	<0.1	
SB-5	10/30/2003	20.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	

TPH-G = Total petroleum hydrocarbons as Gasoline Range Organics-C6-C12
 TPH-D = Total petroleum hydrocarbons as Diesel Range Organics
 TOG = Total oil and grease
 BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260E
 MTBE = Methyl tertiary butyl ether by EPA Method 8260B
 YBA = Tertiary butyl alcohol by EPA Method 8260B
 1,2,4 = 1,2,4-Trimethylbenzene
 DIPE = Diisopropyl ether by EPA Method 8260B
 TAME = Tertiary amyl methyl ether by EPA Method 8260B
 1,2-DCA = 1,2-dichloroethane (also known as ethylene dichloride) by EPA Method 8260E
 EDB = Ethylene dibromide (also known as 1,2-dibromoethane) by EPA Method 8260E
 1,1-DCB = 1,1-dichlorobromide
 PCE = tetrachloroethene
 1,1,1-TCE = 1,1,1-trichloroethene
 HVOCs = Halogenated volatile organic compounds by EPA Method 8010

NA = Not analyzed
 ND = Not detected (detection limit not given)

HISTORICAL GRAB GROUNDWATER ANALYTICAL DATA

ConocoPhillips Station No. 5781
3535 Pierson Street, Oakland, California

Sample ID	Date	TPPH (ug/l)	TPH-D (ug/l)	TPH-G (ug/l)	TOG (ug/l)	BENZENE (ug/l)	TOLUENE (ug/l)	Ethyl- Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	TBA (ug/l)	ETBE (ug/l)	TAME (ug/l)	DIPE (ug/l)	1,2-DCA (ug/l)	EDB (ug/l)	ETHANOL (ug/l)
EB1	7/6/90	NA	6.7	<30	ND	<0.3	1.5	<0.3	1.0	NA	NA	NA	NA	NA	NA	NA	NA
EB2	7/6/90	NA	<50	<30	ND	0.61	1.5	<0.3	1.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-A	12/18/90	NA	73	<30	ND	<0.3	<0.3	<0.3	<0.3	NA	NA	NA	NA	NA	NA	NA	NA
SB-1	10/30/03	<50	NA	NA	NA	<0.05	<0.05	<0.05	<1.0	<2	<100	<2	<2	<2	<2	<2	<500
SB-4	10/30/03	<50	NA	NA	NA	<0.05	<0.05	<0.05	<1.0	<2	<100	<2	<2	<2	<2	<2	<500
SB-5	10/30/03	<50	NA	NA	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TPPH = Total purgeable petroleum hydrocarbons
 TPH-D = Total petroleum hydrocarbons as Diesel Range Organics
 TPH-G = Total petroleum hydrocarbons as Gasoline Range Organics-C6-C12
 TOG = Total oil and grease by method 1664
 BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
 MTBE = Methyl tertiary butyl ether by EPA Method 8260B
 TBA = Tertiary butyl alcohol by EPA Method 8260B
 DIPE = Di-isopropyl ether by EPA Method 8260B
 TAME = Tertiary amyl methyl ether by EPA Method 8260B
 1,2-DCA : 1,2-dichloroethane (also known as ethylene dichloride) by EPA Method 8260B
 EDB = Ethylene dibromide (also known as 1,2-dibromoethane) by EPA Method 8260B
 Ethanol analyzed by EPA Method 8260B

ug/l = micrograms per liter
 ND = not detected above the laboratory detection limit
 NA = not applicable / not analyzed
Bold = detected compound concentration
 EPA = Environmental Protection Agency

Attachment C – ACPWA Permits

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 02/05/2010 By jamesy

Permit Numbers: W2010-0078
Permits Valid from 02/22/2010 to 02/23/2010

Application Id: 1265145132167
Site Location: 3535 Pierson St, Oakland, CA
Project Start Date: 02/22/2010
Assigned Inspector: Contact Ron Smalley at (510) 670-5407 or ronaldws@acpwa.org

City of Project Site:Oakland
Completion Date:02/23/2010

Applicant: Delta - Nadine Periat
312 Piercy Rd., San Jose, CA 95138
Property Owner: United Brothers Enterprise Inc.
3535 Pierson St, Oakland, CA 94619
Client: ** same as Property Owner **

Phone: 408-826-1879
Phone: 510-437-9837

	Total Due:	\$265.00
Receipt Number: WR2010-0035	Total Amount Paid:	\$265.00
Payer Name : Delta	Paid By: CHECK	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Geotechnical Study/CPT's - 4 Boreholes
Driller: Gregg - Lic #: 485165 - Method: auger

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0078	02/05/2010	05/23/2010	4	6.00 in.	45.00 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.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
5. Applicant shall contact Ron Smalley for an inspection time at 510-670-5407 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.

Alameda County Public Works Agency - Water Resources Well Permit

6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

7. 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.

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

Attachment D - Boring Logs

Delta

Consultants

Project No: c105781031
 Logged By: Nadine Periat
 Driller: Gregg Drilling and Testing
 Drilling Method: Hollow Stem Auger
 Sampling Method: Split Spoon
 Casing Type: NA
 Slot Size: NA
 Gravel Pack: NA

Client: ConocoPhillips
 Location: 3535 Pierson Street, Oakland, CA
 Date Drilled: March 12, 2010
 Hole Diameter: 6"
 Hole Depth: 40 feet
 Well Diameter: NA
 Well Depth: NA
 Casing Stickup: NA

Well/ Boring ID: SB-6
 Page 2 of 2

Location Map
 See Site Map

Well Completion		Static Water Level	Elevation			Northing		Easting	LITHOLOGY / DESCRIPTION
Backfill	Casing		Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Recovery Interval	Soil Type	
			Wet	1.6	7 8 17	23 24 25		Sandy Lean Clay , tan, 30% well graded sand, low plasticity, very tough, some gray root holes with roots, very stiff	
			Wet	0.9	9 12 18	29 30		Lean Clay with Sand , tan, 20% fine sand, low plasticity, trace black organic matter in ~1mm spheres, very stiff.	
			Wet	0.9	11 13 16	34 35		As above, trace fine gravel	
			Wet	2.1	8 10 10	39 40		Lean Clay , tan, 10% fine sand, trace fine gravel, low plasticity, very stiff.	
						40		Bottom of Boring at 40 Feet	
						41			
						42			
						43			
						44			

Delta

Consultants

Project No: c105781031
 Logged By: Nadine Periat
 Driller: Gregg Drilling and Testing
 Drilling Method: Hollow Stem Auger
 Sampling Method: Split Spoon
 Casing Type: NA
 Slot Size: NA
 Gravel Pack: NA

Client: ConocoPhillips
 Location: 3535 Pierson Street, Oakland, CA
 Date Drilled: March 12, 2010
 Hole Diameter: 6"
 Hole Depth: 15 feet
 Well Diameter: NA
 Well Depth: NA
 Casing Stickup: NA

Well/ Boring ID: SB-7
 Page 1 of 1

Location Map
 See Site Map

▽ : First encountered water

Well Completion		Static Water Level	Elevation			Northing		Easting		Soil Type	LITHOLOGY / DESCRIPTION
Backfill	Casing		Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Recovery	Interval			
			Moist	0.4	Air Knife to 5 feet	1			CL	Sandy Lean Clay, mottled tan and orange, low plasticity, 45% fine to medium sand.	
						2					
						3					
						4					
						5					As above
						6				CL	Lean Clay with sand, brown, 20-25% fine to coarse sand, medium plasticity.
						7					
						8					
						9				CL	Lean Clay, gray, 10-15% well graded sand, low plasticity, inch long chunks of fractured quartzite.
			Moist	0.5		10					
						11					
						12					
		▽				13					
			Wet	0.4		14				SP-SC	Poorly Graded Sand with Clay, tan, no plasticity, sand is medium.
						15					Bottom of boring at 15 feet
					16						
					17						
					18						
					19						
					20						
					21						
					22						

Delta

Consultants

Project No: c105781031
 Logged By: Nadine Periat
 Driller: Gregg Drilling and Testing
 Drilling Method: Hollow Stem Auger
 Sampling Method: Split Spoon
 Casing Type: NA
 Slot Size: NA
 Gravel Pack: NA

Client: ConocoPhillips
 Location: 3535 Pierson Street, Oakland, CA
 Date Drilled: March 12, 2010
 Hole Diameter: 6"
 Hole Depth: 40 feet
 Well Diameter: NA
 Well Depth: NA
 Casing Stickup: NA

Well/ Boring ID: SB-6
 Page 1 of 2

Location Map
 See Site Map

▽ : First encountered water

Elevation	Northing	Easting
-----------	----------	---------

Well Completion	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill Casing					1		SC	Clayey Sand, tan, 15-20% clay, 80-85% sand, low plasticity, sand is medium to coarse
					2			
					3			
					4			As above with fractured granitic cobbles approximately 4" in diameter. Red oxidation present in fracture planes.
		Moist	0.6	1	5		SC	Clayey Sand with Gravel, tan, 15-20% clay, 15-20% gravel, 60-70% sand, low plasticity. Sand is well graded, gravel is angular and medium sized, loose.
				2	6			
				3	7			
		Moist	0.9	3	9		SC	Clayey Sand, tan, 35% clay, 65% sand, low plasticity, sand is well graded, very loose.
				2	10			
				2	11			
	▽	Wet	1.3	9	13			
				5	14		GP	Poorly Graded Gravel, tan/green, no plasticity, <5% fines. Rock fragments are green quartzite, approximately 3 inches in diameter, loose. Rocks stuck in sampler, poor recovery.
				5	15			
					16			
					17			
					18			
				1	19			No Recovery, loose density
				2	20			
				4	21			
					22			

