



76 Broadway
Sacramento, California 95818

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Alameda County
Environmental Health

June 6, 2010

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

**Re: Work Plan for Preliminary Site Assessment
76 Service Station No. 1028
5300 Broadway
Oakland, California
Alameda County LOP Case #: RO0002967
Delta Project No. I40251028**

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.

If you have any questions or need additional information, please call Ms. Lia Holden at (408) 826-1863.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric G. Hetrick". The signature is stylized and somewhat cursive.

Eric G. Hetrick
Site Manager
Risk Management & Remediation

July 6, 2010

Ms. Barbara J. Jakub
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Work Plan for Preliminary Site Assessment

76 Service Station No. 1028
5300 Broadway
Oakland, California
Alameda County LOP Case #: RO0002967
Delta Project No. I40251028



Dear Ms. Jakub,

Delta Consultants (Delta) has prepared this *Work Plan for Preliminary Site Assessment* to investigate the vertical extent of petroleum hydrocarbons in soil and groundwater, and to install groundwater monitoring wells to accurately characterize groundwater conditions beneath 76 Service Station No. 1028, located at 5300 Broadway in Oakland, California (**Figure 1**). This work plan is intended to supersede the *Soil and Water Investigation Work Plan Addendum* dated April 3, 2009 and the *Additional Site Assessment Work Plan – First Phase* dated October 29, 2008. The management of the site's environmental activities has transferred to a different project manager within Delta. The current project manager has conducted a thorough review of the historical data and regulatory correspondence and believes that the scope of work presented herein will aid in a more accurate determination of current site conditions than the previously recommended scope. Included in the October 2008 work plan, Delta prepared a preferential pathway study as requested by the Alameda County Environmental Health Department (ACEH). The former work plans, including the preferential pathway study, are presented as **Attachment A**. This work plan has been prepared to address comments in the two letters from the ACEH dated June 25, 2008 and March 6, 2009 (**Attachment B**).

During a 2007 due diligence site assessment conducted by ATC Associates, Inc. (ATC), total petroleum hydrocarbons as gasoline (TPH-G) and total petroleum hydrocarbons as diesel (TPH-D) were detected at maximum concentrations in groundwater collected from ATC-2 and ATC-5. TPH-D was detected at a maximum concentration of 25,000 µg/l in the duplicate sample collected from ATC-2 (the duplicate ATC-2 sample was named B-2 when submitted to the laboratory), while the maximum TPH-G concentration was detected in ATC-5 at 5,300 micrograms per liter (µg/l). Maximum concentrations of TPH-G and TPH-D were also reported in soil samples from ATC-2 and ATC-5 from a depth of five feet; 5.2 milligrams per kilogram (mg/kg) of TPH-G in ATC-5, and 23 mg/kg of TPH-D in ATC-2 (ATC 2007). This report prepared by ATC is included as **Attachment C**.

Delta proposes to install three groundwater monitoring wells in order to establish groundwater flow direction, and to characterize the petroleum hydrocarbon plume onsite. In addition, Delta proposes to advance three Cone Penetrometer Test (CPT) borings to assess the vertical extent of soil and groundwater contamination beneath the site.

GENERAL SITE DESCRIPTION

The subject site is an inactive service station located on the northeast corner of the intersection of Broadway and Broadway Terrace in Oakland, California (**Figure 1**). Aboveground facilities consist of two dispenser islands and repair shop. Three gasoline underground storage tanks (USTs) share a common pit located in the southwest corner of the property. One waste oil tank is located south of the station building (**Figure 2**). The site is bordered to the north and east by residential buildings. Commercial properties are located to the west of the site across Broadway and to the south across Broadway Terrace.

SENSITIVE RECEPTOR SURVEY

Delta conducted a preferential pathway and receptor study which included a Department of Water Resources search for water supply wells within a half-mile radius of the site (Delta 2008). No water supply wells within the search radius were identified. From historical well data, Delta concluded that depth to water at the site had been reported as shallow as 2.5 feet below ground surface (bgs), at or above the depth of typical utility trenching. Delta prepared a preferential pathway map, which was included in the work plan (**Attachment A**).

PROPOSED SITE INVESTIGATION

Delta proposes the advancement of three CPT borings and three groundwater monitoring wells in the vicinity of former soil borings ATC-2, ATC-4 and ATC-5 in order to characterize groundwater conditions and evaluate the vertical extent of soil and groundwater contamination beneath the site.

Soil Borings:

Delta proposes to advance three CPT borings, CPT-1, CPT-2 and CPT-3, adjacent to former ATC borings ATC-2, ATC-4 and ATC-5, respectively. The borings will be advanced to 25 feet below ground surface (bgs), or until refusal is met. The site's former environmental case was closed in April 1994. In the closure letter dated April 20, 1994, the ACEH stated that depth to water had historically fluctuated between 9.5 and 2.48 feet bgs (ACEH 1994). During the 2007 ATC investigation, groundwater was encountered at a depth of 7 feet in two borings. A third boring was advanced ten feet bgs, but no groundwater was reportedly encountered (ATC 2007). In a letter dated March 6, 2009, the ACEH stated the following:

In addition to your proposed sampling at five foot intervals, at the capillary fringe and areas with high PID readings, ACEH also requests that you collect continuous soil samples for lithologic logging and submit soil samples for analysis from the saturated zone to define the vertical extent of soil contamination since fluctuations in groundwater levels can submerge contaminated soils, leaving a soil source that would otherwise go undetected if not sampled.

Delta proposes to continuously sample each of the three proposed soil borings to a depth of approximately 25 feet bgs for the collection of soil samples within the capillary fringe.

Boring locations will be placed within five feet of previously advanced borings ATC-2, ATC-4 and ATC-5 as shown on **Figure 2**, in order to verify reported concentrations of TPH-G and TPH-D, and to define the vertical extent of contamination.

Each boring will be precleared by hand auger to a depth of five feet to minimize the potential for encountering utilities during boring advancement. At each proposed CPT boring location, four separate holes will be precleared; one will be to establish the stratigraphic profile beneath the site in each CPT location, one for the collection of soil samples, and two for the collection of groundwater samples (one shallow and one deep) for the purpose of vertically defining petroleum hydrocarbons and constituents in the areas of the former ATC borings. The purpose of advancing four separate holes per CPT location is to

minimize both the potential for cross contamination of water-bearing zones and the amount of particulates suspended in the water from soil disturbance.

Once each location is precleared, a CPT probe will be pushed to 25 feet or refusal for stratigraphic profiling. Dedicated borings will aid in the collection of groundwater samples that are more representative of actual groundwater conditions. A groundwater sample will be collected from one dedicated CPT boring at the anticipated water table depth, which will be determined in the field from the stratigraphic profile and pressure dissipation tests. A second (deeper) groundwater sample will be collected from another dedicated CPT boring at the deepest water-bearing unit within the boring. The depth of the deep groundwater sample will also be determined in the field from the stratigraphic profile and pressure dissipation tests.

Finally, soil samples will be continuously sampled from the third hole starting at the identified capillary fringe from the CPT probe boring to total depth. CPT boreholes will be tremmie-grouted upon completion. CPT drilling and sampling procedures are provided in **Attachment D**.

Soil samples from the following intervals will be submitted for laboratory analyses: from just above first encountered groundwater, from the bottom of the boring, and at depths within the boring exhibiting elevated photoionization detector (PID) readings. It is estimated that three to four soil samples per boring will be submitted for analysis where field conditions allow. The current depth to water is unknown, but based on historical reports it is anticipated to be approximately 6 to 7 feet bgs. Due to this uncertainty in the current depth to water, the current depth to the capillary fringe is also unknown and may be shallower than anticipated. Therefore, shallow soil samples above the water table (within the capillary fringe) may necessitate hand auger collection, as the capillary fringe may be encountered during borehole clearance. A field determination will be made for the depth and method of the shallow sample collection.

Soil and groundwater samples will be analyzed by Environmental Protection Agency (EPA) Method 8260B for TPH-G, benzene, toluene, ethylbenzene and xylenes (BTEX compounds), and methyl tertiary butyl ether (MTBE). Additionally, soil and groundwater samples will be analyzed for TPH-D by EPA Method 8015M with silica gel cleanup.

Monitoring Wells:

Delta proposes the installation of three onsite monitoring wells, designated MW-1, MW-2 and MW-3 (**Figure 2**). The monitoring wells will be installed in the following locations:

- MW-1 will be installed in the southwest corner of the site, near the location of ATC-2 where a TPH-D concentration of 25,000 µg/l was reported in the duplicate sample collected from ATC-2 (duplicate sample was submitted to the laboratory under the name "B-2"). MW-1 will be placed further toward the southwest corner of the site from ATC-2 for contaminant plume delineation.
- MW-2 will be placed southeast of ATC-4, in the southeast corner of the property. Based on the 1994 closure letter, groundwater beneath the site was historically directed to the northwest (ACEH 1994). MW-2 will be installed to monitor conditions of groundwater entering the site.
- MW-3 will be placed northwest of ATC-5 where TPH-G and TPH-D were reported at concentrations of 5,300 µg/l and 18,000 µg/l, respectively. This well will also serve to monitor downgradient groundwater conditions.

Each boring will be pre-cleared using airknife technology to minimize the potential of encountering utilities during boring advancement. The borings for the wells will then be advanced to approximately 12 feet using a hollow stem auger drilling rig equipped with 8-inch outer diameter auger flights. The wells will be screened from approximately 2 feet to 12 feet bgs. This construction will allow for the groundwater table to intersect the screened interval of the well. Historic water level data summarized in the 1994 closure summary indicates that groundwater has historically fluctuated between 9.5 feet and 2.48 feet bgs (ACEH 1994). This screen interval will allow for natural fluctuation, while providing enough water volume to collect groundwater samples, and enough head space to ensure screens will not be submerged.

The wells will be constructed using 2-inch diameter PVC casing with 0.020-inch slotted casing in the screen interval due to anticipated coarse grained soils. 2/12 Monterey sand filter packing will be installed in the annular space to one foot above the top of the screened interval, overlain by a 2-foot thick bentonite seal (saturated in place). Each well will be capped with Portland cement grout and boxed at grade with a locking, water-tight cap and traffic-rated well box.

Following a minimum of 72 hours after completion of the well installations, the wells will be developed by surging the entire screen lengths and purging at least ten casing volumes of groundwater from each well. A minimum of 72 hours following well development, the wells will be purged of an additional three casing volumes and sampled. Newly installed wells will be included in a quarterly monitoring program.

During advancement of well borings, the deepest unsaturated soil sample (anticipated to be approximately 5 feet bgs) will be collected for analysis. Additional soil samples will be collected from within the capillary fringe (to be determined from the CPT portion of the investigation), then continuously to 12 feet bgs and screened for the presence of volatile organic compounds (VOCs) using a PID. A lithologic description of each soil sample will be recorded by a Delta geologist on a boring log form. From each well boring, it is estimated that three soil samples will be collected for laboratory analysis where field conditions allow—the deepest unsaturated soil sample, a sample from within the capillary fringe (to be determined from the CPT portion of the investigation), and from the bottom of each well boring. The soil sample that exhibits the highest PID value will be submitted for analysis.

Soil and groundwater samples will be analyzed by EPA Method 8260B for TPH-G, BTEX compounds and MTBE. Additionally, soil and groundwater samples will be analyzed for TPH-D by EPA Method 8015M with silica gel cleanup.

Down-hole tools will be cleaned prior to and between each boring to prevent cross-contamination. Waste materials will be stored onsite in DOT approved 55-gallon drums pending proper disposal.

Following monitoring well completion and development activities, the newly installed well will be placed on a quarterly monitoring program. Newly-installed wells will be surveyed by a licensed surveying company in accordance with State of California requirements for the GeoTracker database, and all field point data, soil and water sample analytical data will be uploaded to the GeoTracker system per current standards.

Preferential Pathway Investigation

Delta conducted a preferential pathway study (included in **Attachment A**) which identified a sewer line bordering the site along Broadway Avenue (Delta 2008). Proposed locations of wells MW-1 and MW-2 are adjacent to the sewer line and will serve to monitor any groundwater being transported in the sewer line trenching. Should results of soil and groundwater samples from MW-1 and MW-2 contain elevated concentrations of petroleum

hydrocarbons and constituents, if necessary, Delta may propose offsite downgradient investigation along the sewer line to determine whether contaminants are being transported through permeable trenching.

SCHEDULE

Delta requests to receive regulatory comment of the proposed scope of work within 60 days of ACEH receipt of this work plan. Delta will obtain all necessary permits following approval of this work plan by the ACEH and will commence field activities within 30 days of receipt work plan approval by ACEH.

REPORTING

Upon completion of the fieldwork, Delta will prepare a report describing field activities, methods, and analytical results. Delta will evaluate the findings of this investigation and include additional recommendations as appropriate.

It is further estimated that the final report will be ready for submittal approximately 45 days after receipt of the sample analytical results.

REMARKS

The descriptions, conclusions, and recommendations contained in this document represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, the data from those reports is used "as is" and is assumed to be accurate. Delta does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This document 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 document were conducted. This document is intended only for the use of Delta's Client and anyone else specifically listed on this document. 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 document.

If you have any questions regarding this work plan or need and additional information about the Site, please do not hesitate to contact the undersigned at (408) 826-1863.

Sincerely,

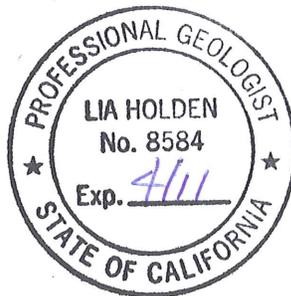
DELTA CONSULTANTS



Nadine Periat
Senior Staff Geologist



Lia Holden, PG #8584
Geologist – Project Manager



Figures:

- Figure 1 - Site Location Map
- Figure 2 - Site Map

Attachments:

- Attachment A – Delta’s Soil and Water Investigation Work Plan Addendum dated April 3, 2009
- Attachment B - Agency Correspondence
- Attachment C - ATC’s Due Diligence Site Assessment Report
- Attachment D - CPT Field Procedures

REFERENCES CITED

Alameda County Health Care Services Agency, *Case Closure, Unocal 5300 Broadway, Oakland, CA - 94621*, April 20, 1994.

ATC Associates Inc., *Due Diligence Site Assessment Report, ConocoPhillips Site No. 251028, 5300 Broadway Avenue, Oakland, California*, November 1, 2007.

Alameda County Health Care Services Agency, *Subject: Fuel Leak Case No. R000002967 and Geotracker Global ID T0619732490, Unocal #1028/ ConocoPhillips #251028, 5300 Broadway, Oakland, CA, 94618*, June 25, 2008.

Delta Consultants, *Additional Site Assessment Work Plan – First Phase, Fuel Leak Case No. R000002967, Geotracker Global ID T0619732490, Unocal #1028/ ConocoPhillips #251028, 5300 Broadway, Oakland, CA 94618*, October 29, 2008

Alameda County Health Care Services Agency, *Subject: Fuel Leak Case No. R000002967 and Geotracker Global ID T0619732490, Unocal #1028/ ConocoPhillips #251028, 5300 Broadway, Oakland, CA, 94618*, March 6, 2009.