Delta Consultants

Project No: c105781031
 Logged By: Nadine Periat
 Driller: Gregg Drilling and Testing
 Drilling Method: Hollow Stem Auger
 Sampling Method: Split Spoon
 Casing Type: NA
 Slot Size: NA
 Gravel Pack: NA

Client: ConocoPhillips
 Location: 3535 Pierson Street, Oakland, CA
 Date Drilled: March 12, 2010
 Hole Diameter: 6"
 Hole Depth: 40 feet
 Well Diameter: NA
 Well Depth: NA
 Casing Stickup: NA

Well/ Boring ID: SB-6
 Page 2 of 2

Location Map
 See Site Map

Well Completion		Static Water Level	Elevation			Northing		Easting		Soil Type	LITHOLOGY / DESCRIPTION
Backfill	Casing		Moisture Content	PID Reading (ppm)	Penetration (blows/6')	Depth (feet)	Recovery	Interval			
			Wet	1.6	7 8 17	23 24 25	↑ ↓				Sandy Lean Clay , tan, 30% well graded sand, 70% clay, low plasticity, very tough, some gray root holes with roots, very stiff
			Wet	0.9	9 12 18	29 30	↑ ↓				Lean Clay with Sand , tan, 20% fine sand, 80% clay, low plasticity, trace black organic matter in ~1mm spheres, very stiff.
			Wet	0.9	11 13 16	34 35	↑ ↓				As above, trace fine gravel
			Wet	2.1	8 10 10	39	↑ ↓				Lean Clay , tan, 10% fine sand, 90% clay, trace fine gravel, low plasticity, very stiff.
						40					Bottom of Boring at 40 Feet
						41					
						42					
						43					
						44					

Delta Consultants

Project No: c105781031
 Logged By: Nadine Periat
 Driller: Gregg Drilling and Testing
 Drilling Method: Hollow Stem Auger
 Sampling Method: Split Spoon
 Casing Type: NA
 Slot Size: NA
 Gravel Pack: NA

Client: ConocoPhillips
 Location: 3535 Pierson Street, Oakland, CA
 Date Drilled: March 12, 2010
 Hole Diameter: 6"
 Hole Depth: 15 feet
 Well Diameter: NA
 Well Depth: NA
 Casing Stickup: NA

Well/ Boring ID: SB-7
 Page 1 of 1

Location Map
 See Site Map

▽ : First encountered water

Elevation Northing Easting

Well Completion Backfill Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
				Air Knife to 5 feet 	1		CL	Sandy Lean Clay , mottled tan and orange, low plasticity, 45% fine to medium sand, 55% clay.
					2			
					3			
					4			
		Moist	0.4		5			As above
					6		CL	Lean Clay with sand , brown, 20-25% fine to coarse sand, 80-85% clay, medium plasticity.
					7			
					8			
					9		CL	Lean Clay , gray, 10-15% well graded sand, 85-90% clay, low plasticity, inch long chunks of fractured quartzite.
		Moist	0.5		10			
					11			
					12			
	▽				13			
		Wet	0.4		14		SP-SC	Poorly Graded Sand with Clay , tan, no plasticity, sand is medium.
					15			Bottom of boring at 15 feet
				16				
				17				
				18				
				19				
				20				
				21				
				22				

Delta Consultants

Project No: c105781031

Client: ConocoPhillips

Well/ Boring ID: SWC-2

Logged By: Nadine Periat

Location: 3535 Pierson Street, Oakland, CA

Page 1 of 1

Driller: Gregg Drilling and Testing

Date Drilled: March 12, 2010

Location Map

Drilling Method: Hollow Stem Auger

Hole Diameter: 6"

See Site Map

Sampling Method: Split Spoon

Hole Depth: 20 feet

▽ : First encountered water

Casing Type: NA

Well Diameter: NA

Slot Size: NA

Well Depth: NA

Gravel Pack: NA

Casing Stickup: NA

Elevation

Northing

Easting

Well Completion	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill Casing		Moist		Air Knife/ Hand Auger to 10 feet	1		SC	Clayey Sand with Gravel, brown, 15-20% clay, 50-55% well graded sand, 30% fine to medium gravel, no plasticity, gravel is subrounded. Suspected artificial fill.
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
		Wet			11			As above
	▽	Wet	0.5		12			
		Wet	0.4		14		CL	Lean Clay with Sand and Gravel, mottled brown/tan, 20% well graded sand, 15% fine gravel, 65% clay, low plasticity.
		Wet	0.1		19			As above, fracture planes present when clay core is broken open. Black oxidation on fracture planes.
					20			Bottom of Boring at 20 ft
					21			
					22			

Attachment E - Laboratory Analytical Reports



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Date of Report: 04/01/2010

Jan Wagoner

Delta Environmental Consultants, Inc.

11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

RE: 5781
BC Work Order: 1003609
Invoice ID: B077986

Enclosed are the results of analyses for samples received by the laboratory on 3/16/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	Sampling Date:	Sample Depth:	Sample Matrix:	Delivery Work Order:
1003609-01	COC Number:	---		03/16/2010 08:00	03/12/2010 11:10	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SWC-2
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SWC-2@10						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:
1003609-02	COC Number:	---		03/16/2010 08:00	03/12/2010 11:29	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SWC-2
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SWC-2@15						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:
1003609-03	COC Number:	---		03/16/2010 08:00	03/12/2010 11:50	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SWC-2
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SWC-2@20						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:
1003609-04	COC Number:	---		03/16/2010 08:00	03/12/2010 12:24	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SWD-2
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SWD-2@10						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	Sampling Date:	Sample Depth:	Sample Matrix:	Delivery Work Order:
1003609-05	COC Number:	---		03/16/2010 08:00	03/12/2010 12:34	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SWD-2
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SWD-2@15						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:
1003609-06	COC Number:	---		03/16/2010 08:00	03/12/2010 12:45	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SWD-2
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SWD-2@20						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:
1003609-07	COC Number:	---		03/16/2010 08:00	03/12/2010 02:05	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SB-6
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SB-6@5						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:
1003609-08	COC Number:	---		03/16/2010 08:00	03/12/2010 02:10	---	Solids	Global ID: T0600101467
	Project Number:	5781						Location ID (FieldPoint): SB-6
	Sampling Location:	---						Matrix: SO
	Sampling Point:	SB-6@10						Sample QC Type (SACode): CS
	Sampled By:	DECR						Cooler ID:



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information					
1003609-09	COC Number:	---		Receive Date:	03/16/2010 08:00	Delivery Work Order:
	Project Number:	5781		Sampling Date:	03/12/2010 02:36	Global ID: T0600101467
	Sampling Location:	---		Sample Depth:	---	Location ID (FieldPoint): SB-6
	Sampling Point:	SB-6@25		Sample Matrix:	Solids	Matrix: SO
	Sampled By:	DECR				Sample QC Type (SACode): CS
						Cooler ID:
1003609-12	COC Number:	---		Receive Date:	03/16/2010 08:00	Delivery Work Order:
	Project Number:	5781		Sampling Date:	03/12/2010 03:10	Global ID: T0600101467
	Sampling Location:	---		Sample Depth:	---	Location ID (FieldPoint): SB-6
	Sampling Point:	SB-6@40		Sample Matrix:	Solids	Matrix: SO
	Sampled By:	DECR				Sample QC Type (SACode): CS
						Cooler ID:
1003609-13	COC Number:	---		Receive Date:	03/16/2010 08:00	Delivery Work Order:
	Project Number:	5781		Sampling Date:	03/12/2010 09:55	Global ID: T0600101467
	Sampling Location:	---		Sample Depth:	---	Location ID (FieldPoint): SB-7
	Sampling Point:	SB-7@5		Sample Matrix:	Solids	Matrix: SO
	Sampled By:	DECR				Sample QC Type (SACode): CS
						Cooler ID:
1003609-14	COC Number:	---		Receive Date:	03/16/2010 08:00	Delivery Work Order:
	Project Number:	5781		Sampling Date:	03/12/2010 10:06	Global ID: T0600101467
	Sampling Location:	---		Sample Depth:	---	Location ID (FieldPoint): SB-7
	Sampling Point:	SB-7@10		Sample Matrix:	Solids	Matrix: SO
	Sampled By:	DECR				Sample QC Type (SACode): CS
						Cooler ID:



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information					
1003609-15	COC Number:	---		Receive Date:	03/16/2010 08:00	Delivery Work Order:
	Project Number:	5781		Sampling Date:	03/12/2010 03:45	Global ID: T0600101467
	Sampling Location:	---		Sample Depth:	---	Location ID (FieldPoint): COMP ABCD
	Sampling Point:	COMP ABCD		Sample Matrix:	Solids	Matrix: SO
	Sampled By:	DECR				Sample QC Type (SACode): CS Cooler ID:
1003609-16	COC Number:	---		Receive Date:	03/16/2010 08:00	Metal Analysis: 2-Lab Filtered and
	Project Number:	5781		Sampling Date:	03/12/2010 11:30	Acidified
	Sampling Location:	---		Sample Depth:	---	Delivery Work Order:
	Sampling Point:	SWC-2		Sample Matrix:	Water	Global ID: T0600101467
	Sampled By:	DECR				Location ID (FieldPoint): SWC-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1003609-17	COC Number:	---		Receive Date:	03/16/2010 08:00	Delivery Work Order:
	Project Number:	5781		Sampling Date:	03/12/2010 02:16	Global ID: T0600101467
	Sampling Location:	---		Sample Depth:	---	Location ID (FieldPoint): SB-6
	Sampling Point:	SB-6		Sample Matrix:	Water	Matrix: W
	Sampled By:	DECR				Sample QC Type (SACode): CS Cooler ID:
1003609-18	COC Number:	---		Receive Date:	03/16/2010 08:00	Metal Analysis: 2-Lab Filtered and
	Project Number:	5781		Sampling Date:	03/12/2010 10:25	Acidified
	Sampling Location:	---		Sample Depth:	---	Delivery Work Order:
	Sampling Point:	SB-7		Sample Matrix:	Water	Global ID: T0600101467
	Sampled By:	DECR				Location ID (FieldPoint): SB-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1003609-01		Client Sample Name: 5781, SWC-2@10, 3/12/2010 11:10:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	0.025	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	0.23	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	96.4	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	86.5	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	74.7	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 02:57	JSK	MS-V3	1	BTC1256		

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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-01	Client Sample Name: 5781, SWC-2@10, 3/12/2010 11:10:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	62	mg/kg	9.9	Luft/TPHd	03/17/10	03/19/10 16:50	MLR	GC-5	4.950	BTC1381	ND	
Tetracosane (Surrogate)	95.0	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/19/10 16:50	MLR	GC-5	4.950	BTC1381		

Delta Environmental Consultants, Inc. 11050 White Rock Rd, Suite 110 Rancho Cordova, CA 95670	Project: 5781 Project Number: 000010118553-00013 Project Manager: Jan Wagoner	Reported: 04/01/2010 10:28
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EPA Method 1664

BCL Sample ID: 1003609-01	Client Sample Name: 5781, SWC-2@10, 3/12/2010 11:10:00AM
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Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	7700	mg/kg	98	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	1.969	BTC1990	ND	A09



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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-02		Client Sample Name:	5781, SWC-2@15, 3/12/2010 11:29:00AM								
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	87.4	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	97.1	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	90.9	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 03:23	JSK	MS-V3	1	BTC1256		

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Reported: 04/01/2010 10:28

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-02	Client Sample Name: 5781, SWC-2@15, 3/12/2010 11:29:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	2.5	mg/kg	2.0	Luft/TPHd	03/17/10	03/19/10 13:46	MLR	GC-5	0.997	BTC1381	ND	
Tetracosane (Surrogate)	78.4	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/19/10 13:46	MLR	GC-5	0.997	BTC1381		

Delta Environmental Consultants, Inc. 11050 White Rock Rd, Suite 110 Rancho Cordova, CA 95670	Project: 5781 Project Number: 000010118553-00013 Project Manager: Jan Wagoner	Reported: 04/01/2010 10:28
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EPA Method 1664

BCL Sample ID: 1003609-02	Client Sample Name: 5781, SWC-2@15, 3/12/2010 11:29:00AM
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Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.986	BTC1990	ND	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-03		Client Sample Name:	5781, SWC-2@20, 3/12/2010 11:50:00AM								
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	90.8	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	96.6	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	99.2	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 03:48	JSK	MS-V3	1	BTC1256		



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Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-03		Client Sample Name: 5781, SWC-2@20, 3/12/2010 11:50:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	ND	mg/kg	2.0	Luft/TPHd	03/17/10	03/19/10 14:00	MLR	GC-5	0.984	BTC1381	ND	
Tetracosane (Surrogate)	73.6	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/19/10 14:00	MLR	GC-5	0.984	BTC1381		

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EPA Method 1664

BCL Sample ID: 1003609-03	Client Sample Name: 5781, SWC-2@20, 3/12/2010 11:50:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.986	BTC1990	ND	

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-04	Client Sample Name:	5781, SWD-2@10, 3/12/2010 12:24:00PM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	0.58	mg/kg	0.20	Luft-GC/MS	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	95.7	%	70 - 121 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	98.1	%	74 - 121 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 21:27	JSK	MS-V3	1	BTC1256		

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Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1003609-04	Client Sample Name:	5781, SWD-2@10, 3/12/2010 12:24:00PM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Diesel Range Organics (C12 - C24)	270	mg/kg	20	Luft/TPHd	03/17/10	03/19/10 17:18	MLR	GC-5	9.901	BTC1381	ND	A01	
Tetracosane (Surrogate)	0	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/19/10 17:18	MLR	GC-5	9.901	BTC1381		A01,A17	

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EPA Method 1664

BCL Sample ID: 1003609-04	Client Sample Name: 5781, SWD-2@10, 3/12/2010 12:24:00PM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	870	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.988	BTC1990	ND	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-05		Client Sample Name:	5781, SWD-2@15, 3/12/2010 12:34:00PM								
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	91.0	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	96.3	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	94.6	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 04:40	JSK	MS-V3	1	BTC1256		

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Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-05	Client Sample Name: 5781, SWD-2@15, 3/12/2010 12:34:00PM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	ND	mg/kg	2.0	Luft/TPHd	03/17/10	03/19/10 14:29	MLR	GC-5	0.993	BTC1381	ND	
Tetracosane (Surrogate)	78.0	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/19/10 14:29	MLR	GC-5	0.993	BTC1381		

Delta Environmental Consultants, Inc. 11050 White Rock Rd, Suite 110 Rancho Cordova, CA 95670	Project: 5781 Project Number: 000010118553-00013 Project Manager: Jan Wagoner	Reported: 04/01/2010 10:28
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EPA Method 1664

BCL Sample ID: 1003609-05	Client Sample Name: 5781, SWD-2@15, 3/12/2010 12:34:00PM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.990	BTC1990	ND	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-06	Client Sample Name:	5781, SWD-2@20, 3/12/2010 12:45:00PM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	94.7	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	97.0	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	94.1	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 05:06	JSK	MS-V3	1	BTC1256		



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Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1003609-06	Client Sample Name:	5781, SWD-2@20, 3/12/2010 12:45:00PM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	ND	mg/kg	2.0	Luft/TPHd	03/17/10	03/19/10 14:42	MLR	GC-5	1	BTC1381	ND	
Tetracosane (Surrogate)	78.4	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/19/10 14:42	MLR	GC-5	1	BTC1381		

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EPA Method 1664

BCL Sample ID: 1003609-06	Client Sample Name: 5781, SWD-2@20, 3/12/2010 12:45:00PM
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Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.990	BTC1990	ND	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-07	Client Sample Name:	5781, SB-6@5, 3/12/2010 2:05:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
1,2-Dibromoethane	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
t-Amyl Methyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
t-Butyl alcohol	ND	mg/kg	0.050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Diisopropyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Ethanol	ND	mg/kg	1.0	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Ethyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	95.5	%	70 - 121 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	95.7	%	74 - 121 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 21:53	JSK	MS-V3	1	BTC1256		



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-08	Client Sample Name:	5781, SB-6@10, 3/12/2010 2:10:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
1,2-Dibromoethane	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
t-Amyl Methyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
t-Butyl alcohol	ND	mg/kg	0.050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Diisopropyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Ethanol	ND	mg/kg	1.0	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Ethyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	107	%	74 - 121 (LCL - UCL)	EPA-8260	03/18/10	03/18/10 22:19	JSK	MS-V3	1	BTC1256		



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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-09	Client Sample Name:	5781, SB-6@25, 3/12/2010 2:36:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
1,2-Dibromoethane	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	0.020	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
t-Amyl Methyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
t-Butyl alcohol	ND	mg/kg	0.050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Diisopropyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Ethanol	ND	mg/kg	1.0	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Ethyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	97.0	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 06:24	JSK	MS-V3	1	BTC1256		



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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-12												
Client Sample Name:	5781, SB-6@40, 3/12/2010 3:10:00AM												
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
1,2-Dibromoethane	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
1,2-Dichloroethane	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
t-Amyl Methyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
t-Butyl alcohol	ND	mg/kg	0.050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Diisopropyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Ethanol	ND	mg/kg	1.0	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Ethyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256	ND		
1,2-Dichloroethane-d4 (Surrogate)	93.5	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256			
Toluene-d8 (Surrogate)	99.9	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256			
4-Bromofluorobenzene (Surrogate)	98.8	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 06:50	JSK	MS-V3	1	BTC1256			



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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1003609-13		Client Sample Name: 5781, SB-7@5, 3/12/2010 9:55:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	98.1	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	90.2	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 07:16	JSK	MS-V3	1	BTC1256		



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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-13		Client Sample Name: 5781, SB-7@5, 3/12/2010 9:55:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quas
Diesel Range Organics (C12 - C24)	ND	mg/kg	2.0	Luft/TPHd	03/17/10	03/31/10 14:12	MLR	GC-13A	0.947	BTC1381	ND	
Tetracosane (Surrogate)	85.0	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/31/10 14:12	MLR	GC-13A	0.947	BTC1381		