Delta Consultants, *Soil and Water Investigation Work Plan Addendum, Fuel Leak Case No. R000002967, Geotracker Global ID T0619732490, Unocal #1028/ ConocoPhillips #251028, 5300 Broadway, Oakland, CA 94618*, April 3, 2009

FIGURES

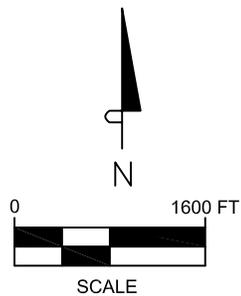
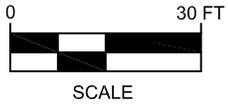
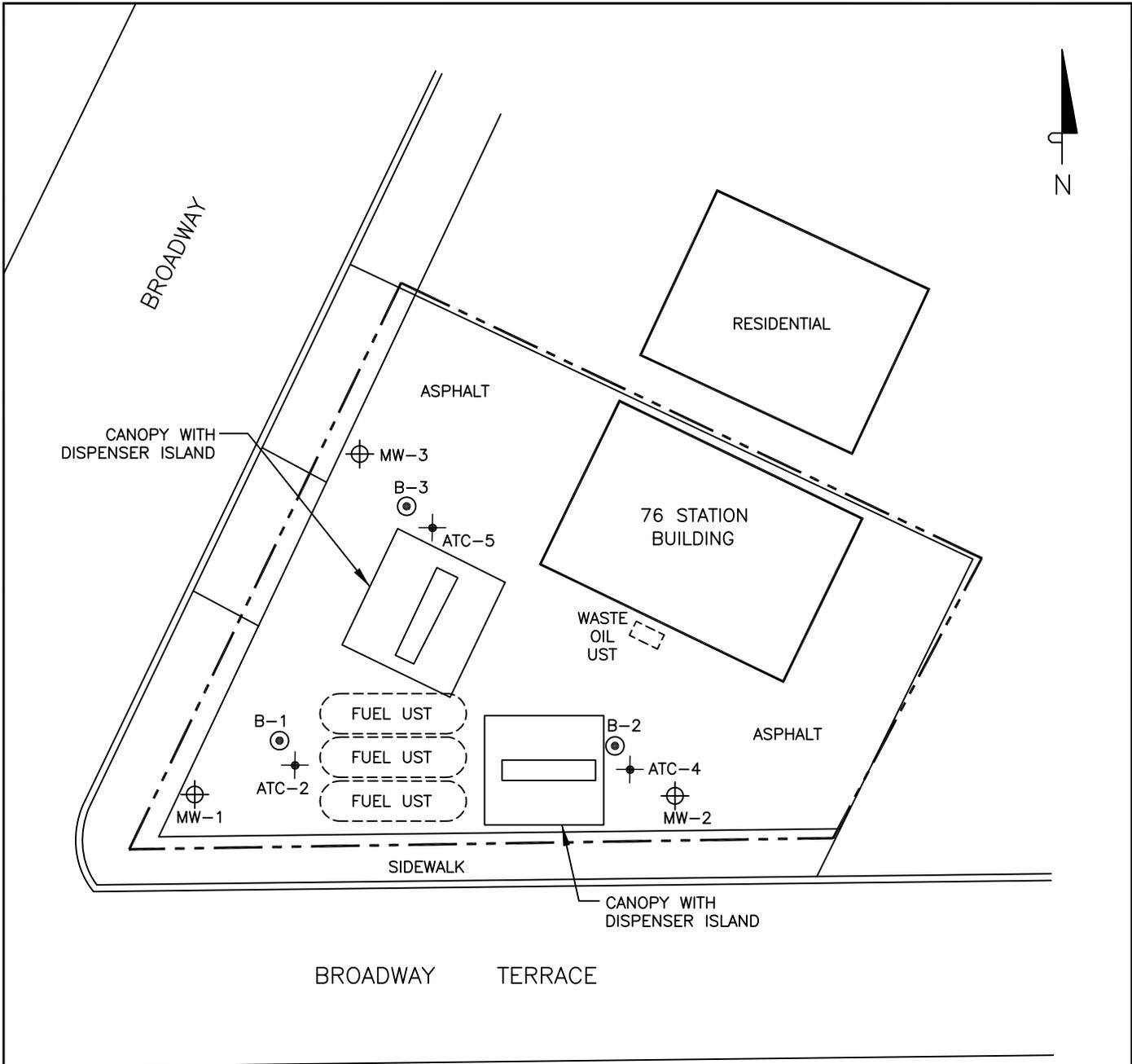


FIGURE 1
SITE LOCATION MAP

76 STATION NO. 1028
5300 BROADWAY AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 140251028	PREPARED BY NP	DRAWN BY JH
DATE 04/19/10	REVIEWED BY LH	FILE NAME 1028-Topo





NOTE:
SITE MAP ADAPTED FROM A SITE MAP BY ATC ASSOCIATES, 2007.

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- ATC-5 SOIL BORING LOCATION (ATC 2007)
- MW-3 PROPOSED MONITORING WELL LOCATION
- B-3 PROPOSED SOIL BORING LOCATION

FIGURE 2
SITE MAP

76 STATION NO. 1028
5300 BROADWAY
OAKLAND, CALIFORNIA

PROJECT NO. I40251028	PREPARED BY NP	DRAWN BY KYM	
DATE 07/07/10	REVIEWED BY LH	FILE NAME 1028-Site	

ATTACHMENT A

Delta's Soil and Water Investigation Work Plan Addendum dated April 3, 2009
and
Additional Site Assessment Work Plan – First Phase dated October 29, 2008



76 Broadway
Sacramento, California 95818

October 30, 2008

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

Re: ***Additional Site Assessment Work Plan—First Phase***
76 Service Station # 1028 RO # 02967
5300 Broadway
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.

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 large, light-colored oval scribble.

Terry L. Grayson
Site Manager
Risk Management & Remediation

October 29, 2008

Ms. Barbara J. Jakub, PG

Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577



**RE: Additional Site Assessment Work Plan
First Phase
Fuel Leak Case No. R000002967
Geotracker Global ID T0619732490
Unocal#1028 / ConocoPhillips # 251028
5300 Broadway
Oakland, CA 94618**

Dear Ms. Jakub:

On behalf of Conoco Phillips Company (COP), Delta Consultants (Delta), has prepared this work plan as directed by the Alameda County Environmental Health (ACEH) in the letter dated June 25, 2008.

A *Due Diligence Site Assessment Report* that was submitted by ATC on November 2007. This report discusses the results of the baseline assessment that was performed at the site in 2007. The report indicates that maximum concentrations of 25,000 micrograms per liter ($\mu\text{g/L}$) total petroleum hydrocarbons as diesel (TPHd) in groundwater from ATC-2 and 5,300 $\mu\text{g/L}$ total petroleum hydrocarbons as gasoline (TPHg) in ATC-5. The maximum TPHd concentration in soil [23 milligrams per kilogram (mg/Kg)] was detected in ATC-2 at a depth of five feet below ground surface (bgs) and the maximum TPHg concentration (5.2 mg/Kg) was detected in ATC-5 from 5 ft bgs.

a member of:



ACEH requested that additional investigation be performed at the site to:

1. Define the dissolved contamination plume, and to
2. Evaluate the preferential pathways (Utility Survey and Well Survey)

In this **First Phase**, Delta is proposing the advancement of seven soil borings (Figure 1) to determine the extent of contamination in soil and groundwater.

In a **Second Phase**, the vertical extent and magnitude of soil and groundwater contamination and, if necessary, the lateral extent and magnitude of groundwater in the off-site areas will be defined and consequently, the hydrogeologic conditions will be determined. A Work Plan to install a minimum of three groundwater monitoring wells on site will be submitted for approval to ACEH. Monitoring well locations and (if necessary) the off-site soil boring locations will be determined based on Phase 1 results.

SITE DESCRIPTION

The site's current underground storage tank (UST) system configuration includes three fuel USTs, one waste oil UST and two dispenser islands. During the site visit, on October 17, 2008, the fuel station was inactive (fenced).

PREVIOUS ASSESSMENT

1989 - Soil samples were collected following the removal of two fuel storage tanks, their associated piping, and a waste oil tank at the referenced site. Ground water was encountered in the tank pit at a depth off approximately 7 to 8 feet. Analytical results of the soil samples showed TPH as gasoline ranging from non-detectable to 22 ppm in the fuel tank pit and from non-detectable to 5.7 ppm in the waste oil tank pit. All TPH as diesel levels were less than 10 ppm and all TOG levels in the waste oil tank pit were less than 50 ppm.

On April 6 and 9, **1990**, three two-inch diameter monitoring wells (designated as MW1, MW2 and MW3 on the attached Figure 1) were installed at the site. Analytical results of the soil samples, collected from the borings for monitoring wells (MW1, MW2 and MW3), indicate non-detectable levels of TPH as gasoline in all soil samples. Benzene was detected in the soil samples at concentrations ranging from non-detectable to 0.0066 ppm. In boring MW1 soil samples, TPH as diesel, TOG and EPA 8010 compounds were non-detectable in all samples. Analytical results of the ground water samples collected from monitoring wells MW1 and MW2 indicate non-detectable levels of TPH as gasoline and BTX&E. In well MW3, TPH as gasoline was detected at 590 ppb and benzene was detected at 2.5 ppb. In well MW1, TPH as diesel was detected at 5.4 ppb, while TOG and EPA method 8010 constituents were non-detectable.

On April 24, **1998**, product lines and dispensers were removed. Product lines consisted of double-walled fiberglass piping and showed no visible evidence of damage or staining. The piping was removed only in the dispenser area. Laboratory analyses of soil samples collected from adjacent to former dispensers D 1 and D2 did not detect concentrations of residual gasoline hydrocarbons at or above the stated laboratory detection limits except for methyl tert-butyl ether (MTBE) detected at 0.46 milligrams per kilogram (mg/kg). Lead was detected in the sample collected adjacent to dispenser D1 (6.4 mg/kg).

2007 - On September 27, 2007, ATC personnel observed the advancement of three soil borings (ATC-2, ATC-4 and ATC-5) in the vicinity of the existing fuel USTs and dispensers.

Laboratory analytical results for the **soil** samples selected for analysis indicate the following:

- Ethylbenzene was detected at a concentration of 0.007 milligrams per kilogram (mg/kg) in the soil sample collected at approximately five feet bgs from boring ATC-5.
- Methylene chloride was detected at a concentration of 0.007 mg/kg in the soil sample collected at approximately 10 feet bgs from boring ATC-4.
- TPH-GRO was detected at concentrations of 1.4 mg/kg and 5.2 mg/kg in the soil samples collected at approximately five feet bgs from borings ATC-2 and ATC-5, respectively.
- TPH-DRO was detected at a concentration of 23 mg/kg in the soil sample collected at approximately five feet bgs from boring ATC-2.
- Lead was detected at concentrations of 11.3 mg/kg, 13.8 mg/kg, 16.7 mg/kg and 9.63 mg/kg in the soil samples collected at approximately five feet bgs from borings ATC-2 and ATC-5 and 10 feet bgs from borings ATC-4 and ATC-5, respectively.

Laboratory analytical results for the **groundwater** samples collected from borings ATC-2 (including duplicate B-2) and ATC-5 indicate the following:

- Ethylbenzene was detected at a concentration of 45 micrograms per liter (ug/L) in the groundwater sample collected from boring ATC-5.
- Total xylenes were detected at a concentration of 6 ug/L in the groundwater sample collected from boring ATC-5.

- TPH-GRO was detected at concentrations of 73 ug/L, 69 ug/L and 5,300 ug/L in the groundwater samples collected from borings ATC-2 (including duplicate B-2) and ATC5, respectively.
- TPH-DRO was detected at concentrations of 15,000 ug/L, 25,000 ug/L and 18,000 ug/L in the groundwater samples collected from borings ATC-2 (including duplicate B-2) and ATC-5, respectively.

GEOLOGY AND HYDROGEOLOGY

In 1990, the water table stabilized in the monitoring wells at depths ranging from 2.30 to 3.75 feet below the surface. The ground water flow direction appeared to be northwest on April 17, 1990. The results of the subsurface study indicated that the depth to the Franciscan Complex bedrock materials at the site varies from about 1/2 foot up to a maximum of 3 feet below grade. The bedrock materials are typically composed by hard, fractured shale.

In 2007, the lithology underlying the site generally is described as consisted of clayey, silty and sandy gravel, shale bedrock and gravelly sand from the ground surface to approximately 13 feet bgs, the maximum extent of exploration. PID readings from screened soil samples collected from borings ATC-2 and ATC-4 were 0.0 parts per million (ppm), while the soil samples collected from boring ATC-5 at five, seven and 10 feet bgs registered 33.8 ppm, 99.1 ppm and 396 ppm, respectively. Geoprobe refusal was encountered at depths of approximately 13 feet bgs and 10 feet bgs in borings ATC-2 and ATC-4, respectively, while boring ATC-5 was advanced to a depth of approximately 10 feet bgs.

FILE REVIEWS

Files regarding the subject site were reviewed on Delta's databases and on ConocoPhillips' databases, "Livelink" and "WebXtender". ACEH, DTSC, and the RWQCB offices have been contacted for file search. Excepting files for the subject site, these agencies indicated there are no files for the other environmental cases in the immediate surrounding areas.

Water Well Survey

The agency receptor survey was completed to identify all water supply wells within a half-mile radius of the site referenced above. The survey entailed a request to the California Department of Water Resources (DWR) office in Sacramento to provide well log records. No water supply wells were listed in DWR database within a half-mile radius of the site.

Preferential Pathways

Evidence from the investigation indicates that a preferential pathway exists to facilitate direct chemical migration. A preferential pathway is a more permeable pathway through the aquifer material. Trench backfill for the buried sanitary sewer, storm sewer, water lines, gas lines, and other underground utilities contain more sand or gravel and may constitute potential pathways for groundwater flow.

Attached please see a map showing the underground utilities at the subject site (Figure 2). The location and direction of underground utilities shown on these maps are based on information/maps provided by Alameda County Public Works, PG&E, and ConocoPhillips.

Based on the data obtained, trench backfill material ranges from native soil to trench sand. The minimum cover above identified utilities in the area was reported to be 2.0- 2.5 feet. Based on the information obtained, the depths of the utility trenches in the immediate surrounding areas do not exceed 5 feet.

Based on the historical depth to groundwater (between 2.30 ft. and 3.75 ft bgs in 1990, but 7 ft bgs in 2007), groundwater flow direction (NW in 1990), depth and assumed slope of the shale bedrock, site area slope (West-Northwest), and underground utilities direction and depth (see Figures 2, attached), it is likely that the sewer line/trench and possibly the water line/trench provide a direct conduit for groundwater migration from the subject site to the neighboring sites, most likely to those located down-slope to the Northwest and West.

It should be mentioned that, based on our professional opinion, due to depths to the shallow aquifer and close proximity, contaminants could have migrated such as affecting the shallow aquifer immediately below the subject site and later, by lateral transport, dispersion, dissolution, etc., the aquifer in the surrounding areas. Therefore, it is likely that the shallow aquifer in the area was affected by both mechanisms described, migration from below the subject site and along a preferential pathway (the sewer line trench).

PROPOSED ACTIVITIES

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. Prior to drilling, Underground Service Alert (USA) and a private utility locator will be notified as required to clear the proposed drilling locations for underground utilities.

Soil Boring and Soil Samples

Delta proposes to advance seven soil borings, designated B1 through B7, using a truck mounted 8-inch hollow stem auger. Each soil boring will be advanced to a maximum depth of approximately 12-15 feet bgs or until refusal is attained. Soil samples will be logged using the Unified Soil Classification System (USCS) for lithologic interpretation and field screened for the presence of volatile organic compounds by headspace analysis using a pre-calibrated photo-ionization detector (PID). Soil samples will be collected at 5-foot intervals and immediately above the soil-groundwater interface (above the capillary fringe) for lithologic interpretation, field screening, and laboratory analysis. However, any other obviously contaminated soils (as determined in the field by an experienced geologist and by using a PID) will be sampled and analyzed. A grab groundwater sample will be acquired using a clean bailer. All soil and grab groundwater samples collected will be properly labeled and placed on ice and submitted for analysis. A chain-of-custody will accompany the samples during transportation to the laboratory.