Delta Environmental Consultants, Inc. 11050 White Rock Rd, Suite 110 Rancho Cordova, CA 95670	Project: 5781 Project Number: 000010118553-00013 Project Manager: Jan Wagoner	Reported: 04/01/2010 10:28
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EPA Method 1664

BCL Sample ID:	1003609-13	Client Sample Name:	5781, SB-7@5, 3/12/2010 9:55:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.986	BTC1990	ND	

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Project: 5781
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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1003609-14		Client Sample Name: 5781, SB-7@10, 3/12/2010 10:06:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256	ND	
Ethylbenzene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256	ND	
Methyl t-butyl ether	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256	ND	
Toluene	ND	mg/kg	0.0050	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256	ND	
Total Xylenes	ND	mg/kg	0.010	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256	ND	
Total Purgeable Petroleum Hydrocarbons	ND	mg/kg	0.20	Luft-GC/MS	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256	ND	
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256		
Toluene-d8 (Surrogate)	98.2	%	81 - 117 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256		
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)	EPA-8260	03/17/10	03/18/10 07:42	JSK	MS-V3	1	BTC1256		

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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-14	Client Sample Name: 5781, SB-7@10, 3/12/2010 10:06:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	ND	mg/kg	2.0	Luft/TPHd	03/17/10	03/31/10 14:12	MLR	GC-13A	0.970	BTC1381	ND	
Tetracosane (Surrogate)	81.0	%	34 - 136 (LCL - UCL)	Luft/TPHd	03/17/10	03/31/10 14:12	MLR	GC-13A	0.970	BTC1381		

Delta Environmental Consultants, Inc. 11050 White Rock Rd, Suite 110 Rancho Cordova, CA 95670	Project: 5781 Project Number: 000010118553-00013 Project Manager: Jan Wagoner	Reported: 04/01/2010 10:28
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EPA Method 1664

BCL Sample ID: 1003609-14	Client Sample Name: 5781, SB-7@10, 3/12/2010 10:06:00AM
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Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/kg	50	EPA-1664HE M	03/29/10	03/29/10 13:00	JAK	MAN-SV	0.996	BTC1990	ND	



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Project: 5781
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Reported: 04/01/2010 10:28

PCB Analysis (EPA Method 8082)

BCL Sample ID: 1003609-15		Client Sample Name: 5781, COMP ABCD, 3/12/2010 3:45:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
PCB-1016	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
PCB-1221	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
PCB-1232	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
PCB-1242	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
PCB-1248	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
PCB-1254	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
PCB-1260	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
Total PCB's (Summation)	ND	mg/kg	0.010	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547	ND	
Decachlorobiphenyl (Surrogate)	66.0	%	40 - 136 (LCL - UCL)	EPA-8082	03/17/10	03/28/10 15:25	CC1	GC-6	0.997	BTC1547		V11



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Project: 5781
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Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1003609-15		Client Sample Name: 5781, COMP ABCD, 3/12/2010 3:45:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Benzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Bromobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Bromochloromethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Bromodichloromethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Bromoform	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Bromomethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
n-Butylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
sec-Butylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
tert-Butylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Carbon tetrachloride	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Chlorobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Chloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Chloroform	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Chloromethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
2-Chlorotoluene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
4-Chlorotoluene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Dibromochloromethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2-Dibromoethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Dibromomethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2-Dichlorobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,3-Dichlorobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,4-Dichlorobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1003609-15		Client Sample Name: 5781, COMP ABCD, 3/12/2010 3:45:00AM										
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Dichlorodifluoromethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
1,1-Dichloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
1,2-Dichloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
1,1-Dichloroethene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
cis-1,2-Dichloroethene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
trans-1,2-Dichloroethene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Total 1,2-Dichloroethene	ND	mg/kg	0.10	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
1,2-Dichloropropane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
1,3-Dichloropropane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
2,2-Dichloropropane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
1,1-Dichloropropene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
cis-1,3-Dichloropropene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
trans-1,3-Dichloropropene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Total 1,3-Dichloropropene	ND	mg/kg	0.10	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Ethylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Hexachlorobutadiene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Isopropylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
p-Isopropyltoluene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Methylene chloride	ND	mg/kg	0.10	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Methyl t-butyl ether	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Naphthalene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
n-Propylbenzene	0.090	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a
Styrene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1003609-15		Client Sample Name: 5781, COMP ABCD, 3/12/2010 3:45:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Tetrachloroethene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Toluene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2,3-Trichlorobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2,4-Trichlorobenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,1,1-Trichloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,1,2-Trichloroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Trichloroethene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Trichlorofluoromethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2,3-Trichloropropane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,2,4-Trimethylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
1,3,5-Trimethylbenzene	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Vinyl chloride	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Total Xylenes	ND	mg/kg	0.10	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
t-Amyl Methyl ether	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
t-Butyl alcohol	ND	mg/kg	0.50	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Diisopropyl ether	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Ethanol	ND	mg/kg	10	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Ethyl t-butyl ether	ND	mg/kg	0.050	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	
Total Purgeable Petroleum Hydrocarbons	3.7	mg/kg	2.0	Luft-GC/MS	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256	ND	A10,Z1a	



Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-15	Client Sample Name:	5781, COMP ABCD, 3/12/2010 3:45:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256		
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256		
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 06:20	JSK	MS-V3	10	BTC1256		



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Project: 5781
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Reported: 04/01/2010 10:28

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1003609-15		Client Sample Name: 5781, COMP ABCD, 3/12/2010 3:45:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
TPH - C8 - C9	ND	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C10 - C11	ND	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C12 - C14	ND	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C15 - C16	ND	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C17 - C18	ND	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C19 - C20	1.4	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C21 - C22	2.7	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C23 - C28	27	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C29 - C32	58	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C33 - C36	60	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C37 - C40	34	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C41 - C43	6.9	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH - C44 plus	ND	mg/kg	1.0	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
TPH (Total)	190	mg/kg	10	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315	ND		
Tetracosane (Surrogate)	56.7	%	20 - 145 (LCL - UCL)	EPA-8015CC	03/17/10	03/19/10 15:09	CKD	GC-13	0.984	BTC1315			

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Project: 5781
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Reported: 04/01/2010 10:28

Total Concentrations (TTLIC)

BCL Sample ID:	1003609-15		Client Sample Name:	5781, COMP ABCD, 3/12/2010 3:45:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Antimony	ND	mg/kg	2.8	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Arsenic	4.4	mg/kg	0.56	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Barium	130	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Beryllium	0.30	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Cadmium	1.0	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Chromium	32	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Cobalt	10	mg/kg	1.4	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Copper	37	mg/kg	0.56	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Lead	110	mg/kg	1.4	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Mercury	ND	mg/kg	0.13	EPA-7471A	03/18/10	03/19/10 11:38	MEV	CETAC1	0.791	BTC1327	ND		
Molybdenum	ND	mg/kg	1.4	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Nickel	37	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Selenium	ND	mg/kg	0.56	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Silver	ND	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Thallium	ND	mg/kg	2.8	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Vanadium	34	mg/kg	0.28	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		
Zinc	150	mg/kg	1.4	EPA-6010B	03/19/10	03/22/10 09:03	ARD	PE-OP1	0.565	BTC1392	ND		



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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-16	Client Sample Name:	5781, SWC-2, 3/12/2010 11:30:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366	ND	Z1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366	ND	Z1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366	ND	Z1
Toluene	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366	ND	Z1
Total Xylenes	ND	ug/L	1.0	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366	ND	Z1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366	ND	Z1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366		
Toluene-d8 (Surrogate)	96.6	%	88 - 110 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 03:55	KEA	MS-V12	1	BTC1366		



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Project: 5781
Project Number: 000010118553-00013
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Reported: 04/01/2010 10:28

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-16	Client Sample Name: 5781, SWC-2, 3/12/2010 11:30:00AM												
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Diesel Range Organics (C12 - C24)	200	ug/L	50	Luft/TPHd	03/18/10	03/19/10 16:22	MLR	GC-5	1	BTC1382	ND	M02	
Tetracosane (Surrogate)	73.0	%	28 - 139 (LCL - UCL)	Luft/TPHd	03/18/10	03/19/10 16:22	MLR	GC-5	1	BTC1382			

Delta Environmental Consultants, Inc. 11050 White Rock Rd, Suite 110 Rancho Cordova, CA 95670	Project: 5781 Project Number: 000010118553-00013 Project Manager: Jan Wagoner	Reported: 04/01/2010 10:28
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EPA Method 1664

BCL Sample ID:	1003609-16	Client Sample Name:	5781, SWC-2, 3/12/2010 11:30:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA-1664HE M	03/24/10	03/24/10 11:00	JAK	MAN-SV	1	BTC1823	ND	

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Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Water Analysis (Metals)

BCL Sample ID: 1003609-16	Client Sample Name: 5781, SWC-2, 3/12/2010 11:30:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Lead	ND	ug/L	50	EPA-6010B	03/17/10	03/18/10 10:09	ARD	PE-OP1	1	BTC1284	ND	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-17		Client Sample Name:	5781, SB-6, 3/12/2010 2:16:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Benzene	160	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
1,2-Dibromoethane	ND	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
1,2-Dichloroethane	ND	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Ethylbenzene	110	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Methyl t-butyl ether	ND	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Toluene	310	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Total Xylenes	690	ug/L	5.0	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
t-Amyl Methyl ether	ND	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
t-Butyl alcohol	ND	ug/L	50	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Diisopropyl ether	ND	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Ethanol	ND	ug/L	1200	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Ethyl t-butyl ether	ND	ug/L	2.5	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
Total Purgeable Petroleum Hydrocarbons	2500	ug/L	250	Luft-GC/MS	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368	ND	A01	
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368			
Toluene-d8 (Surrogate)	88.1	%	88 - 110 (LCL - UCL)	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368			
4-Bromofluorobenzene (Surrogate)	98.0	%	86 - 115 (LCL - UCL)	EPA-8260	03/22/10	03/22/10 19:33	KEA	MS-V12	5	BTC1368			

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1003609-18		Client Sample Name:	5781, SB-7, 3/12/2010 10:25:00AM									
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Benzene	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366	ND	Z1	
Ethylbenzene	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366	ND	Z1	
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366	ND	Z1	
Toluene	ND	ug/L	0.50	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366	ND	Z1	
Total Xylenes	ND	ug/L	1.0	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366	ND	Z1	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366	ND	Z1	
1,2-Dichloroethane-d4 (Surrogate)	102	%	76 - 114 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366			
Toluene-d8 (Surrogate)	89.2	%	88 - 110 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366			
4-Bromofluorobenzene (Surrogate)	98.2	%	86 - 115 (LCL - UCL)	EPA-8260	03/19/10	03/20/10 03:17	KEA	MS-V12	1	BTC1366			



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Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID: 1003609-18		Client Sample Name: 5781, SB-7, 3/12/2010 10:25:00AM											
Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Diesel Range Organics (C12 - C24)	65	ug/L	50	Luft/TPHd	03/18/10	03/19/10 16:36	MLR	GC-5	1	BTC1382	ND	M02	
Tetracosane (Surrogate)	52.7	%	28 - 139 (LCL - UCL)	Luft/TPHd	03/18/10	03/19/10 16:36	MLR	GC-5	1	BTC1382			

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EPA Method 1664

BCL Sample ID: 1003609-18	Client Sample Name: 5781, SB-7, 3/12/2010 10:25:00AM
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Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	QC Batch ID	MB Bias	Lab Quals
Oil and Grease	ND	mg/L	5.0	EPA-1664HE M	03/24/10	03/24/10 11:00	JAK	MAN-SV	1	BTC1823	ND



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Water Analysis (Metals)

BCL Sample ID: 1003609-18	Client Sample Name: 5781, SB-7, 3/12/2010 10:25:00AM
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Constituent	Result	Units	PQL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Lead	ND	ug/L	50	EPA-6010B	03/17/10	03/18/10 10:19	ARD	PE-OP1	1	BTC1284	ND	



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PCB Analysis (EPA Method 8082)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
										RPD	Percent Recovery	
PCB-1260	BTC1547	Matrix Spike	1003609-15	ND	0.031217	0.082237	mg/kg	71.8	38.0	19	32 - 136	Q02
		Matrix Spike Duplicate	1003609-15	ND	0.066403	0.082508						
Decachlorobiphenyl (Surrogate)	BTC1547	Matrix Spike	1003609-15	ND	0.0013816	0.0032895	mg/kg		42.0		40 - 136	
		Matrix Spike Duplicate	1003609-15	ND	0.0032343	0.0033003						



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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
										RPD	Percent Recovery	
Benzene	BTC1256	Matrix Spike	1002046-91	ND	0.12829	0.12500	mg/kg		103		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.14313	0.12500	mg/kg	10.9	115	20	70 - 130	
Bromodichloromethane	BTC1256	Matrix Spike	1002046-91	ND	0.10881	0.12500	mg/kg		87.1		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.11607	0.12500	mg/kg	6.5	92.9	20	70 - 130	
Chlorobenzene	BTC1256	Matrix Spike	1002046-91	ND	0.12257	0.12500	mg/kg		98.1		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.13055	0.12500	mg/kg	6.3	104	20	70 - 130	
Chloroethane	BTC1256	Matrix Spike	1002046-91	ND	0.13487	0.12500	mg/kg		108		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.14847	0.12500	mg/kg	9.6	119	20	70 - 130	
1,4-Dichlorobenzene	BTC1256	Matrix Spike	1002046-91	ND	0.11754	0.12500	mg/kg		94.0		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.12673	0.12500	mg/kg	7.5	101	20	70 - 130	
1,1-Dichloroethane	BTC1256	Matrix Spike	1002046-91	ND	0.12094	0.12500	mg/kg		96.8		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.13514	0.12500	mg/kg	11.1	108	20	70 - 130	
1,1-Dichloroethene	BTC1256	Matrix Spike	1002046-91	ND	0.12614	0.12500	mg/kg		101		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.14271	0.12500	mg/kg	12.3	114	20	70 - 130	
Toluene	BTC1256	Matrix Spike	1002046-91	ND	0.12183	0.12500	mg/kg		97.5		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.13271	0.12500	mg/kg	8.6	106	20	70 - 130	
Trichloroethene	BTC1256	Matrix Spike	1002046-91	ND	0.12729	0.12500	mg/kg		102		70 - 130	
		Matrix Spike Duplicate	1002046-91	ND	0.13783	0.12500	mg/kg	7.9	110	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BTC1256	Matrix Spike	1002046-91	ND	0.046910	0.050000	mg/kg		93.8		70 - 121	
		Matrix Spike Duplicate	1002046-91	ND	0.047743	0.050000	mg/kg		95.5		70 - 121	
Toluene-d8 (Surrogate)	BTC1256	Matrix Spike	1002046-91	ND	0.050113	0.050000	mg/kg		100		81 - 117	
		Matrix Spike Duplicate	1002046-91	ND	0.048039	0.050000	mg/kg		96.1		81 - 117	
4-Bromofluorobenzene (Surrogate)	BTC1256	Matrix Spike	1002046-91	ND	0.049878	0.050000	mg/kg		99.8		74 - 121	
		Matrix Spike Duplicate	1002046-91	ND	0.047609	0.050000	mg/kg		95.2		74 - 121	
Benzene	BTC1366	Matrix Spike	1003567-03	0.22000	25.840	25.000	ug/L		102		70 - 130	
		Matrix Spike Duplicate	1003567-03	0.22000	26.710	25.000	ug/L	3.3	106	20	70 - 130	



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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery Lab Quals
Toluene	BTC1366	Matrix Spike	1003567-03	ND	25.660	25.000	ug/L	1.9	103	20	70 - 130
		Matrix Spike Duplicate	1003567-03	ND	26.150	25.000			105		70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BTC1366	Matrix Spike	1003567-03	ND	9.9700	10.000	ug/L		99.7		76 - 114
		Matrix Spike Duplicate	1003567-03	ND	9.9300	10.000			99.3		76 - 114
Toluene-d8 (Surrogate)	BTC1366	Matrix Spike	1003567-03	ND	10.010	10.000	ug/L		100		88 - 110
		Matrix Spike Duplicate	1003567-03	ND	9.9500	10.000			99.5		88 - 110
4-Bromofluorobenzene (Surrogate)	BTC1366	Matrix Spike	1003567-03	ND	10.080	10.000	ug/L		101		86 - 115
		Matrix Spike Duplicate	1003567-03	ND	10.190	10.000			102		86 - 115
Benzene	BTC1368	Matrix Spike	1003610-08	ND	24.350	25.000	ug/L	3.9	97.4	20	70 - 130
		Matrix Spike Duplicate	1003610-08	ND	23.420	25.000			93.7		70 - 130
Toluene	BTC1368	Matrix Spike	1003610-08	ND	23.940	25.000	ug/L	3.7	95.8	20	70 - 130
		Matrix Spike Duplicate	1003610-08	ND	23.060	25.000			92.2		70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BTC1368	Matrix Spike	1003610-08	ND	9.9600	10.000	ug/L		99.6		76 - 114
		Matrix Spike Duplicate	1003610-08	ND	9.8000	10.000			98.0		76 - 114
Toluene-d8 (Surrogate)	BTC1368	Matrix Spike	1003610-08	ND	10.110	10.000	ug/L		101		88 - 110
		Matrix Spike Duplicate	1003610-08	ND	10.000	10.000			100		88 - 110
4-Bromofluorobenzene (Surrogate)	BTC1368	Matrix Spike	1003610-08	ND	10.010	10.000	ug/L		100		86 - 115
		Matrix Spike Duplicate	1003610-08	ND	9.9200	10.000			99.2		86 - 115

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery
Tetracosane (Surrogate)	BTC1315	Matrix Spike	1003609-15	ND	2.7538	3.3113	mg/kg		83.2		20 - 145
		Matrix Spike Duplicate	1003609-15	ND	2.9143	3.3223	mg/kg		87.7		20 - 145

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Total Petroleum Hydrocarbons (Silica Gel Treated)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery
Diesel Range Organics (C12 - C24)	BTC1381	Matrix Spike	1003609-02	2.4862	12.612	16.556	mg/kg	8.6	61.2	30	40 - 137
		Matrix Spike Duplicate	1003609-02	2.4862	13.444	16.447					
Tetracosane (Surrogate)	BTC1381	Matrix Spike	1003609-02	ND	0.48318	0.66225	mg/kg		73.0		34 - 136
		Matrix Spike Duplicate	1003609-02	ND	0.48691	0.65789	mg/kg		74.0		34 - 136
Diesel Range Organics (C12 - C24)	BTC1382	Matrix Spike	0917254-86	25.136	407.81	500.00	ug/L	3.5	76.5	30	36 - 130
		Matrix Spike Duplicate	0917254-86	25.136	421.58	500.00	ug/L				
Tetracosane (Surrogate)	BTC1382	Matrix Spike	0917254-86	ND	17.120	20.000	ug/L		85.6		28 - 139
		Matrix Spike Duplicate	0917254-86	ND	16.930	20.000	ug/L		84.6		28 - 139