Groundwater samples and soil samples collected will be analyzed by a California Department of Public Health (CDPH) certified laboratory for: fuel oxygenates and halogenated volatile organic compounds (HVOC) - including benzene, toluene, ethylbenzene and total xylenes [BTEX] and MTBE using Environmental Protection Agency (EPA) Method 8260B, for total petroleum hydrocarbons (TPH) in the gasoline and diesel range (TPH-GRO and TPH-DRO, respectively) and TPH-oil range organics (ORO) using EPA Method 8015B Modified, and for Total: Cadmium, Chromium, Lead, Nickel and Zinc using (TTLC) EPA Method 6010B.

Once the sampling has been completed, the boring will be backfilled the same day to the surface with neat cement.

The sealing material will be a neat cement grout composed of one sack of Portland Type I/II Cement (94 lbs.) to five gallons of clean water or a sand-cement slurry with a minimum of eleven sacks of Portland Type I/II Cement per cubic yard. If standing water is present or if there is more than a 30 foot length

to be sealed, the sealing material will be placed by means of a tremie pipe (maximum diameter of 3 inches) lowered to within 3 feet of the underlying layer of material or bottom of the well. The sealing material will be placed in one continuous operation until the borehole is filled. If a tremie pipe is used, the end of the tremie pipe will remain in place in the sealing material until placement is complete.

Down-hole drilling tools will be decontaminated between borings to avoid cross contamination. The decontamination process will consist of multiple wash and rinse cycles using potable water and a non-phosphate detergent.

Disposal of Drill Cuttings and Wastewater

Drill cuttings and decontamination water generated during the soil boring advancement will be placed into properly labeled 55-gallon Department of Transportation (DOT) approved steel drums and temporarily stored on the property. Samples of the drill cuttings and wastewater will be collected, properly labeled and placed on ice for submittal to a CDPH-certified laboratory and analyzed for TPH, BTEX, and MTBE by EPA Method 8260B and total lead by EPA Method 6010B. A chain-of-custody will accompany the samples during transportation to the laboratory. Subsequent to receiving the laboratory analytical results, the drummed drill cuttings and wastewater will be profiled, transported, and disposed of at a COP approved facility.

Reporting

Following completion of the field work and receipt of analytical results, a site investigation report will be prepared and submitted within 60 days. The report will present the details of the boring activities and copies of disposal documents. Required electronic submittals will be uploaded to the State Geotracker database.

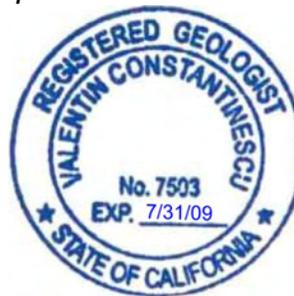
REMARKS/SIGNATURES

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 will be 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.

If you have any questions regarding this project, please contact me at (916) 503-1265 or Mr. Terry Grayson of ConocoPhillips at (916) 558-7666.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.



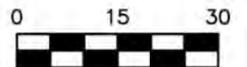
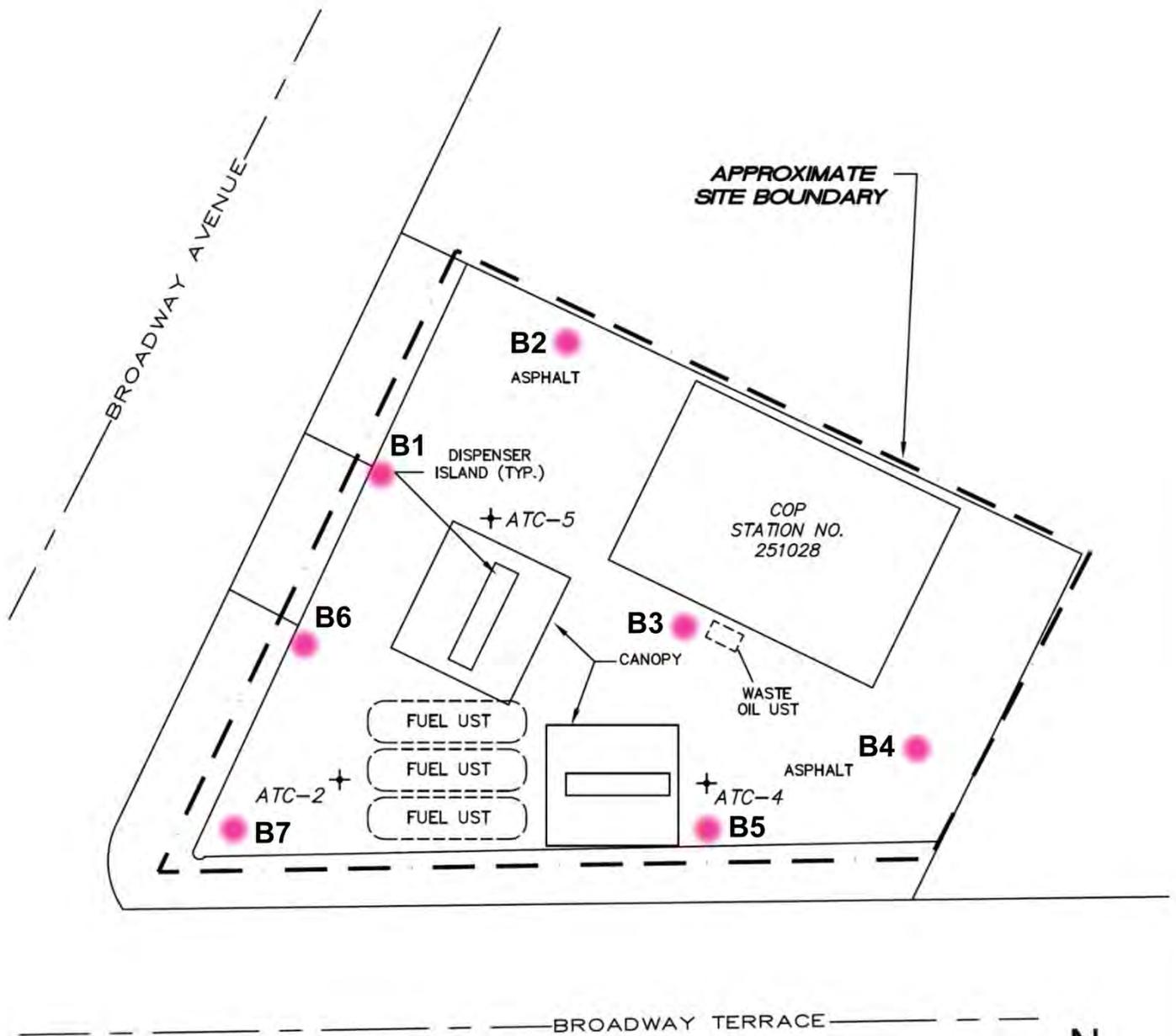
Valentin Constantinescu

Valentin Constantinescu, P.G., R.E.A.
Senior Project Manager
California-Registered Professional Geologist No. 7503

Figures:

- Figure 1 – Site Map – Proposed Soil Boring Locations
- Figure 2 – Preferential Pathway Investigation

cc: Mr. Terry Grayson, ConocoPhillips (electronic copy only)



SCALE, FT

LEGEND

ATC-2 + SOIL BORING LOCATION (ATC, 2007) AND DESIGNATION

B1 ● PROPOSED SOIL BORING LOCATION AND DESIGNATION

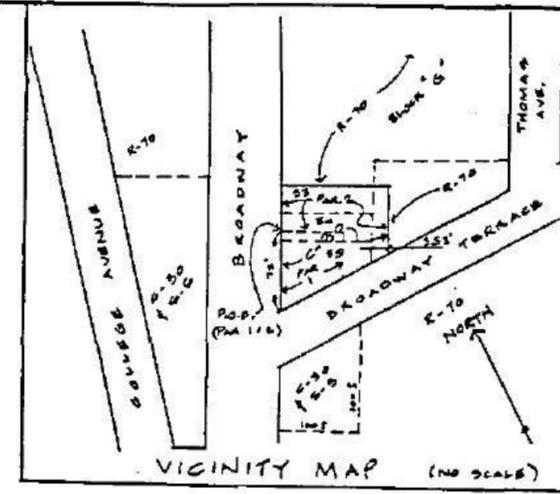
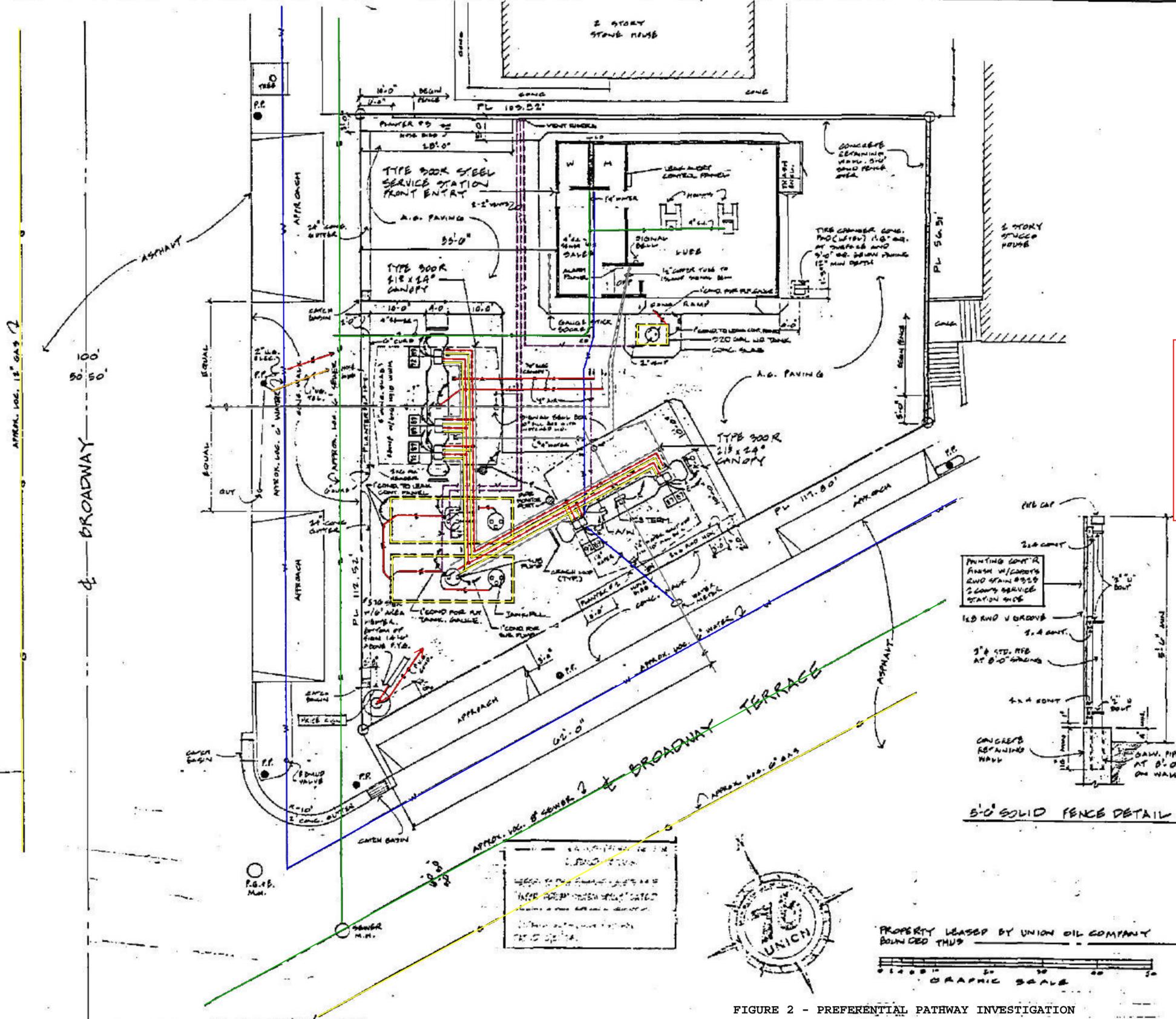
NOTE: LOCATIONS AND SCALE ARE APPROXIMATE

FIGURE 1
PROPOSED SOIL BORING LOCATIONS
CONOCOPHILLIPS SITE NO. 251028
5300 BROADWAY
OAKLAND, CALIFORNIA

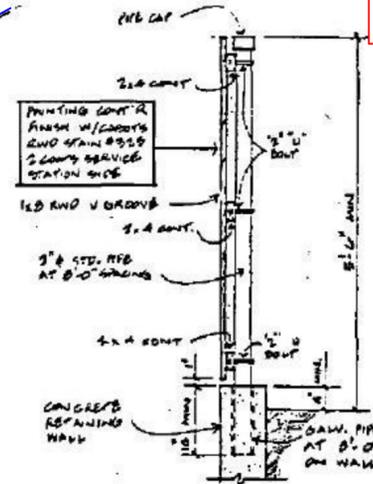
PROJECT NO. 251028	DRAWN BY V.C.
FILE NO. 4979	PREPARED BY V.C.
REVISION NO. 1	REVIEWED BY K.T.



NOTE: BASE MAP ATC ASSOCIATES, INC. - 2007

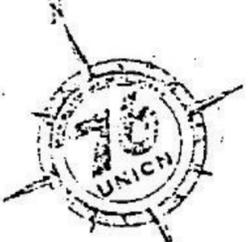


- Telephone line
- Sewer Line
- Electric Line
- Water
- Gas Line
- UST
- - - Vent Line
- Other/Unknown Utility



— PLANTING LEGEND —

NUMBER	VARIETY	HTAL	SEE	SPACING
1	JUNIPER TAM	8	5 GAL	6' O.C.
2	"	10	"	5' O.C.
3	"	3	"	10' O.C.



PROPERTY LEASED BY UNION OIL COMPANY
BOUNDED THUS

FIGURE 2 - PREFERENTIAL PATHWAY INVESTIGATION

NO.	DESCRIPTION

store # 251028 Date: 8/14/91 August 1991
 Unit # 1028 Code: GEN Color
 Description: GEN ARRANGEMENT
 WESTERN REGION BOX: A #9532

NO.	DATE	REVISION	BY	CHKD	APP
1		GENERAL TAP MECHANICAL			
2		REPLACE 2-1/2\"/>			

APPROVED FOR CONSTRUCTION
 DATE: 10-22-66
 GENERAL ARRANGEMENT
 SERVICE STATION NO. 1028
 BROADWAY + BROADWAY TERRACE
 OAKLAND CALIFORNIA
 UNION OIL COMPANY OF CALIFORNIA
 LOS ANGELES, CALIF.
 F3-1028-1.1

DATE OF COMPLETION: APRIL 4, 1966

SS 1028

CONTRACTOR: AS BUILT DWG 5-4-66 CONTR. JOB NO.:



76 Broadway
Sacramento, California 95818

April 6, 2009

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

Re: ***Additional Site Assessment Work Plan***
76 Service Station # 1028 RO # 02967
5300 Broadway
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.

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". The signature is stylized and written over a large, light-colored scribble or mark.

Terry L. Grayson
Site Manager
Risk Management & Remediation

April 3, 2009

Ms. Barbara J. Jakub, PG

Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**RE: Soil and Water Investigation
Work Plan Addendum
Fuel Leak Case No. R000002967
Geotracker Global ID T0619732490
Unocal#1028 / ConocoPhillips # 251028
5300 Broadway
Oakland, CA 94618**



Dear Ms. Jakub:

On behalf of Conoco Phillips Company (COP), Delta Consultants (Delta), has prepared this *Soil and Water Investigation Work Plan Addendum* ("Work Plan Addendum") as directed by the Alameda County Environmental Health (ACEH) in the letter dated March 6, 2009.

A site description, previous environmental compliance activities at the subject site, geology and hydrogeology, a water well survey, a discussion on preferential pathways, drilling and sampling procedures, analyses, QA/QC, permitting, disposal of drill cuttings and wastewater have already been presented in the October 30, 2008 *Additional Site Assessment Work Plan* ("2008 Work Plan") and are not repeated in this Work Plan Addendum.

This Work Plan Addendum responds to the technical comments regarding: 1. Vertical Extent of Contamination, 2. Soil Sampling, 3. Groundwater and Soil Analysis, and 4. Preferential Pathway Survey addressed in the March 6, 2009 ACEH's letter.

a member of:



11050 WHITE ROCK ROAD SUITE 110 RANCHO CORDOVA, CALIFORNIA 95670 USA
PHONE 916.638.2085 / 800.477.7411 FAX 916.638.8385 WWW.DELTAENV.COM

ACEH's letter requested that "a brief work plan addendum" be submitted to address the technical comments below:

- 1. "Vertical Extent of Contamination. Your work plan does not include evaluation of the vertical extent of contamination at the site as requested in the ACEH letter dated June 26, 2008 but suggests that this will be defined in the second phase of the work. Following the Expedited Site Assessment Process, ACEH recommends that the vertical extent of contamination be assessed along with the lateral extent of contamination. Please update your work plan to assess this data gap."**

To evaluate of the vertical extent of contamination at the site, as requested by ACEH, three (3) deep soil borings designated DSB-1, DSB-2, and DSB-3 are proposed to be drilled to approximately fifty (50) ft bgs using rotary drilling at those locations shown on Figure 1, attached. The three deep soil borings are proposed to be located in the close proximity of ATC-2, ATC-2, and ATC-4 where higher levels of contaminants have been detected in 2007 in soil/groundwater (near the "source"). Because refusal was encountered during previous drilling (geoprobe) activities, all three deep soil borings will be advanced using a truck mounted drill-rig equipped with 8-inch diameter hollow stem augers.

- 2. "Soil Sampling - In addition to your proposed sampling at five foot intervals, at the capillary fringe and areas with high PID readings, ACEH also requests that you collect continuous soil samples for lithologic logging and submit soil samples for analysis from the saturated zone to define the vertical extent of soil contamination since fluctuations in groundwater levels can submerge contaminated soils, leaving a soil source that would otherwise go undetected if not sampled."**

In addition to the proposed sampling (October 30, 2008 Work Plan) at five foot intervals, at the capillary fringe and areas with high PID readings, as requested by ACEH, soil samples will be collected continuously for lithologic logging and soil samples will be also submitted for analysis from the saturated zone to define the vertical extent of soil contamination since fluctuations in groundwater levels can submerge contaminated soils. It should be noted that the sampling and analyses interval will be also applied to the deep soil borings (DSB-1, DSB-2, and DSB-3) mentioned above.

- 3. "Groundwater and Soil Analysis - In addition to your proposed analyses, please ensure that samples are analyzed for ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), tert butyl alcohol (TBA), ethylene dibromide (EDB), ethylene dichloride (EDC) and ethanol by EPA Method 8260. Also, please add the depth to water on your groundwater analytical table."**

As requested by ACEH, in addition to the analyses proposed in the 2008 Work Plan, all soil and groundwater samples submitted for analysis will be also analyzed for ETBE, DIPE, TAME, TBA, EDB, and EDC by EPA Method 8260 and the depth to water will be added to the groundwater analytical table.

- 4. "Preferential Pathway Survey - The results of the utility survey indicate that utilities can be a preferential pathway for contaminants at the site. If your borings results indicate that contamination is present along the Broadway Terrace side of the site (proposed borings B1, B6 and/or B7), please include your proposal to investigate potential migration along the utilities in the report requested below."**

As noted by ACEH, if contamination is detected in B1, B6, and B7, potential migration of contaminants exist along the preferential pathways created by the existing utilities; therefore, based on this first phase results, conclusions, and recommendations, and if warranted, additional soil/groundwater sampling will be proposed along these preferential pathways.

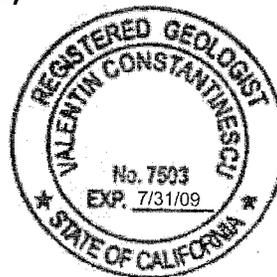
REMARKS/SIGNATURES

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 will be 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.

If you have any questions regarding this project, please contact me at (916) 503-1265 or Mr. Terry Grayson of ConocoPhillips at (916) 558-7666.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.



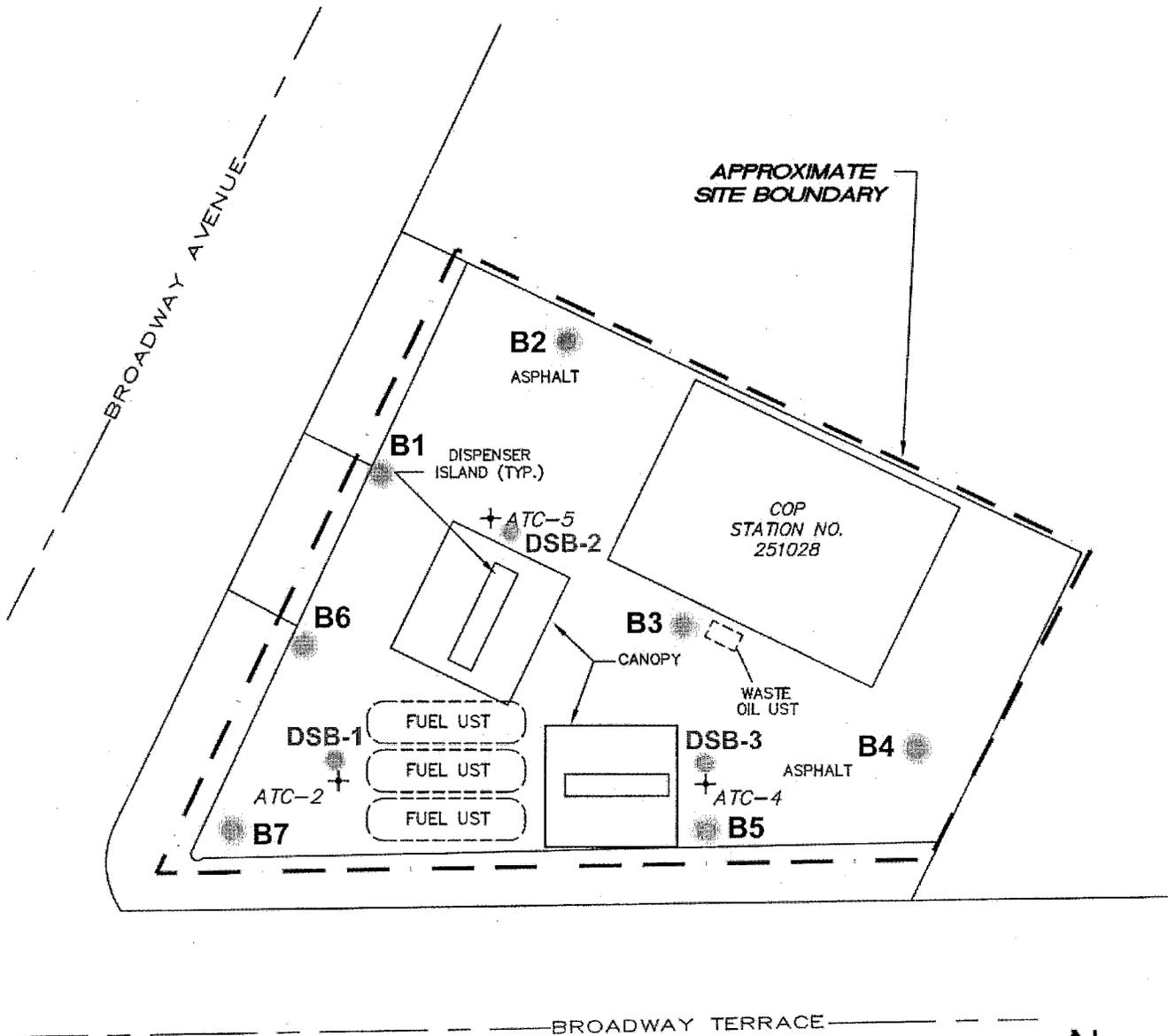


Valentin Constantinescu, P.G., R.E.A.
Senior Project Manager
California-Registered Professional Geologist No. 7503

Figures:

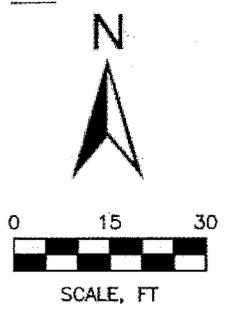
Figure 1 – Site Map – Proposed Soil Boring Locations

cc: Mr. Terry Grayson, ConocoPhillips (electronic copy only)



LEGEND

- ATC-2
+ SOIL BORING LOCATION (ATC, 2007) AND DESIGNATION
- B1 ● PROPOSED SOIL BORING LOCATION AND DESIGNATION
- DSB-1 ● PROPOSED DEEP SOIL BORING LOCATION AND DESIGNATION



NOTE: LOCATIONS AND SCALE ARE APPROXIMATE

FIGURE 1

**PROPOSED SOIL BORING LOCATIONS
CONOCOPHILLIPS SITE NO. 251028
5300 BROADWAY
OAKLAND, CALIFORNIA**

PROJECT NO. 251028	DRAWN BY V.C.	
FILE NO. 4979	PREPARED BY V.C.	
REVISION NO. 1	REVIEWED BY K.T.	

NOTE: BASE MAP ATC ASSOCIATES, INC. - 2007

ATTACHMENT B

Agency Correspondence

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



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

June 25, 2008

Mr. Bill Borgh
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Mr. Elias and Mrs. Elaine Adamopoulos
18 Southampton Place
Lafayette, CA 94549

Subject: Fuel Leak Case No. RC00002967 and Geotracker Global ID T0619732490, Unocal #1028 / ConocoPhillips # 251028, 6300 Broadway, Oakland, CA 94618

Dear Mr. Borgh and Mr. and Mrs. Adamopoulos:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the November 1, 2007 *Due Diligence Site Assessment Report* that was submitted by ATC. This report discusses the results of the baseline assessment that was performed at the site in 2007. The report indicates that maximum concentrations of 25,000 micrograms per liter ($\mu\text{g/L}$) total petroleum hydrocarbons as diesel (TPHd) in groundwater from ATC-2 and 5,300 $\mu\text{g/L}$ total petroleum hydrocarbons as gasoline (TPHg) in ATC-5. The maximum TPHd concentration in soil [23 milligrams per kilogram (mg/Kg)] was detected in ATC-2 at a depth of five feet below ground surface (bgs) and the maximum TPHg concentration (5.2 mg/Kg) was detected in ATC-5 from 5 ft bgs.

ACEH requests that you perform additional investigation at the site including addressing the following technical comments, performing the requested work, and sending us the technical reports requested below.

TECHNICAL COMMENTS

1. **Dissolved Contamination Plume Definition.** The lateral and vertical extent of groundwater contamination is undefined since the only two groundwater samples collected during the baseline assessment both contained elevated petroleum hydrocarbons. We recommend that you perform an expedited site assessment to determine the extent of contamination in the groundwater. Please submit your proposal to define the extent of contamination in the Work Plan requested below.

2. **Preferential Pathway Evaluation Survey**- The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of the NAPL and/or plume encountering preferential pathways and conduits that could spread contamination. We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for vertical and lateral migration that may be present in the vicinity of the site.

Discuss your analysis and interpretation of the results of the preferential pathway study (including the detailed well survey and utility survey requested below) and report your results in the Work Plan requested below. The results of your study shall contain all information required by California Code of Regulations, Title 23, Division 3, Chapter 16, §2654(b).

a. **Utility Survey**

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Please include maps and cross-sections illustrating the location and depth of all utility lines and trenches within and near the site and plume areas(s) as part of your study.

b. **Well Survey**

The preferential pathway study includes a detailed well survey of all wells (monitoring and production wells: active, inactive, standby, decommissioned (sealed with concrete), abandoned (improperly decommissioned or lost); and dewatering, drainage, and cathodic protection wells) within a ¼-mile radius of the subject site. Your consultant has already contacted us to perform a well survey. Please report the results of the well survey in the work plan requested below.

TECHNICAL REPORT REQUEST

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

- **September 30, 2008** –Work Plan and preferential pathway evaluation

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

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used

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

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including

Mr. Borgh and Mr. and Mrs. Adamopoulos
RO0002967
June 25, 2008, Page 4

the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,



Barbara J. Jakub, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Mr. Valentin Contantinescu, Delta Environmental Consultants, Inc., 11050 White Rock Road, Rancho Cordova, CA 95670, (via electronic mail)

Donna Drogos, ACEH (Sent via electronic mail)
Barbara Jakub, ACEH
File

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



AOC 04979 - OAKLAND
TERRY GRAYSON
AGCY COLLEGE

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

March 6, 2009

Mr. Terry Grayson
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Mr. Mohammad Ahmadi
Lafayette Investment Group, LLC
587 Ygnacio Valley Road
Walnut Creek, CA 94596

Ms. Elizabeth Bochnak
64 Glenwild Rd.
Madison, NJ 07940

Subject: Fuel Leak Case No. RO00002967 and Geotracker Global ID T0619732490, Unocal #1028 / ConocoPhillips # 251028, 5300 Broadway, Oakland, CA 94618

Dear Messrs. Grayson and Ahmadi and Ms. Bochnak:

Alameda County Environmental Health (ACEH) staff has reviewed the October 30, 2008 *Additional Site Assessment Work Plan* that was submitted by Delta for the above-referenced site. The work plan proposes advancing seven soil borings in the first phase to determine the extent of contamination in soil and groundwater. Delta proposed submit a work plan to define the vertical and lateral extent of the contamination plume and to install monitoring wells in a second phase of work. We request that you address the following technical comments and submit a brief work plan addendum that addresses the technical comments below.

TECHNICAL COMMENTS

1. **Vertical Extent of Contamination.** Your work plan does not include evaluation of the vertical extent of contamination at the site as requested in the ACEH letter dated June 26, 2008 but suggests that this will be defined in the second phase of the work. Following the Expedited Site Assessment Process, ACEH recommends that the vertical extent of contamination be assessed along with the lateral extent of contamination. Please update your work plan to assess this data gap.
2. **Soil Sampling** – In addition to your proposed sampling at five foot intervals, at the capillary fringe and areas with high PID readings, ACEH also requests that you collect continuous soil samples for lithologic logging and submit soil samples for analysis from the saturated zone to define the vertical extent of soil contamination since fluctuations in groundwater levels can submerge contaminated soils, leaving a soil source that would otherwise go undetected if not sampled.

3. **Groundwater and Soil Analysis.** In addition to your proposed analyses, please ensure that samples are analyzed for ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), tert butyl alcohol (TBA), ethylene dibromide (EDB), ethylene dichloride (EDC) and ethanol by EPA Method 8260. Also, please add the depth to water on your groundwater analytical table.
4. **Preferential Pathway Survey.** The results of the utility survey indicate that utilities can be a preferential pathway for contaminants at the site. If your borings results indicate that contamination is present along the Broadway Terrace side of the site (proposed borings B1, B6 and/or B7), please include your proposal to investigate potential migration along the utilities in the report requested below.