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EPA Method 1664

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
										RPD	Percent Recovery	
Oil and Grease	BTC1823	Duplicate	1003686-02	15.200	8.8500		mg/L	52.8		18		Q01
		Matrix Spike	1002046-88	ND	41.050	39.900	mg/L		103		78 - 114	
		Matrix Spike Duplicate	1002046-88	ND	33.950	39.900	mg/L	18.9	85.1	18	78 - 114	Q02
Oil and Grease	BTC1990	Duplicate	1003609-05	ND	ND		mg/kg			30		
		Matrix Spike	1003609-05	ND	599.00	764.00	mg/kg		78.4		56 - 111	
		Matrix Spike Duplicate	1003609-05	ND	974.00	764.00	mg/kg	47.7	127	30	56 - 111	Q02,Q03

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Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Source Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery Lab Quals
Mercury	BTC1327	Duplicate	1003531-01	0.24270	0.21667		mg/kg	11.3		20	
		Matrix Spike	1003531-01	0.24270	0.96000	0.79365	mg/kg		90.4		85 - 115
		Matrix Spike Duplicate	1003531-01	0.24270	0.91952	0.79365	mg/kg	5.8	85.3	20	85 - 115
Antimony	BTC1392	Duplicate	1003647-01	ND	ND		mg/kg			20	
		Matrix Spike	1003647-01	ND	22.885	99.010	mg/kg		23.1		16 - 119
		Matrix Spike Duplicate	1003647-01	ND	22.955	99.010	mg/kg	0.3	23.2	20	16 - 119
Arsenic	BTC1392	Duplicate	1003647-01	5.8309	5.4792		mg/kg	6.2		20	
		Matrix Spike	1003647-01	5.8309	14.685	9.9010	mg/kg		89.4		75 - 125
		Matrix Spike Duplicate	1003647-01	5.8309	14.635	9.9010	mg/kg	0.6	88.9	20	75 - 125
Barium	BTC1392	Duplicate	1003647-01	205.76	205.73		mg/kg	0.0		20	
		Matrix Spike	1003647-01	205.76	296.37	99.010	mg/kg		91.5		75 - 125
		Matrix Spike Duplicate	1003647-01	205.76	287.36	99.010	mg/kg	10.5	82.4	20	75 - 125
Beryllium	BTC1392	Duplicate	1003647-01	0.26798	ND		mg/kg			20	
		Matrix Spike	1003647-01	0.26798	10.103	9.9010	mg/kg		99.3		75 - 125
		Matrix Spike Duplicate	1003647-01	0.26798	10.044	9.9010	mg/kg	0.6	98.7	20	75 - 125
Cadmium	BTC1392	Duplicate	1003647-01	0.36886	ND		mg/kg			20	
		Matrix Spike	1003647-01	0.36886	10.028	9.9010	mg/kg		97.6		75 - 125
		Matrix Spike Duplicate	1003647-01	0.36886	9.7410	9.9010	mg/kg	3.0	94.7	20	75 - 125
Chromium	BTC1392	Duplicate	1003647-01	22.523	22.435		mg/kg	0.4		20	
		Matrix Spike	1003647-01	22.523	114.42	99.010	mg/kg		92.8		75 - 125
		Matrix Spike Duplicate	1003647-01	22.523	113.87	99.010	mg/kg	0.6	92.3	20	75 - 125
Cobalt	BTC1392	Duplicate	1003647-01	11.008	11.165		mg/kg	1.4		20	
		Matrix Spike	1003647-01	11.008	104.31	99.010	mg/kg		94.2		75 - 125
		Matrix Spike Duplicate	1003647-01	11.008	103.89	99.010	mg/kg	0.5	93.8	20	75 - 125
Copper	BTC1392	Duplicate	1003647-01	44.408	45.141		mg/kg	1.6		20	
		Matrix Spike	1003647-01	44.408	145.95	99.010	mg/kg		103		75 - 125
		Matrix Spike Duplicate	1003647-01	44.408	137.80	99.010	mg/kg	8.4	94.3	20	75 - 125



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Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Source Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
										RPD	Percent Recovery	
Lead	BTC1392	Duplicate	1003647-01	192.46	190.01		mg/kg	1.3		20		
		Matrix Spike	1003647-01	192.46	301.36	99.010	mg/kg		110		75 - 125	
		Matrix Spike Duplicate	1003647-01	192.46	251.20	99.010	mg/kg	59.8	59.3	20	75 - 125	Q02,Q03
Molybdenum	BTC1392	Duplicate	1003647-01	0.65375	ND		mg/kg			20		
		Matrix Spike	1003647-01	0.65375	91.186	99.010	mg/kg		91.4		75 - 125	
		Matrix Spike Duplicate	1003647-01	0.65375	89.807	99.010	mg/kg	1.5	90.0	20	75 - 125	
Nickel	BTC1392	Duplicate	1003647-01	20.044	20.309		mg/kg	1.3		20		
		Matrix Spike	1003647-01	20.044	114.63	99.010	mg/kg		95.5		75 - 125	
		Matrix Spike Duplicate	1003647-01	20.044	114.16	99.010	mg/kg	0.5	95.1	20	75 - 125	
Selenium	BTC1392	Duplicate	1003647-01	ND	ND		mg/kg			20		
		Matrix Spike	1003647-01	ND	9.7271	9.9010	mg/kg		98.2		75 - 125	
		Matrix Spike Duplicate	1003647-01	ND	9.3989	9.9010	mg/kg	3.4	94.9	20	75 - 125	
Silver	BTC1392	Duplicate	1003647-01	ND	ND		mg/kg			20		
		Matrix Spike	1003647-01	ND	9.6594	9.9010	mg/kg		97.6		75 - 125	
		Matrix Spike Duplicate	1003647-01	ND	9.4410	9.9010	mg/kg	2.3	95.4	20	75 - 125	
Thallium	BTC1392	Duplicate	1003647-01	ND	ND		mg/kg			20		
		Matrix Spike	1003647-01	ND	91.156	99.010	mg/kg		92.1		75 - 125	
		Matrix Spike Duplicate	1003647-01	ND	89.615	99.010	mg/kg	1.7	90.5	20	75 - 125	
Vanadium	BTC1392	Duplicate	1003647-01	40.316	40.189		mg/kg	0.3		20		
		Matrix Spike	1003647-01	40.316	134.25	99.010	mg/kg		94.9		75 - 125	
		Matrix Spike Duplicate	1003647-01	40.316	134.17	99.010	mg/kg	0.1	94.8	20	75 - 125	
Zinc	BTC1392	Duplicate	1003647-01	172.18	169.76		mg/kg	1.4		20		
		Matrix Spike	1003647-01	172.18	258.15	99.010	mg/kg		86.8		75 - 125	
		Matrix Spike Duplicate	1003647-01	172.18	243.95	99.010	mg/kg	18.0	72.5	20	75 - 125	Q03

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Project: 5781
Project Number: 000010118553-00013
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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals
										RPD	Percent Recovery	
Lead	BTC1284	Duplicate	1003609-16	ND	ND		ug/L			20		
		Matrix Spike	1003609-16	ND	392.91	408.16	ug/L		96.3		75 - 125	
		Matrix Spike Duplicate	1003609-16	ND	401.72	408.16	ug/L	2.2	98.4	20	75 - 125	

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Reported: 04/01/2010 10:28

PCB Analysis (EPA Method 8082)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
PCB-1260	BTC1547	BTC1547-BS1	LCS	0.071225	0.082781	0.010	mg/kg	86.0		66 - 116		
Decachlorobiphenyl (Surrogate)	BTC1547	BTC1547-BS1	LCS	0.0022517	0.0033113		mg/kg	68.0		40 - 136		