TECHNICAL REPORT REQUEST

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

- **April 6, 2009** – Soil and Water Investigation Work Plan Addendum

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

ELECTRONIC SUBMITTAL OF REPORTS

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

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following:

Messrs. Grayson and Ahmadi and Ms. Bochnak
RO0002967
March 6, 2009, Page 3

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

If you have any questions, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,



Barbara J. Jakub, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Mr. Valentin Contantinescu, Delta Environmental Consultants, Inc., 11050 White Rock Road, Rancho Cordova, CA 95670
Donna Drogos, ACEH
Barbara Jakub, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	ISSUE DATE: July 5, 2005
	REVISION DATE: December 16, 2005
	PREVIOUS REVISIONS: October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

Effective January 31, 2006, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection.** (Please do not submit reports as attachments to electronic mail.)
- It is preferable that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements must be included and have either original or electronic signature.
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in Excel format. These are for use by assigned Caseworker only.

Submission Instructions

- 1) Obtain User Name and Password:
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to dehloptoxic@acgov.org
 - or
 - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape and Firefox browsers will not open the FTP site.
 - b) Click on File, then on Login As.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload.** (e.g., Subject: RO1234 Report Upload)

ATTACHMENT C

ATC's Due Diligence Site Assessment Report



9185 South Farmer Avenue, Suite 107
Tempe, Arizona 85284
www.atcassociates.com
480.894.2056
fax 480.894.2497

November 1, 2007

Mr. Max Boone
ConocoPhillips Company
1230 W. Washington St., Suite 212
Tempe, Arizona 85281

**RE: Due Diligence Site Assessment Report
ConocoPhillips Site No. 251028
5300 Broadway Avenue
Oakland, California
ATC Project No. 34.75118.3103**

Dear Mr. Boone:

ATC Associates Inc. (ATC) on behalf of ConocoPhillips Company (ConocoPhillips) presents the results of a Due Diligence Site Assessment conducted at the above-referenced site. The purpose of the investigation was to generate a baseline assessment of property conditions at the time of property transfer. The data reported herein were collected on behalf of ConocoPhillips, in general accordance with the Site-Specific Scope of Work (SOW) prepared by Shaw Environmental & Infrastructure, Inc. (Shaw), dated June 27, 2007 (Appendix A, attached). The data reported herein were not requested or required by a regulatory agency.

Activities included in the SOW performed are outlined below:

- Preparation of a site specific Health and Safety Plan (HASP);
- Securing permits from the local permitting agency to advance the borings (Appendix B, attached);
- Marking soil boring locations, notification to California's Underground Service Alert and contracting a private utility locating service to locate any identifiable underground utilities in the vicinity of the proposed boring locations;
- Air-knifing borings to five feet below ground surface (bgs) to a diameter at least one inch greater than that of the drilling device;
- Advancement of three exploratory soil borings to total depths of 10 or 13 feet bgs utilizing geoprobe drilling equipment (borings ATC-1, ATC-3 and ATC-6 [Assigned to the boring location near the waste oil UST that was identified during ATC's utility marking activities, therefore, this boring was not addressed in the SOW] were not advanced due to encountering pea gravel and/or proximity to the existing canopy);
- Collection of soil samples at approximate five-foot intervals for purposes of logging subsurface conditions, field detection of organic vapors using a photoionization detector (PID), and potential laboratory analysis;
- Collection of groundwater samples for laboratory analysis from borings ATC-2 and ATC-5;

- Waste profiling and disposal coordination (still underway); and
- Preparation of a report summarizing due diligence assessment activities.

SITE DESCRIPTION

The site is an active service station located at 5300 Broadway Avenue in Oakland, California. The site's current underground storage tank (UST) system configuration includes three fuel USTs, one waste oil UST and two dispenser islands. Limited background information is included in the SOW prepared by Shaw (Appendix A).

BASELINE SITE ASSESSMENT

Field Activities

On September 27, 2007, ATC personnel observed the advancement of three soil borings (ATC-2, ATC-4 and ATC-5) in the vicinity of the existing fuel USTs and dispensers using geoprobe drilling equipment. Approximate boring locations are shown on attached Figure 1, Site Plan. Geoprobe refusal was encountered at depths of approximately 13 feet bgs and 10 feet bgs in borings ATC-2 and ATC-4, respectively, while boring ATC-5 was advanced to a depth of approximately 10 feet bgs. Soil samples were collected at approximate five-foot intervals for lithological description, field screening using a PID, and for possible laboratory analysis. Groundwater was encountered in borings ATC-2 and ATC-5 at approximately seven feet bgs. Groundwater samples were collected from borings ATC-2 and ATC-5 after each boring was advanced three to six feet into groundwater. A duplicate groundwater sample, designated "B-2", was collected from boring ATC-2.

Upon collecting a soil sample at each depth interval, the soil was visually examined and classified in accordance with the Unified Soil Classification System (USCS). Field PID readings were also used to monitor the soils for volatile organic compound (VOC) vapors. A description of the lithology encountered and PID readings obtained are presented on the boring logs included as Appendix C, attached.

Upon completion of drilling, the borings were backfilled to approximately one foot bgs with bentonite grout. Once the level of the sealing mixture had reached a level of one foot bgs, concrete was emplaced in the borehole, finished flush with the existing surface grade and dyed, if necessary, to match surrounding conditions.

Laboratory Analytical Procedures

Soil and groundwater samples collected during field activities were shipped under chain-of-custody (COC) protocol to Lancaster Laboratories, Inc. (Lancaster) in Lancaster, Pennsylvania. Lancaster is certified through the State of California Department of Health Services Environmental Laboratory Accreditation Program. Select soil samples collected from borings ATC-2, ATC-4 and ATC-5 and groundwater samples collected from ATC-2 (including duplicate B-2) and ATC-5 were analyzed for fuel oxygenates and halogenated volatile organic compounds (HVOC; including benzene, toluene, ethylbenzene and total xylenes [BTEX]) using

Environmental Protection Agency (EPA) Method 8260B and for total petroleum hydrocarbons in the gasoline and diesel range (TPH-GRO and TPH-DRO, respectively) using EPA Method 8015B Modified. Additionally, the select soil samples were analyzed for lead using EPA Method 6010B. Laboratory analytical data for soil and groundwater samples analyzed as part of this assessment are summarized in attached Table 1, Summary of Soil Analytical Data and Table 2, Summary of Groundwater Analytical Data, respectively. The laboratory analytical report and COC document are provided as Appendix D, attached.

Waste Disposal

Investigation derived waste (IDW) generated during the field operations has been temporarily stored onsite pending characterization and disposal. A copy of the waste manifest(s) will be provided under separate cover once the IDW has been profiled and transported to an appropriate disposal facility.

FINDINGS

The lithology underlying the site generally consists of clayey, silty and sandy gravel, shale bedrock and gravelly sand from the ground surface to approximately 13 feet bgs, the maximum extent of exploration. PID readings from screened soil samples collected from borings ATC-2 and ATC-4 were 0.0 parts per million (ppm), while the soil samples collected from boring ATC-5 at five, seven and 10 feet bgs registered 33.8 ppm, 99.1 ppm and 396 ppm, respectively. Refer to the edited boring logs in Appendix C for a summary of field observations noted during drilling activities.

As shown in Table 1, laboratory analytical results for the soil samples selected for analysis indicate the following:

- Ethylbenzene was detected at a concentration of 0.007 milligrams per kilogram (mg/kg) in the soil sample collected at approximately five feet bgs from boring ATC-5 (ATC-5d5.0).
- Methylene chloride was detected at a concentration of 0.007 mg/kg in the soil sample collected at approximately 10 feet bgs from boring ATC-4 (ATC-4d10.0).
- TPH-GRO was detected at concentrations of 1.4 mg/kg and 5.2 mg/kg in the soil samples collected at approximately five feet bgs from borings ATC-2 and ATC-5 (ATC-2d5.0 and ATC-5d5.0), respectively.
- TPH-DRO was detected at a concentration of 23 mg/kg in the soil sample collected at approximately five feet bgs from boring ATC-2 (ATC-2d5.0).
- Lead was detected at concentrations of 11.3 mg/kg, 13.8 mg/kg, 16.7 mg/kg and 9.63 mg/kg in the soil samples collected at approximately five feet bgs from borings ATC-2 and ATC-5 (ATC-2d5.0 and ATC-5d5.0) and 10 feet bgs from borings ATC-4 and ATC-5 (ATC-4d10.0 and ATC-5d10.0), respectively.

- No other analytes were detected in excess of their respective laboratory method Limit of Quantitation (LOQ) in any of the soil samples submitted for analysis.

As shown in Table 2, laboratory analytical results for the groundwater samples collected from borings ATC-2 (including duplicate B-2) and ATC-5 indicate the following:

- Ethylbenzene was detected at a concentration of 45 micrograms per liter ($\mu\text{g/L}$) in the groundwater sample collected from boring ATC-5.
- Total xylenes were detected at a concentration of 6 $\mu\text{g/L}$ in the groundwater sample collected from boring ATC-5.
- TPH-GRO was detected at concentrations of 73 $\mu\text{g/L}$, 69 $\mu\text{g/L}$ and 5,300 $\mu\text{g/L}$ in the groundwater samples collected from borings ATC-2 (including duplicate B-2) and ATC-5, respectively.
- TPH-DRO was detected at concentrations of 15,000 $\mu\text{g/L}$, 25,000 $\mu\text{g/L}$ and 18,000 $\mu\text{g/L}$ in the groundwater samples collected from borings ATC-2 (including duplicate B-2) and ATC-5, respectively.
- No other analytes were detected in excess of their respective laboratory method LOQ in any of the groundwater samples submitted for analysis.

LIMITATIONS

This report was prepared in general accordance with the Shaw SOW, dated June 27, 2007, and with generally accepted professional environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of ConocoPhillips for the express purpose of generating a baseline assessment of property conditions. Any re-use of this report for a different purpose shall be at the user's sole risk without liability to ATC. To the extent that this report is based on information provided to ATC by third parties, ATC may have made efforts to verify this third party information, however, ATC cannot guarantee the completeness or accuracy of this information. The data collected during this investigation and summarized in this report represent site conditions at the time field activities were conducted. No other warranties, expressed or implied are made by ATC.

Prepared by:



Name: Mark D. Miller
Title: Senior Project Manager

Reviewed by:



Name: Girard E. Morgan, P.G.
Title: Principal Geologist

The data presented by ATC in this document have been prepared under the supervision of and reviewed by the Licensed Professional whose signature appears below:

Licensed Approver:



Girard E. Morgan, California Professional Geologist No. 5289
Principal Geologist

Attachments:

- Table 1 – Summary of Soil Analytical Data
- Table 2 – Summary of Groundwater Analytical Data
- Figure 1 – Site Plan
- Appendix A – Scope of Work
- Appendix B – Well Permit
- Appendix C – Boring Logs
- Appendix D – Laboratory Analytical Report and Chain-of-Custody Documentation

TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL DATA
 ConocoPhillips Site No. 251028
 5300 Broadway Avenue, Oakland, California

Sample ID	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Other HVOC * (mg/kg)	Oxygenates * (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Lead (mg/kg)
			EPA 8260B						EPA 8015B Modified		EPA 6010B
ATC-2d5.0	5	09/27/07	<0.005	<0.005	<0.005	<0.005	All analytes ND.	All analytes ND.	1.4	23	11.3
ATC-4d10.0	10	09/27/07	<0.005	<0.005	<0.005	<0.005	methylene chloride (0.007)	All analytes ND.	<1.0	<12	16.7
ATC-5d5.0	5	09/27/07	<0.005	<0.005	0.007	<0.005	All remaining analytes ND.	All analytes ND.	5.2	<12	13.8
ATC-5d10.0	10	09/27/07	<0.005	<0.005	<0.005	<0.005	All analytes ND.	All analytes ND.	<1.0	<12	9.63

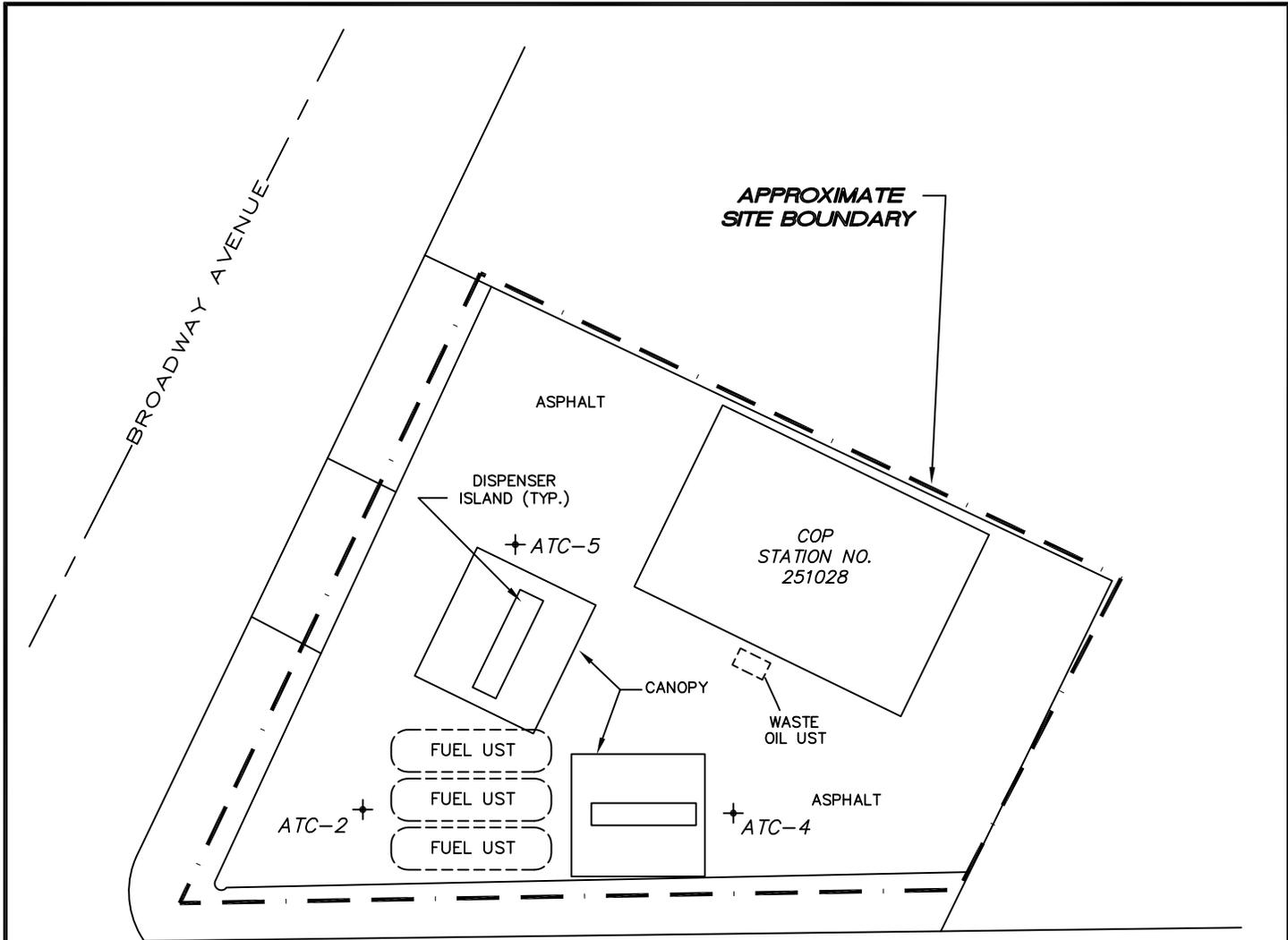
Notes:

- bgs - Below ground surface.
- mg/kg - Milligrams per kilogram (equivalent to parts per million).
- HVOC - Halogenated volatile organic compounds.
- * - Only compounds detected at a concentration exceeding their respective laboratory method Limit of Quantitation (LOQ) are noted
- TPH - Total petroleum hydrocarbons.
- TPH-GRO - Gasoline range organic hydrocarbons.
- TPH-DRO - Diesel range organic hydrocarbons.
- EPA - Environmental Protection Agency
- <0.005 - Analyte not detected above specific laboratory method LOQ
- ND - Analyte not detected above specific laboratory method LOQ

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
 ConocoPhillips Site No. 251028
 5300 Broadway Avenue, Oakland, California

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Other HVOC * (µg/L)	Oxygenates * (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
		EPA 8260B						EPA 8015B Modified	
ATC-2	09/27/07	<5	<5	<5	<5	All analytes ND.	All analytes ND.	73	15,000
B-2**	09/27/07	<5	<5	<5	<5	All analytes ND.	All analytes ND.	69	25,000
ATC-5	09/27/07	<5	<5	45	6	All remaining analytes ND.	All analytes ND.	5,300	18,000
Notes: µg/L - Micrograms per liter (equivalent to parts per billion). HVOC - Halogenated volatile organic compounds. * - Only compounds detected at a concentration exceeding their respective laboratory method Limit of Quantitation (LOQ) are noted. TPH - Total petroleum hydrocarbons. TPH-GRO - Gasoline range organic hydrocarbons. TPH-DRO - Diesel range organic hydrocarbons. EPA - Environmental Protection Agency <5 - Analyte not detected above specific laboratory method LOQ. ND - Analyte not detected above specific laboratory method LOQ. ** - Duplicate groundwater sample collected from boring ATC-2.									

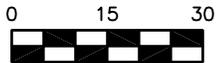
FIGURE



BROADWAY TERRACE

LEGEND

+ SOIL BORING LOCATION



SCALE, FT

NOTE: LOCATIONS AND SCALE ARE APPROXIMATE



SITE PLAN

CONOCOPHILLIPS SITE NO. 251028
 5300 BROADWAY AVENUE
 OAKLAND, CALIFORNIA

PROJECT NUMBER: 34.75118.3103	DATE: 10/31/07	FIGURE
APPROVED BY: MM	DRAWN BY: BK	1
 9185 S. Farmer Ave., Ste. #107 Tempe, Arizona 85284-2912 Ph: (480) 894-2056 *** Fax: (480) 894-2497		

APPENDIX A
SCOPE OF WORK

DIVESTITURE BASELINE PHASE II ASSESSMENT CONVERGED CONTRACTOR - SCOPE OF WORK

Site: 251028
Address: 5300 Broadway Ave at Broadway Terrace
Oakland, CA

SITE SUMMARY

Former Owner: Unocal

Site is equipped with three fuel USTs and two product dispenser islands under separate canopies. Site investigation and groundwater monitoring were performed between 1989 and 1994. Depth to water in 1991 was between 1 and 4 feet below ground surface (bgs); groundwater flow direction was to the northwest. Bedrock was encountered at between 4 and 9 feet bgs. A "No Further Action" letter was issued in 1994. Current depth to water and groundwater flow direction are not available.

Scope of Work to be performed at the site includes (see attached Figure):

- 3 borings (B-1, B-2, B-3) near the fuel USTs to maximum total depth of about 35 feet
- 2 borings (B-4, B-5) near product islands to maximum total depth of about 25 feet

If groundwater is encountered in any of the borings, the boring shall be extended a minimum of five feet into the saturated zone and a groundwater grab sample collected. The boring shall then be terminated at that depth.

Since groundwater at this site is likely to be encountered at a relatively shallow depth (e.g., 1 to 4 feet bgs in 1991), and bedrock is likely to be encountered at a relatively shallow depth (e.g., 4 to 9 feet bgs), Contractor should plan on limited soil sampling, grab groundwater sampling, and limited total depth of borings. Contractor may elect to use alternative sampling methods to complete the site investigation, as appropriate.

PRE-DRILLING ACTIVITIES

- After receiving this Scope of Work, develop requisition for submittal into ENFOS following procedure provided by COP.
- Identify, obtain, and prepare all necessary and relevant permits, work scope summaries, appropriate work plans, etc., in accordance with county and other specific local requirements. Permit requirements for this site have been established by the Alameda County Public Works Water Resources Department. For verification of compliance with state and local regulations, RM&R Area Manager (AM) will need confirmation of, or copies of required permits and/or boring completion reports.
- Prepare and review site specific safety plan (Program HASP and JSA) with Phase II field team.
- Proposed changes to scope will be communicated to Shaw Consultant who will immediately notify the AM if such scope changes materially impact potential safety concern. For example, all bore hole locations will be cleared per RM&R process and that

any and all departures from this protocol will have to be reviewed and approved by the AM.

- Schedule laboratory and obtain proper sample containers. Laboratory used must be COP converged laboratory.
- Shaw Consultant will be coordinating scheduling with Contractor and stakeholders per the “stakeholder engagement process”. Prior to mobilization, Contractor must confirm date and time of site field activities with Shaw Consultant.
- Provide notification to all individuals involved, laboratory, regulatory and/or permitting agencies.

FIELD ACTIVITIES

- All field work shall be conducted according to RM&R processes and Health and Safety protocols.
- Mark the proposed boring locations and locate underground utilities where necessary using “dig alert”.
- Conduct all fieldwork in accordance with the site-specific health and safety plan prepared for this project.
- Prior to drilling, clear the boring locations for underground utilities by using an air knife/vacuum to a depth of five feet below ground surface (bgs) and one inch greater than the diameter of the mechanized equipment that will be used downhole.
- Install soil borings and collect soil samples as proposed on attached Table and Figure. **Choice of drilling method will give a priority to the minimization of waste. In addition, drilling methods should be appropriate for the site’s geology so that “refusal”, requiring re-mobilization, does not occur.** Collect soil samples every five feet and screen with an Organic Vapor Meter (OVM). Submit the sample with the highest OVM reading and the sample from the terminal depth of each boring for lab analyses (see Sampling Analysis Table). If all samples from a boring show OVM readings of less than 25 ppmv, collect a soil sample just above saturated zone (capillary fringe), or at the maximum depth of the boring if groundwater is not encountered, for laboratory analyses.
- If suspected release is encountered, Contractor shall notify AM immediately before any required notification to state and local regulators and to discuss any possible changes to the scope of work. Louis Mosconi 714-428-7621(office), 714-824-1240 (cell).
- If groundwater is encountered prior to the total depth in the borings, the boring will be extended a minimum of five feet into the saturated zone and a groundwater grab sample will be collected and submitted for laboratory analyses as described on Page 2 and 3 of the General Scope of Work document.
- If respective State allows, dispose of investigative derived waste (IDW) on site (e.g. ground-spreading decon water). Otherwise store IDW, temporarily on-site in properly sealed and labeled, DOT-approved drums pending analytical results. Contractor shall coordinate with store manager for an appropriate location to store the drums.
- Arrange for profiling of drum contents and removal from the Site for disposal in accordance with applicable regulations and within 45 days of drilling per RM&R waste authorization process.
- Inspect site to ensure proper closure, security, etc., of wells, borings, and other site disruption issues and obtain concurrence from site personnel. The Contractor is responsible for ensuring the site is left in a clean and neat condition.

- These investigations will be conducted at sites which are active commercial operations. The Contractor is responsible for ensuring that the investigation is conducted in a manner such that it causes as little disruption as possible to the business being conducted on the site.
- Contractor will enter near misses and incidents into Impact.

POST-DRILLING ACTIVITIES

- Complete due diligence report in format as provided by ConocoPhillips (COP). Complete any required agency reports. Contractor shall deliver report and agency reports in electronic format to Shaw Consultant for review and upload to COP database.
- Upon receiving sample results higher than detection levels, provide immediate notification to AM prior to submitting due diligence report to discuss possible notification to state and local regulators. Louis Mosconi 714-428-7621(office), 714-824-1240 (cell).

ConocoPhillips Marketing Divestiture 2007 Phase II Due Diligence

Sampling Analysis Table

Sample Location	Laboratory Analytical Parameters & Methods for Soil and Groundwater									
	BTEX	TPH-g	Oxygenates	Ethanol	HVOC's	TPH-t	TPH-d	TPH-o	SVOCs	CAM Metals
	(8260B)					(8015M)			(8270)	(6010B)
Underground Fuel Storage Tank Complex (B-1, B-2, B-3) & Dispenser Islands (B-4, B-5)	X	X	X	X	X		X			

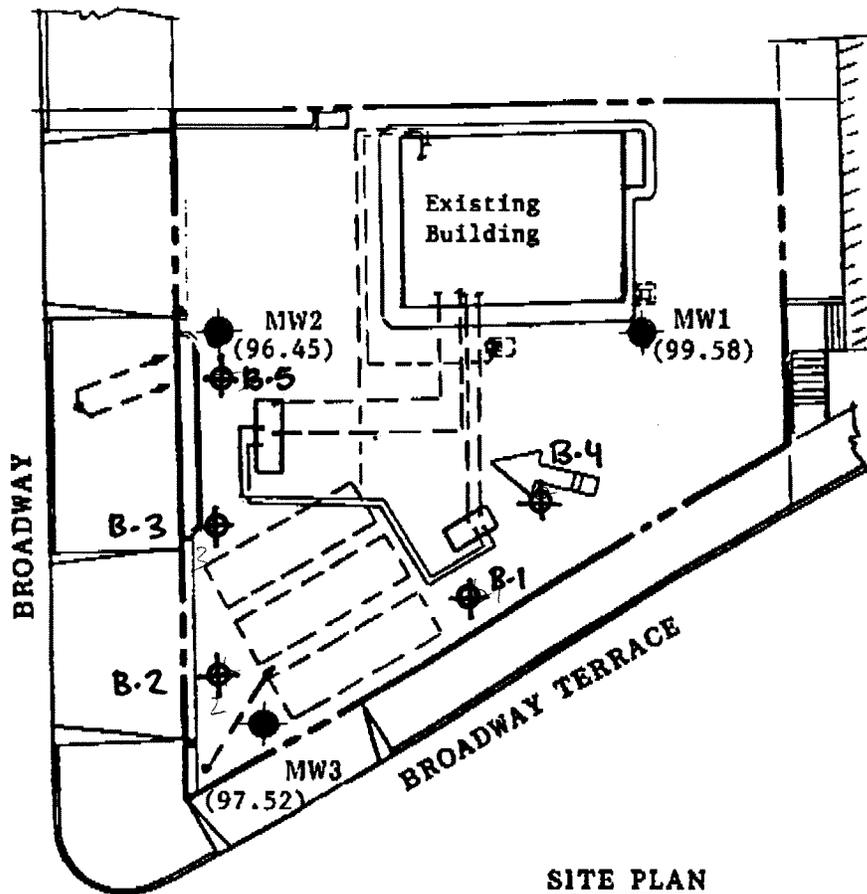


KAPREALIAN ENGINEERING, INC.

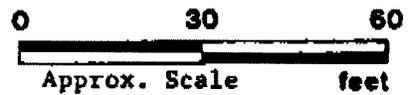
Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510

(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE PLAN
Figure 1



LEGEND

- Monitoring Well
- () Ground Water Elevation in feet on 5/21/91
Top of MW3 Well Cover assumed 100.00 feet as datum.
- Ground Water Flow Direction

Unocal Service Station #1028
5300 Broadway
Oakland, California

DEPTH TO WATER: 1 to 4 FEET (1991)

B.1 PROPOSED BORING LOCATION AND DESIGNATION

APPENDIX B
WELL PERMIT

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 07/20/2007 By jamesy

Permit Numbers: W2007-0797
Permits Valid from 09/21/2007 to 09/24/2007

Application Id: 1184350326344
Site Location: Unocal 251028
5300 Broadway Terrace
APN 48A-7035-19-1

City of Project Site:Oakland

Project Start Date: 08/06/2007
Extension Start Date: 09/21/2007
Extension Count: 1

Completion Date:08/08/2007
Extension End Date: 09/24/2007
Extended By: vickyh1

Applicant: ATC Associates Inc - Ed Vandegrift
9185 South Farmer Avenue, Suite 107, Tempe, AZ 85284
Property Owner: Myron Smith
1230 West Washington Street, Suite 212, Tempe, AZ 85281
Client: ** same as Property Owner **

Phone: 480-894-2056

Phone: 602-452-2505

Receipt Number: WR2007-0321 Total Due: \$200.00
Payer Name : Edwin Vandegrift Total Amount Paid: \$200.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 5 Boreholes
Driller: Vironex - Lic #: 705927 - Method: DP

Work Total: \$200.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2007-0797	07/20/2007	11/04/2007	5	2.00 in.	35.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. 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,

Alameda County Public Works Agency - Water Resources Well Permit

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.

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

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

APPENDIX C
BORING LOGS

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES	Undisturbed Sample	Auger Cuttings	
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel - sand mixtures, little or no fines.	Split Spoon Sample	Bulk Sample	
			GP	Poorly graded gravels or grave - sand mixtures, little or no fines.			Rock Core
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel - sand - silt mixtures.	Dilatometer	Pressure Meter	
			GC	Clayey gravels, gravel - sand - clay mixtures.	Packer	No Recovery	
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 Sieve Size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.	Water Table at time of drilling	Water Table after 24 hours	
			SP	Poorly graded sands or gravelly sands, little or no fines.			
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand - silt mixtures			
			SC	Clayey sands, sand - clay mixtures.			
	FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)	ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts and with slight plasticity.	Correlation of Penetration Resistance with Relative Density and Consistency		
			CL	Inorganic lays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.			
OL			Organic silts and organic silty clays of low plasticity.				
SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	SAND & GRAVEL		SILT & CLAY	
		CH	Inorganic clays of high plasticity, fat clays	No. of Blows	Relative Density	No. of Blows	Consistency
				0 - 4	Very Loose	0 - 1	Very Soft
		OH	Organic clays of medium to high plasticity, organic silts.	5 - 10	Loose	2 - 4	Soft
11 - 30	Medium Dense			5 - 8	Medium Stiff		
31 - 50	Dense	9 - 15	Stiff				
Over 50	Very Dense	16 - 30	Very Stiff				
		Over 31	Hard				
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils.			

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

SILT OR CLAY	SAND			GRAVEL		Cobbles	Boulders
	Fine	Medium	Coarse	Fine	Coarse		

No.200 No.40 No.10 No.4 3/4" 3" 12"

U.S. STANDARD SIEVE SIZE

KEY TO SYMBOLS AND DESCRIPTIONS



*9185 South Farmer Avenue, Suite 107
 Tempe, Arizona 85284
 (480)894-2056
 (480)894-2497 fax*

Reference: The Unified Soil Classification System, Corps of Engineers, U.S. Army Technical Memorandum No. 3-357, Vol. 1, March, 1953 (Revised April, 1960)

Client ConocoPhillips Company

Drill Contractor Cascade Drilling Inc.

LOG OF BORING ATC-2

SHEET 1 OF 1

Project Name Conoco Phillips Site No. 251028

Drill Method Geoprobe

Elevation (ft amsl) --

Number 34.75118.3103

Drilling Started 9/27/07 Ended 9/27/07

Total Depth 13

Location 5300 Broadway Avenue, Oakland, CA

Logged By Jonathan Flomerfelt

Depth To Water ∇ ATD 7

DEPTH (feet)	SAMPLE NO.	BLOWS/6" B-2-5	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5' bgs. No sample recovery.	
5	NR B-2-5	0.0				CLAYEY GRAVEL. 75% gravel. 25% clay. Yellow. Wet. Angular gravel.	5
10	CT B-2-10	0.0		GP			10
						90% gravel. 10% clay.	
15	CT B-2-13	0.0				Bottom of hole at 13 feet	15



LOG A EVMN05_251028 BORING LOGS.GPJ LOG A EVMN05.GDT 11/1/07



9185 S. Farmer Ave., Ste 107
 Tempe, Arizona 85284
 Phone: 480.894.2056
 Fax: 480.894.2497

Remarks : Groundwater encountered at 7' bgs. Refusal at approximately 13' bgs.