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Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Benzene	BTC1256	BTC1256-BS1	LCS	0.12910	0.12500	0.0050	mg/kg	103		70 - 130		
Bromodichloromethane	BTC1256	BTC1256-BS1	LCS	0.10640	0.12500	0.0050	mg/kg	85.1		70 - 130		
Chlorobenzene	BTC1256	BTC1256-BS1	LCS	0.11829	0.12500	0.0050	mg/kg	94.6		70 - 130		
Chloroethane	BTC1256	BTC1256-BS1	LCS	0.13374	0.12500	0.0050	mg/kg	107		70 - 130		
1,4-Dichlorobenzene	BTC1256	BTC1256-BS1	LCS	0.11087	0.12500	0.0050	mg/kg	88.7		70 - 130		
1,1-Dichloroethane	BTC1256	BTC1256-BS1	LCS	0.12579	0.12500	0.0050	mg/kg	101		70 - 130		
1,1-Dichloroethene	BTC1256	BTC1256-BS1	LCS	0.12834	0.12500	0.0050	mg/kg	103		70 - 130		
Toluene	BTC1256	BTC1256-BS1	LCS	0.11988	0.12500	0.0050	mg/kg	95.9		70 - 130		
Trichloroethene	BTC1256	BTC1256-BS1	LCS	0.12370	0.12500	0.0050	mg/kg	99.0		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTC1256	BTC1256-BS1	LCS	0.047025	0.050000		mg/kg	94.0		70 - 121		
Toluene-d8 (Surrogate)	BTC1256	BTC1256-BS1	LCS	0.049527	0.050000		mg/kg	99.1		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTC1256	BTC1256-BS1	LCS	0.047760	0.050000		mg/kg	95.5		74 - 121		
Benzene	BTC1366	BTC1366-BS1	LCS	26.590	25.000	0.50	ug/L	106		70 - 130		
Toluene	BTC1366	BTC1366-BS1	LCS	27.120	25.000	0.50	ug/L	108		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTC1366	BTC1366-BS1	LCS	9.8700	10.000		ug/L	98.7		76 - 114		
Toluene-d8 (Surrogate)	BTC1366	BTC1366-BS1	LCS	10.070	10.000		ug/L	101		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTC1366	BTC1366-BS1	LCS	10.110	10.000		ug/L	101		86 - 115		
Benzene	BTC1368	BTC1368-BS1	LCS	22.300	25.000	0.50	ug/L	89.2		70 - 130		
Toluene	BTC1368	BTC1368-BS1	LCS	21.360	25.000	0.50	ug/L	85.4		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTC1368	BTC1368-BS1	LCS	10.230	10.000		ug/L	102		76 - 114		
Toluene-d8 (Surrogate)	BTC1368	BTC1368-BS1	LCS	10.060	10.000		ug/L	101		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTC1368	BTC1368-BS1	LCS	9.8400	10.000		ug/L	98.4		86 - 115		

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Tetracosane (Surrogate)	BTC1315	BTC1315-BS1	LCS	3.0153	3.2895		mg/kg	91.7		20 - 145		

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Total Petroleum Hydrocarbons (Silica Gel Treated)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Diesel Range Organics (C12 - C24)	BTC1381	BTC1381-BS1	LCS	12.168	16.502	2.0	mg/kg	73.7		50 - 136		
Tetracosane (Surrogate)	BTC1381	BTC1381-BS1	LCS	0.52723	0.66007		mg/kg	79.9		34 - 136		
Diesel Range Organics (C12 - C24)	BTC1382	BTC1382-BS1	LCS	451.28	500.00	50	ug/L	90.3		48 - 125		
Tetracosane (Surrogate)	BTC1382	BTC1382-BS1	LCS	18.149	20.000		ug/L	90.7		28 - 139		

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EPA Method 1664

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Oil and Grease	BTC1823	BTC1823-BS1	LCS	35.000	39.900	5.0	mg/L	87.7		78 - 114		
Oil and Grease	BTC1990	BTC1990-BS1	LCS	554.00	764.00	50	mg/kg	72.5		59 - 117		



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Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Mercury	BTC1327	BTC1327-BS1	LCS	1.4404	1.5000	0.16	mg/kg	96.0		75 - 125		
Antimony	BTC1392	BTC1392-BS1	LCS	104.55	100.00	5.0	mg/kg	105		75 - 125		
Arsenic	BTC1392	BTC1392-BS1	LCS	10.720	10.000	1.0	mg/kg	107		75 - 125		
Barium	BTC1392	BTC1392-BS1	LCS	105.74	100.00	0.50	mg/kg	106		75 - 125		
Beryllium	BTC1392	BTC1392-BS1	LCS	10.848	10.000	0.50	mg/kg	108		75 - 125		
Cadmium	BTC1392	BTC1392-BS1	LCS	10.615	10.000	0.50	mg/kg	106		75 - 125		
Chromium	BTC1392	BTC1392-BS1	LCS	104.95	100.00	0.50	mg/kg	105		75 - 125		
Cobalt	BTC1392	BTC1392-BS1	LCS	109.49	100.00	2.5	mg/kg	109		75 - 125		
Copper	BTC1392	BTC1392-BS1	LCS	101.67	100.00	1.0	mg/kg	102		75 - 125		
Lead	BTC1392	BTC1392-BS1	LCS	111.36	100.00	2.5	mg/kg	111		75 - 125		
Molybdenum	BTC1392	BTC1392-BS1	LCS	106.52	100.00	2.5	mg/kg	107		75 - 125		
Nickel	BTC1392	BTC1392-BS1	LCS	112.56	100.00	0.50	mg/kg	113		75 - 125		
Selenium	BTC1392	BTC1392-BS1	LCS	10.841	10.000	1.0	mg/kg	108		75 - 125		
Silver	BTC1392	BTC1392-BS1	LCS	10.358	10.000	0.50	mg/kg	104		75 - 125		
Thallium	BTC1392	BTC1392-BS1	LCS	114.10	100.00	5.0	mg/kg	114		75 - 125		
Vanadium	BTC1392	BTC1392-BS1	LCS	104.78	100.00	0.50	mg/kg	105		75 - 125		
Zinc	BTC1392	BTC1392-BS1	LCS	111.11	100.00	2.5	mg/kg	111		75 - 125		



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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Lead	BTC1284	BTC1284-BS1	LCS	388.95	400.00	50	ug/L	97.2		85 - 115		

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PCB Analysis (EPA Method 8082)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
PCB-1016	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
PCB-1221	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
PCB-1232	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
PCB-1242	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
PCB-1248	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
PCB-1254	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
PCB-1260	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
Total PCB's (Summation)	BTC1547	BTC1547-BLK1	ND	mg/kg	0.010		
Decachlorobiphenyl (Surrogate)	BTC1547	BTC1547-BLK1	101	%		40 - 136 (LCL - UCL)	



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Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Benzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Bromobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Bromochloromethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Bromodichloromethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Bromoform	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Bromomethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
n-Butylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
sec-Butylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
tert-Butylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Carbon tetrachloride	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Chlorobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Chloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Chloroform	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Chloromethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
2-Chlorotoluene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
4-Chlorotoluene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Dibromochloromethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2-Dibromo-3-chloropropane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2-Dibromoethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Dibromomethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2-Dichlorobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,3-Dichlorobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,4-Dichlorobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Dichlorodifluoromethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		



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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
1,1-Dichloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2-Dichloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1-Dichloroethene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
cis-1,2-Dichloroethene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
trans-1,2-Dichloroethene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Total 1,2-Dichloroethene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.010		
1,2-Dichloropropane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,3-Dichloropropane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
2,2-Dichloropropane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1-Dichloropropene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
cis-1,3-Dichloropropene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
trans-1,3-Dichloropropene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Total 1,3-Dichloropropene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.010		
Ethylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Hexachlorobutadiene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Isopropylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
p-Isopropyltoluene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Methylene chloride	BTC1256	BTC1256-BLK1	ND	mg/kg	0.010		
Methyl t-butyl ether	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Naphthalene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
n-Propylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Styrene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1,1,2-Tetrachloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1,2,2-Tetrachloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		



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Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Tetrachloroethene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Toluene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2,3-Trichlorobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2,4-Trichlorobenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1,1-Trichloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1,2-Trichloroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Trichloroethene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Trichlorofluoromethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2,3-Trichloropropane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,1,2-Trichloro-1,2,2-trifluoroethane	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,2,4-Trimethylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
1,3,5-Trimethylbenzene	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Vinyl chloride	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Total Xylenes	BTC1256	BTC1256-BLK1	ND	mg/kg	0.010		
t-Amyl Methyl ether	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
t-Butyl alcohol	BTC1256	BTC1256-BLK1	ND	mg/kg	0.050		
Diisopropyl ether	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Ethanol	BTC1256	BTC1256-BLK1	ND	mg/kg	1.0		
Ethyl t-butyl ether	BTC1256	BTC1256-BLK1	ND	mg/kg	0.0050		
Total Purgeable Petroleum Hydrocarbons	BTC1256	BTC1256-BLK1	ND	mg/kg	0.20		
1,2-Dichloroethane-d4 (Surrogate)	BTC1256	BTC1256-BLK1	94.2	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTC1256	BTC1256-BLK1	97.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTC1256	BTC1256-BLK1	93.8	%	74 - 121 (LCL - UCL)		
Benzene	BTC1366	BTC1366-BLK1	ND	ug/L	0.50		

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Reported: 04/01/2010 10:28

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Ethylbenzene	BTC1366	BTC1366-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BTC1366	BTC1366-BLK1	ND	ug/L	0.50		
Toluene	BTC1366	BTC1366-BLK1	ND	ug/L	0.50		
Total Xylenes	BTC1366	BTC1366-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BTC1366	BTC1366-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BTC1366	BTC1366-BLK1	102	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTC1366	BTC1366-BLK1	99.4	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTC1366	BTC1366-BLK1	100	%	86 - 115 (LCL - UCL)		
Benzene	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
Ethylbenzene	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
Toluene	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
Total Xylenes	BTC1368	BTC1368-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BTC1368	BTC1368-BLK1	ND	ug/L	10		
Diisopropyl ether	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
Ethanol	BTC1368	BTC1368-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BTC1368	BTC1368-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BTC1368	BTC1368-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BTC1368	BTC1368-BLK1	102	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTC1368	BTC1368-BLK1	99.1	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTC1368	BTC1368-BLK1	99.1	%	86 - 115 (LCL - UCL)		