See key sheet for symbols and abbreviations used above.

LOG OF BORING ATC-4

SHEET 1 OF 1

Client ConocoPhillips Company

Drill Contractor Cascade Drilling Inc.

Project Name Conoco Phillips Site No. 251028

Drill Method Geoprobe

Elevation (ft amsl) --

Number 34.75118.3103

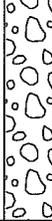
Drilling Started 9/27/07 Ended 9/27/07

Total Depth 10

Location 5300 Broadway Avenue, Oakland, CA

Logged By Jonathan Flomerfelt

Depth To Water

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5' bgs. No sample recovery.	
5	CT B-4-5		0.0		GP 	SANDY GRAVEL. 70% gravel. 30% sand. Brown. Dry.	5
10	CT B-4-10		0.0			Bottom of hole at 10 feet	10
15							15
20							20
25							25



LOG A EWMN05_251028 BORING LOGS.GPJ LOG A EWMN05.GDT 11/1/07



9185 S. Farmer Ave., Ste 107
 Tempe, Arizona 85284
 Phone: 480.894.2056
 Fax: 480.894.2497

Remarks : No groundwater encountered. Refusal at approximately 10' bgs.

See key sheet for symbols and abbreviations used above.

LOG OF BORING ATC-5

SHEET 1 OF 1

Client ConocoPhillips Company

Drill Contractor Cascade Drilling Inc.

Project Name Conoco Phillips Site No. 251028

Drill Method Geoprobe

Elevation (ft amsl) --

Number 34.75118.3103

Drilling Started 9/27/07 Ended 9/27/07

Total Depth 10

Location 5300 Broadway Avenue, Oakland, CA

Logged By Jonathan Flomerfelt

Depth To Water ▽ ATD 7

DEPTH (feet)	SAMPLE NO.	BLOWS/6" B-5-5	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5' bgs. No sample recovery.	
5	CT B-5-5		33.8			GRAVELLY SAND. 70% sand. 30% gravel. Brownish yellow. Wet.	5
			99.1	SP			
10	CT B-5-10		396	GM		SILTY GRAVEL. 70% gravel. 30% silt. Light yellowish brown. Dry to damp. Shale bedrock fragments.	10
						Bottom of hole at 10 feet	



LOG A EWMN05_251028 BORING LOGS.GPJ LOG A EWMN05.GDT 11/1/07



9185 S. Farmer Ave., Ste 107
 Tempe, Arizona 85284
 Phone: 480.894.2056
 Fax: 480.894.2497

Remarks : Groundwater encountered at 7' bgs.

See key sheet for symbols and abbreviations used above.

APPENDIX D

**LABORATORY ANALYTICAL REPORT AND
CHAIN-OF-CUSTODY DOCUMENTATION**

ANALYTICAL RESULTS

Prepared for:

ConocoPhillips
Suite 212
1230 W. Washington
Tempe AZ 85281

602-452-2502

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425SAMPLE GROUP

The sample group for this submittal is 1058509. Samples arrived at the laboratory on Friday, September 28, 2007. The PO# for this group is 4508610423 and the release number is BOONE.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
ATC-2d5.0 NA Soil	5170555
ATC-2 NA Water	5170556
ATC-4d10.0 NA Soil	5170557
ATC-5d10.0 NA Soil	5170558
ATC-5d5.0 NA Soil	5170559
ATC-5 NA Water	5170560
B-2 NA Water	5170561

ELECTRONIC ATC Associates
COPY TO

Attn: Anita Carrano

Questions? Contact your Client Services Representative
Megan A Moeller at (717) 656-2300

Respectfully Submitted,



Marla S. Lord
Senior Specialist

Lancaster Laboratories Sample No. SW 5170555
**ATC-2d5.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-2**

Collected: 09/27/2007 09:25 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT2S5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
08270	TPH-DRO by 8015B	n.a.	23.	4.0	12.	mg/kg	1
06955	Lead	7439-92-1	11.3	0.467	1.43	mg/kg	1
01637	TPH-GRO 8015B - soil						
01641	TPH-GRO 8015B - soil	n.a.	1.4	0.2	1.0	mg/kg	25
03983	EPA SW 846/8260 - Soil						
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	mg/kg	1
06089	Ethanol	64-17-5	N.D.	0.10	0.50	mg/kg	1
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.005	mg/kg	1
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.005	mg/kg	1
08199	Freon 113	76-13-1	N.D.	0.002	0.010	mg/kg	1
05441	EPA SW846/8260 (soil)						
05444	Chloromethane	74-87-3	N.D.	0.002	0.005	mg/kg	1
05445	Vinyl Chloride	75-01-4	N.D.	0.001	0.005	mg/kg	1
05446	Bromomethane	74-83-9	N.D.	0.002	0.005	mg/kg	1
05447	Chloroethane	75-00-3	N.D.	0.002	0.005	mg/kg	1
05448	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.005	mg/kg	1
05449	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.005	mg/kg	1
05450	Methylene Chloride	75-09-2	0.002 J	0.002	0.005	mg/kg	1
05451	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.005	mg/kg	1
05452	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.005	mg/kg	1
05454	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.005	mg/kg	1
05455	Chloroform	67-66-3	N.D.	0.001	0.005	mg/kg	1
05457	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.005	mg/kg	1
05458	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.005	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	0.005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.005	mg/kg	1
05462	Trichloroethene	79-01-6	N.D.	0.001	0.005	mg/kg	1
05463	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.005	mg/kg	1
05465	Bromodichloromethane	75-27-4	N.D.	0.001	0.005	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	0.005	mg/kg	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. SW 5170555
**ATC-2d5.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-2**

Collected: 09/27/2007 09:25 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT2S5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05467	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.005	mg/kg	1
05468	Tetrachloroethene	127-18-4	N.D.	0.001	0.005	mg/kg	1
05470	Dibromochloromethane	124-48-1	N.D.	0.001	0.005	mg/kg	1
05472	Chlorobenzene	108-90-7	N.D.	0.001	0.005	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	0.005	mg/kg	1
05475	m+p-Xylene	1330-20-7	N.D.	0.001	0.005	mg/kg	1
05476	o-Xylene	95-47-6	N.D.	0.001	0.005	mg/kg	1
05478	Bromoform	75-25-2	N.D.	0.001	0.005	mg/kg	1
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.005	mg/kg	1
05491	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	mg/kg	1
05492	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	mg/kg	1
05494	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	mg/kg	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08270	TPH-DRO by 8015B	SW-846 8015B	1	10/09/2007 07:00	Diane V Do	1
06955	Lead	SW-846 6010B	1	10/07/2007 14:48	Choon Y Tian	1
01637	TPH-GRO 8015B - soil	SW-846 8015B modified	1	10/02/2007 18:07	Linda C Pape	25
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	10/05/2007 00:12	Lauren C Marzario	1
05441	EPA SW846/8260 (soil)	SW-846 8260B	1	10/05/2007 00:12	Lauren C Marzario	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	10/04/2007 15:23	Emiley A King	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	09/29/2007 14:49	Eric L Vera	n.a.
05708	SW SW846 ICP Digest	SW-846 3050B	1	10/06/2007 06:15	Mirit S Shenouda	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	10/02/2007 16:15	Doreen K Robles	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170556

ATC-2 NA Water
 Site# 251028 ATCE
 5300 Broadway - Oakland NA ATC-2

Collected: 09/27/2007 09:40 by JF

Account Number: 12258

Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT2-W

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05553	TPH-DRO (Waters)	n.a.	15,000.	2,900.	10,000.	ug/l	10
Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.							
01635	TPH-GRO 8015B - water						
01639	TPH-GRO 8015B - water	n.a.	73.	20.	50.	ug/l	1
Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 6.							
05382	EPA SW846/8260 (water)						
05385	Chloromethane	74-87-3	N.D.	1.	5.	ug/l	1
05386	Vinyl Chloride	75-01-4	N.D.	1.	5.	ug/l	1
05387	Bromomethane	74-83-9	N.D.	1.	5.	ug/l	1
05388	Chloroethane	75-00-3	N.D.	1.	5.	ug/l	1
05389	Trichlorofluoromethane	75-69-4	N.D.	2.	5.	ug/l	1
05390	1,1-Dichloroethene	75-35-4	N.D.	0.8	5.	ug/l	1
05391	Methylene Chloride	75-09-2	N.D.	2.	5.	ug/l	1
05392	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	5.	ug/l	1
05393	1,1-Dichloroethane	75-34-3	N.D.	1.	5.	ug/l	1
05395	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	5.	ug/l	1
05396	Chloroform	67-66-3	N.D.	0.8	5.	ug/l	1
05398	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	5.	ug/l	1
05399	Carbon Tetrachloride	56-23-5	N.D.	1.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	1.	5.	ug/l	1
05403	Trichloroethene	79-01-6	N.D.	1.	5.	ug/l	1
05404	1,2-Dichloropropane	78-87-5	N.D.	1.	5.	ug/l	1
05406	Bromodichloromethane	75-27-4	N.D.	1.	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/l	1
05408	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	5.	ug/l	1
05409	Tetrachloroethene	127-18-4	N.D.	0.8	5.	ug/l	1
05411	Dibromochloromethane	124-48-1	N.D.	1.	5.	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	5.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
05416	m+p-Xylene	1330-20-7	N.D.	0.8	5.	ug/l	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170556
**ATC-2 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-2**

Collected: 09/27/2007 09:40 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT2-W

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method	As Received Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05417	o-Xylene	95-47-6	0.9 J		0.8	5.	ug/l	1
05419	Bromoform	75-25-2	N.D.		1.	5.	ug/l	1
05421	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1.	5.	ug/l	1
05432	1,3-Dichlorobenzene	541-73-1	N.D.		1.	5.	ug/l	1
05433	1,4-Dichlorobenzene	106-46-7	N.D.		1.	5.	ug/l	1
05435	1,2-Dichlorobenzene	95-50-1	N.D.		1.	5.	ug/l	1
08202	EPA SW 846/8260 - Water							
01587	Ethanol	64-17-5	N.D.		50.	250.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	1. J		0.5	5.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.		0.8	5.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.		0.8	5.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.		0.8	5.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.		10.	80.	ug/l	1
06306	trans-1,3-Dichloropropene	10061-02-6	N.D.		1.	5.	ug/l	1
06307	cis-1,3-Dichloropropene	10061-01-5	N.D.		1.	5.	ug/l	1
08203	Freon 113	76-13-1	N.D.		2.	10.	ug/l	1

Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 5.

State of California Lab Certification No. 2116
 Trip blank vials were not received by the laboratory for this sample group.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
05553	TPH-DRO (Waters)	SW-846 8015B	1	10/09/2007 02:53	Diane V Do	10
01635	TPH-GRO 8015B - water	SW-846 8015B modified	1	10/04/2007 10:22	K. Robert Caulfeild-James	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170556

**ATC-2 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-2**

Collected: 09/27/2007 09:40 by JF

Account Number: 12258

Submitted: 09/28/2007 09:15
Reported: 10/15/2007 at 18:38
Discard: 11/15/2007

ConocoPhillips
Suite 212
1230 W. Washington
Tempe AZ 85281

AT2-W

05382	EPA SW846/8260 (water)	SW-846 8260B	1	10/09/2007 02:34	Kelly E Brickley	1
08202	EPA SW 846/8260 - Water	SW-846 8260B	1	10/09/2007 02:34	Kelly E Brickley	1
01146	GC VOA Water Prep	SW-846 5030B	1	10/04/2007 10:22	K. Robert Caulfeild- James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	10/09/2007 02:34	Kelly E Brickley	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	09/30/2007 05:50	Tracy L Schickel	1

Lancaster Laboratories Sample No. SW 5170557
**ATC-4d10.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-4**

Collected: 09/27/2007 08:10 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT410

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
08270	TPH-DRO by 8015B	n.a.	8.4 J	4.0	12.	mg/kg	1
06955	Lead	7439-92-1	16.7	0.485	1.49	mg/kg	1
01637	TPH-GRO 8015B - soil						
01641	TPH-GRO 8015B - soil	n.a.	N.D.	0.2	1.0	mg/kg	25
03983	EPA SW 846/8260 - Soil						
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	mg/kg	1
06089	Ethanol	64-17-5	N.D.	0.10	0.50	mg/kg	1
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.005	mg/kg	1
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.005	mg/kg	1
08199	Freon 113	76-13-1	N.D.	0.002	0.010	mg/kg	1
05441	EPA SW846/8260 (soil)						
05444	Chloromethane	74-87-3	N.D.	0.002	0.005	mg/kg	1
05445	Vinyl Chloride	75-01-4	N.D.	0.001	0.005	mg/kg	1
05446	Bromomethane	74-83-9	N.D.	0.002	0.005	mg/kg	1
05447	Chloroethane	75-00-3	N.D.	0.002	0.005	mg/kg	1
05448	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.005	mg/kg	1
05449	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.005	mg/kg	1
05450	Methylene Chloride	75-09-2	0.007	0.002	0.005	mg/kg	1
05451	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.005	mg/kg	1
05452	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.005	mg/kg	1
05454	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.005	mg/kg	1
05455	Chloroform	67-66-3	N.D.	0.001	0.005	mg/kg	1
05457	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.005	mg/kg	1
05458	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.005	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	0.005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.005	mg/kg	1
05462	Trichloroethene	79-01-6	N.D.	0.001	0.005	mg/kg	1
05463	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.005	mg/kg	1
05465	Bromodichloromethane	75-27-4	N.D.	0.001	0.005	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	0.005	mg/kg	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. SW 5170557
**ATC-4d10.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-4**

Collected: 09/27/2007 08:10 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT410

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05467	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.005	mg/kg	1
05468	Tetrachloroethene	127-18-4	N.D.	0.001	0.005	mg/kg	1
05470	Dibromochloromethane	124-48-1	N.D.	0.001	0.005	mg/kg	1
05472	Chlorobenzene	108-90-7	N.D.	0.001	0.005	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	0.005	mg/kg	1
05475	m+p-Xylene	1330-20-7	N.D.	0.001	0.005	mg/kg	1
05476	o-Xylene	95-47-6	N.D.	0.001	0.005	mg/kg	1
05478	Bromoform	75-25-2	N.D.	0.001	0.005	mg/kg	1
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.005	mg/kg	1
05491	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	mg/kg	1
05492	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	mg/kg	1
05494	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	mg/kg	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08270	TPH-DRO by 8015B	SW-846 8015B	1	10/09/2007 00:50	Diane V Do	1
06955	Lead	SW-846 6010B	1	10/07/2007 14:52	Choon Y Tian	1
01637	TPH-GRO 8015B - soil	SW-846 8015B modified	1	10/02/2007 12:06	Linda C Pape	25
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	10/05/2007 06:59	Holly Berry	1
05441	EPA SW846/8260 (soil)	SW-846 8260B	1	10/05/2007 06:59	Holly Berry	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	10/04/2007 15:01	Emiley A King	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	09/29/2007 14:51	Eric L Vera	n.a.
05708	SW SW846 ICP Digest	SW-846 3050B	1	10/06/2007 06:15	Mirit S Shenouda	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	10/02/2007 16:15	Doreen K Robles	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. SW 5170558
**ATC-5d10.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-5**

Collected: 09/27/2007 11:40 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT510