Delta Environmental Consultants, Inc.
11050 White Rock Rd, Suite 110
Rancho Cordova, CA 95670

Project: 5781
Project Number: 000010118553-00013
Project Manager: Jan Wagoner

Reported: 04/01/2010 10:28

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
TPH - C8 - C9	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C10 - C11	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C12 - C14	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C15 - C16	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C17 - C18	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C19 - C20	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C21 - C22	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C23 - C28	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C29 - C32	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C33 - C36	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C37 - C40	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C41 - C43	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH - C44 plus	BTC1315	BTC1315-BLK1	ND	mg/kg	1.0		
TPH (Total)	BTC1315	BTC1315-BLK1	ND	mg/kg	10		
Tetracosane (Surrogate)	BTC1315	BTC1315-BLK1	91.7	%	20 - 145 (LCL - UCL)		

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Total Petroleum Hydrocarbons (Silica Gel Treated)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Diesel Range Organics (C12 - C24)	BTC1381	BTC1381-BLK1	ND	mg/kg	2.0		
Tetracosane (Surrogate)	BTC1381	BTC1381-BLK1	83.9	%	34 - 136 (LCL - UCL)		
Diesel Range Organics (C12 - C24)	BTC1382	BTC1382-BLK1	ND	ug/L	50		M02
Tetracosane (Surrogate)	BTC1382	BTC1382-BLK1	86.7	%	28 - 139 (LCL - UCL)		



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EPA Method 1664

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Oil and Grease	BTC1823	BTC1823-BLK1	ND	mg/L	5.0		
Oil and Grease	BTC1990	BTC1990-BLK1	ND	mg/kg	50		



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Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Mercury	BTC1327	BTC1327-BLK1	ND	mg/kg	0.16		
Antimony	BTC1392	BTC1392-BLK1	ND	mg/kg	5.0		
Arsenic	BTC1392	BTC1392-BLK1	ND	mg/kg	1.0		
Barium	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Beryllium	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Cadmium	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Chromium	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Cobalt	BTC1392	BTC1392-BLK1	ND	mg/kg	2.5		
Copper	BTC1392	BTC1392-BLK1	ND	mg/kg	1.0		
Lead	BTC1392	BTC1392-BLK1	ND	mg/kg	2.5		
Molybdenum	BTC1392	BTC1392-BLK1	ND	mg/kg	2.5		
Nickel	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Selenium	BTC1392	BTC1392-BLK1	ND	mg/kg	1.0		
Silver	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Thallium	BTC1392	BTC1392-BLK1	ND	mg/kg	5.0		
Vanadium	BTC1392	BTC1392-BLK1	ND	mg/kg	0.50		
Zinc	BTC1392	BTC1392-BLK1	ND	mg/kg	2.5		

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Reported: 04/01/2010 10:28

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Lead	BTC1284	BTC1284-BLK1	ND	ug/L	50		



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Notes And Definitions

- MDL Method Detection Limit
- ND Analyte Not Detected at or above the reporting limit
- PQL Practical Quantitation Limit
- RPD Relative Percent Difference
- A01 PQL's and MDL's are raised due to sample dilution.
- A09 PQL's were raised due to high concentration of target analytes requiring sample dilution.
- A10 PQL's and MDL's were raised due to matrix interference.
- A17 Surrogate not reportable due to sample dilution.
- M02 Analyte detected in the Method Blank at a level between the PQL and 1/2 the PQL.
- Q01 Sample precision is not within the control limits.
- Q02 Matrix spike precision is not within the control limits.
- Q03 Matrix spike recovery(s) is(are) not within the control limits.
- V11 The Continuing Calibration Verification (CCV) recovery is not within established control limits.
- Z1 Combined two VOAs for a complete sample.
- Z1a Sample plugged twice at 5.0g

Chain Of Custody Record

BC Laboratories
 4100 Atlas Court, Bakersfield, CA
 (661) 327-4911 (661) 327-1918 fax

INVOICE REMITTANCE ADDRESS:

CONOCOPHILLIPS
 Attn: Dee Hutchinson
 3611 South Harbor, Suite 200
 Santa Ana, CA. 92704

AOC#

1470

Requisition Number

000010118553-00013

DATE: 3/12/10

PAGE: 1 of 2

SAMPLING COMPANY: Delta Consultants		Valid Value ID:	CONOCOPHILLIPS SITE NUMBER 5781		GLOBAL ID NO.: T0600101467
ADDRESS: 11050 White Rock Road, Suite 100, Rancho Cordova, CA, 95670			SITE ADDRESS (Street and City): 3535 Pierson Street, Oakland		ConocoPhillips Manager Terry Grayson
PROJECT CONTACT (Hardcopy or PDF Report to): Jan Wagoner			EDF DELIVERABLE TO (RP or Designee): Jan Wagoner	PHONE NO.: 916-503-1268	E-MAIL: Terry.L.Grayson@contractor.com
TELEPHONE: 916-503-1268	FAX: 916-638-8385	E-MAIL: jwagoner@deltaenv.com	LAB USE ONLY 10-03609		
SAMPLER NAME(S) (Print): Nadine Periat/ Alan Buehler		CONSULTANT PROJECT NUMBER C105781			

TURNAROUND TIME (CALENDAR DAYS):
 14 DAYS
 7 DAYS
 72 HOURS
 48 HOURS
 24 HOURS
 LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED

PLEASE CC RESULTS TO
 Nperiat@deltaenv.com
 Abuehler@deltaenv.com

* Field Point name only required if different from Sample ID

LAB USE ONLY	Field Point Name/ ID	SAMPLING		MATRIX	NO. OF CONT.	TPH-G, BTEX, MTBE, by EPA Method 8260B	TPH-G, BTEX, MTBE, DIPE, ETBE, TAME, TBA, EDB, EDC, Ethanol by EPA Method 8260B	TPH-D by EPA 8015M with Silica Gel Cleanup	TOG by EPA 1664	Dissolved Lead by EPA 6010B	Total Lead	TPH Normal Carbon Chain hydrocarbons(C10-C40) by EPA 8015 CC	Full Scan VOCs by EPA 8260B	CAM 17 Metals EPA 6010B	Polychlorinated Biphenyls by EPA 8082	TEMPERATURE ON RECEIPT C°
		DATE	TIME													
	SWC-2 @ 10'	3-12-10	11:10	S	1	X		X	X							
	" @ 15'	3-12-10	11:20	S	1	X		X	X							
	" @ 20'	3-12-10	11:50	S	1	X		X	X							
	SWD-2 @ 15'	3-12-10	12:24	S	1	X		X	X							
	" @ 15'	3-12-10	12:34	S	1	X		X	X							
	" @ 20'	3-12-10	12:45	S	1	X		X	X							
	SB-6 @ 5'	3-12-10	2:05	S	1											
	" @ 10'	3-12-10	2:10	S	1											
	" @ 25'	3-12-10	2:36	S	1											
	" @ 30'	3-12-10	2:43	S	1											
	" @ 35'	3-12-10	2:54	S	1											HOLD
	" @ 40'	3-12-10	3:10	S	1											HOLD
	SB-7 @ 5'	3-12-10	9:55	S	1	X		X	X							
	" @ 10'	3-12-10	10:06	S	1	X		X	X							
	COMP ABCD	3-12-10	3:45	S	4					X	X	X	X	X		

Relinquished by: (Signature) <i>Nadine Periat</i>	Received by: (Signature) <i>Dee Hutchinson</i>	Date: 3/15/10	Time: 1:30
Relinquished by: (Signature) <i>Alan Buehler</i>	Received by: (Signature) <i>Dee Hutchinson</i>	Date: MAR 16 2010	Time: 0800
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Submission #:

SHIPPING INFORMATION

Federal Express UPS Hand Delivery
 BC Lab Field Service Other (Specify) OnTrac

SHIPPING CONTAINER

Ice Chest None
 Box Other (Specify) _____

Refrigerant: Ice Blue Ice None Other Comments:

Custody Seals Ice Chest Containers None Comments:

Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received
 YES NO

Emissivity: .98 Container: Q+P Thermometer ID: #1163
 Temperature: A 3.1 °C / C 3.1 °C

Date/Time 3/16/10
 Analyst Init BLT 0800

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	()	()	()	()	()
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	A	A	A	A	A	A	A	A	A	A
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

CHECK BY _____
 DISTRIBUTION
 OUT

Comments:
 Sample Numbering Completed By: JW Date/Time: 3/16/10 11:18
 A = Actual / C = Corrected

Submission #:

SHIPPING INFORMATION

Federal Express UPS Hand Delivery
 BC Lab Field Service Other (Specify) OnTrac

SHIPPING CONTAINER

Ice Chest None
 Box Other (Specify) _____

Refrigerant: Ice Blue Ice None Other Comments:

Custody Seals Ice Chest Containers None Comments:
 Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received
 YES NO

Emissivity: .98 Container: QTP Thermometer ID: #1163
 Temperature: A 3.1 °C / C 3.1 °C

Date/Time 3/16/10
 Analyst Init BLT 0800

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS ^{unpreserved}								B		
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL							A10	A10	A10	
QT EPA 413.1, 413.2, 418.1							B	C		
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER							CD	D		
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	A	A	A	A	A	A				
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
 Sample Numbering Completed By: JWJ Date/Time: 3/16/10 11:18
 A = Actual / C = Corrected