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
08270	TPH-DRO by 8015B	n.a.	N.D.	4.0	12.	mg/kg	1
06955	Lead	7439-92-1	9.63	0.476	1.46	mg/kg	1
01637	TPH-GRO 8015B - soil						
01641	TPH-GRO 8015B - soil	n.a.	N.D.	0.2	1.0	mg/kg	25
03983	EPA SW 846/8260 - Soil						
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	mg/kg	0.99
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	mg/kg	0.99
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	mg/kg	0.99
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	mg/kg	0.99
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	0.099	mg/kg	0.99
06089	Ethanol	64-17-5	N.D.	0.099	0.50	mg/kg	0.99
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.005	mg/kg	0.99
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.005	mg/kg	0.99
08199	Freon 113	76-13-1	N.D.	0.002	0.01	mg/kg	0.99
05441	EPA SW846/8260 (soil)						
05444	Chloromethane	74-87-3	N.D.	0.002	0.005	mg/kg	0.99
05445	Vinyl Chloride	75-01-4	N.D.	0.001	0.005	mg/kg	0.99
05446	Bromomethane	74-83-9	N.D.	0.002	0.005	mg/kg	0.99
05447	Chloroethane	75-00-3	N.D.	0.002	0.005	mg/kg	0.99
05448	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.005	mg/kg	0.99
05449	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.005	mg/kg	0.99
05450	Methylene Chloride	75-09-2	N.D.	0.002	0.005	mg/kg	0.99
05451	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.005	mg/kg	0.99
05452	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.005	mg/kg	0.99
05454	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.005	mg/kg	0.99
05455	Chloroform	67-66-3	N.D.	0.001	0.005	mg/kg	0.99
05457	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.005	mg/kg	0.99
05458	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.005	mg/kg	0.99
05460	Benzene	71-43-2	N.D.	0.0005	0.005	mg/kg	0.99
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.005	mg/kg	0.99
05462	Trichloroethene	79-01-6	N.D.	0.001	0.005	mg/kg	0.99
05463	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.005	mg/kg	0.99
05465	Bromodichloromethane	75-27-4	N.D.	0.001	0.005	mg/kg	0.99
05466	Toluene	108-88-3	N.D.	0.001	0.005	mg/kg	0.99

* = This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. SW 5170558
**ATC-5d10.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-5**

Collected: 09/27/2007 11:40 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT510

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05467	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.005	mg/kg	0.99
05468	Tetrachloroethene	127-18-4	N.D.	0.001	0.005	mg/kg	0.99
05470	Dibromochloromethane	124-48-1	N.D.	0.001	0.005	mg/kg	0.99
05472	Chlorobenzene	108-90-7	N.D.	0.001	0.005	mg/kg	0.99
05474	Ethylbenzene	100-41-4	N.D.	0.001	0.005	mg/kg	0.99
05475	m+p-Xylene	1330-20-7	N.D.	0.001	0.005	mg/kg	0.99
05476	o-Xylene	95-47-6	N.D.	0.001	0.005	mg/kg	0.99
05478	Bromoform	75-25-2	N.D.	0.001	0.005	mg/kg	0.99
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.005	mg/kg	0.99
05491	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	mg/kg	0.99
05492	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	mg/kg	0.99
05494	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	mg/kg	0.99

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08270	TPH-DRO by 8015B	SW-846 8015B	1	10/09/2007 01:15	Diane V Do	1
06955	Lead	SW-846 6010B	1	10/07/2007 14:55	Choon Y Tian	1
01637	TPH-GRO 8015B - soil	SW-846 8015B modified	1	10/02/2007 12:42	Linda C Pape	25
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	10/05/2007 07:22	Holly Berry	0.99
05441	EPA SW846/8260 (soil)	SW-846 8260B	1	10/05/2007 07:22	Holly Berry	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	10/04/2007 15:02	Emiley A King	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	09/29/2007 14:53	Eric L Vera	n.a.
05708	SW SW846 ICP Digest	SW-846 3050B	1	10/06/2007 06:15	Mirit S Shenouda	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	10/02/2007 16:15	Doreen K Robles	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. SW 5170559
**ATC-5d5.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-5**

Collected: 09/27/2007 11:40 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT5-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
08270	TPH-DRO by 8015B	n.a.	8.2 J	4.0	12.	mg/kg	1
06955	Lead	7439-92-1	13.8	0.476	1.46	mg/kg	1
01637	TPH-GRO 8015B - soil						
01641	TPH-GRO 8015B - soil	n.a.	5.2	0.2	1.0	mg/kg	25
03983	EPA SW 846/8260 - Soil						
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	mg/kg	1
06089	Ethanol	64-17-5	N.D.	0.10	0.50	mg/kg	1
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.005	mg/kg	1
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.005	mg/kg	1
08199	Freon 113	76-13-1	N.D.	0.002	0.010	mg/kg	1
05441	EPA SW846/8260 (soil)						
05444	Chloromethane	74-87-3	N.D.	0.002	0.005	mg/kg	1
05445	Vinyl Chloride	75-01-4	N.D.	0.001	0.005	mg/kg	1
05446	Bromomethane	74-83-9	N.D.	0.002	0.005	mg/kg	1
05447	Chloroethane	75-00-3	N.D.	0.002	0.005	mg/kg	1
05448	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.005	mg/kg	1
05449	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.005	mg/kg	1
05450	Methylene Chloride	75-09-2	N.D.	0.002	0.005	mg/kg	1
05451	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.005	mg/kg	1
05452	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.005	mg/kg	1
05454	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.005	mg/kg	1
05455	Chloroform	67-66-3	N.D.	0.001	0.005	mg/kg	1
05457	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.005	mg/kg	1
05458	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.005	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	0.005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.005	mg/kg	1
05462	Trichloroethene	79-01-6	N.D.	0.001	0.005	mg/kg	1
05463	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.005	mg/kg	1
05465	Bromodichloromethane	75-27-4	N.D.	0.001	0.005	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	0.005	mg/kg	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. SW 5170559
**ATC-5d5.0 NA Soil
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-5**

Collected: 09/27/2007 11:40 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT5-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05467	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.005	mg/kg	1
05468	Tetrachloroethene	127-18-4	N.D.	0.001	0.005	mg/kg	1
05470	Dibromochloromethane	124-48-1	N.D.	0.001	0.005	mg/kg	1
05472	Chlorobenzene	108-90-7	N.D.	0.001	0.005	mg/kg	1
05474	Ethylbenzene	100-41-4	0.007	0.001	0.005	mg/kg	1
05475	m+p-Xylene	1330-20-7	N.D.	0.001	0.005	mg/kg	1
05476	o-Xylene	95-47-6	N.D.	0.001	0.005	mg/kg	1
05478	Bromoform	75-25-2	N.D.	0.001	0.005	mg/kg	1
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.005	mg/kg	1
05491	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	mg/kg	1
05492	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	mg/kg	1
05494	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	mg/kg	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08270	TPH-DRO by 8015B	SW-846 8015B	1	10/09/2007 04:32	Diane V Do	1
06955	Lead	SW-846 6010B	1	10/07/2007 14:59	Choon Y Tian	1
01637	TPH-GRO 8015B - soil	SW-846 8015B modified	1	10/02/2007 13:18	Linda C Pape	25
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	10/05/2007 03:38	Lauren C Marzario	1
05441	EPA SW846/8260 (soil)	SW-846 8260B	1	10/05/2007 03:38	Lauren C Marzario	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	10/04/2007 15:37	Emiley A King	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	09/29/2007 14:56	Eric L Vera	n.a.
05708	SW SW846 ICP Digest	SW-846 3050B	1	10/06/2007 06:15	Mirit S Shenouda	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	10/02/2007 16:15	Doreen K Robles	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170560
**ATC-5 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-5**

Collected: 09/27/2007 11:55 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT5-W

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05553	TPH-DRO (Waters) Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.	n.a.	18,000.	2,900.	10,000.	ug/l	10
01635	TPH-GRO 8015B - water						
01639	TPH-GRO 8015B - water	n.a.	5,300.	100.	250.	ug/l	5
05382	EPA SW846/8260 (water)						
05385	Chloromethane	74-87-3	N.D.	1.	5.	ug/l	1
05386	Vinyl Chloride	75-01-4	N.D.	1.	5.	ug/l	1
05387	Bromomethane	74-83-9	N.D.	1.	5.	ug/l	1
05388	Chloroethane	75-00-3	N.D.	1.	5.	ug/l	1
05389	Trichlorofluoromethane	75-69-4	N.D.	2.	5.	ug/l	1
05390	1,1-Dichloroethene	75-35-4	N.D.	0.8	5.	ug/l	1
05391	Methylene Chloride	75-09-2	N.D.	2.	5.	ug/l	1
05392	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	5.	ug/l	1
05393	1,1-Dichloroethane	75-34-3	N.D.	1.	5.	ug/l	1
05395	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	5.	ug/l	1
05396	Chloroform	67-66-3	N.D.	0.8	5.	ug/l	1
05398	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	5.	ug/l	1
05399	Carbon Tetrachloride	56-23-5	N.D.	1.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	1.	5.	ug/l	1
05403	Trichloroethene	79-01-6	N.D.	1.	5.	ug/l	1
05404	1,2-Dichloropropane	78-87-5	N.D.	1.	5.	ug/l	1
05406	Bromodichloromethane	75-27-4	N.D.	1.	5.	ug/l	1
05407	Toluene	108-88-3	0.7 J	0.7	5.	ug/l	1
05408	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	5.	ug/l	1
05409	Tetrachloroethene	127-18-4	N.D.	0.8	5.	ug/l	1
05411	Dibromochloromethane	124-48-1	N.D.	1.	5.	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	5.	ug/l	1
05415	Ethylbenzene	100-41-4	45.	0.8	5.	ug/l	1
05416	m+p-Xylene	1330-20-7	6.	0.8	5.	ug/l	1
05417	o-Xylene	95-47-6	2. J	0.8	5.	ug/l	1
05419	Bromoform	75-25-2	N.D.	1.	5.	ug/l	1
05421	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.	5.	ug/l	1
05432	1,3-Dichlorobenzene	541-73-1	N.D.	1.	5.	ug/l	1
05433	1,4-Dichlorobenzene	106-46-7	N.D.	1.	5.	ug/l	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170560
**ATC-5 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA ATC-5**

Collected: 09/27/2007 11:55 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

AT5-W

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method	As Received Limit of Quantitation	Units	Dilution Factor
05435	1,2-Dichlorobenzene	95-50-1	N.D.	1.	5.	ug/l	1
08202	EPA SW 846/8260 - Water						
01587	Ethanol	64-17-5	N.D.	50.	250.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	2. J	0.5	5.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.8	5.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.8	5.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.8	5.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	10.	80.	ug/l	1
06306	trans-1,3-Dichloropropene	10061-02-6	N.D.	1.	5.	ug/l	1
06307	cis-1,3-Dichloropropene	10061-01-5	N.D.	1.	5.	ug/l	1
08203	Freon 113	76-13-1	N.D.	2.	10.	ug/l	1

State of California Lab Certification No. 2116

Trip blank vials were not received by the laboratory for this sample group.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Analyst	Dilution Factor
			Trial#	Date and Time			
05553	TPH-DRO (Waters)	SW-846 8015B	1	10/09/2007 02:28		Diane V Do	10
01635	TPH-GRO 8015B - water	SW-846 8015B modified	1	10/04/2007 17:20		Martha L Seidel	5
05382	EPA SW846/8260 (water)	SW-846 8260B	1	10/10/2007 08:36		Susan McMahon-Luu	1
08202	EPA SW 846/8260 - Water	SW-846 8260B	1	10/10/2007 08:36		Susan McMahon-Luu	1
01146	GC VOA Water Prep	SW-846 5030B	1	10/04/2007 17:20		Martha L Seidel	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	10/10/2007 08:36		Susan McMahon-Luu	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	09/30/2007 05:50		Tracy L Schickel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170561
**B-2 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA B-2**

Collected: 09/27/2007 09:50 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

ATB-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
05553	TPH-DRO (Waters)	n.a.	25,000.	2,900.	10,000.	ug/l	10
Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.							
01635	TPH-GRO 8015B - water						
01639	TPH-GRO 8015B - water	n.a.	69.	20.	50.	ug/l	1
Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 5.							
05382	EPA SW846/8260 (water)						
05385	Chloromethane	74-87-3	N.D.	1.	5.	ug/l	1
05386	Vinyl Chloride	75-01-4	N.D.	1.	5.	ug/l	1
05387	Bromomethane	74-83-9	N.D.	1.	5.	ug/l	1
05388	Chloroethane	75-00-3	N.D.	1.	5.	ug/l	1
05389	Trichlorofluoromethane	75-69-4	N.D.	2.	5.	ug/l	1
05390	1,1-Dichloroethene	75-35-4	N.D.	0.8	5.	ug/l	1
05391	Methylene Chloride	75-09-2	N.D.	2.	5.	ug/l	1
05392	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	5.	ug/l	1
05393	1,1-Dichloroethane	75-34-3	N.D.	1.	5.	ug/l	1
05395	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	5.	ug/l	1
05396	Chloroform	67-66-3	N.D.	0.8	5.	ug/l	1
05398	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	5.	ug/l	1
05399	Carbon Tetrachloride	56-23-5	N.D.	1.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	1.	5.	ug/l	1
05403	Trichloroethene	79-01-6	N.D.	1.	5.	ug/l	1
05404	1,2-Dichloropropane	78-87-5	N.D.	1.	5.	ug/l	1
05406	Bromodichloromethane	75-27-4	N.D.	1.	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/l	1
05408	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	5.	ug/l	1
05409	Tetrachloroethene	127-18-4	N.D.	0.8	5.	ug/l	1
05411	Dibromochloromethane	124-48-1	N.D.	1.	5.	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	5.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
05416	m+p-Xylene	1330-20-7	N.D.	0.8	5.	ug/l	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170561
**B-2 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA B-2**

Collected: 09/27/2007 09:50 by JF

Account Number: 12258

 Submitted: 09/28/2007 09:15
 Reported: 10/15/2007 at 18:38
 Discard: 11/15/2007

 ConocoPhillips
 Suite 212
 1230 W. Washington
 Tempe AZ 85281

ATB-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method	As Received Limit of Quantitation	Units	Dilution Factor
05417	o-Xylene	95-47-6	N.D.	0.8	5.	ug/l	1
05419	Bromoform	75-25-2	N.D.	1.	5.	ug/l	1
05421	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.	5.	ug/l	1
05432	1,3-Dichlorobenzene	541-73-1	N.D.	1.	5.	ug/l	1
05433	1,4-Dichlorobenzene	106-46-7	N.D.	1.	5.	ug/l	1
05435	1,2-Dichlorobenzene	95-50-1	N.D.	1.	5.	ug/l	1
08202	EPA SW 846/8260 - Water						
01587	Ethanol	64-17-5	N.D.	50.	250.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	1. J	0.5	5.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.8	5.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.8	5.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.8	5.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	10.	80.	ug/l	1
06306	trans-1,3-Dichloropropene	10061-02-6	N.D.	1.	5.	ug/l	1
06307	cis-1,3-Dichloropropene	10061-01-5	N.D.	1.	5.	ug/l	1
08203	Freon 113	76-13-1	N.D.	2.	10.	ug/l	1

State of California Lab Certification No. 2116

Trip blank vials were not received by the laboratory for this sample group.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
05553	TPH-DRO (Waters)	SW-846 8015B	1	10/09/2007 03:17	Diane V Do	10
01635	TPH-GRO 8015B - water	SW-846 8015B modified	1	10/04/2007 15:50	Martha L Seidel	1
05382	EPA SW846/8260 (water)	SW-846 8260B	1	10/09/2007 03:44	Kelly E Brickley	1
08202	EPA SW 846/8260 - Water	SW-846 8260B	1	10/09/2007 03:44	Kelly E Brickley	1
01146	GC VOA Water Prep	SW-846 5030B	1	10/04/2007 15:50	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	10/09/2007 03:44	Kelly E Brickley	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	09/30/2007 05:50	Tracy L Schickel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 5170561

B-2 NA Water
Site# 251028 ATCE
5300 Broadway - Oakland NA B-2

Collected: 09/27/2007 09:50 by JF

Submitted: 09/28/2007 09:15
Reported: 10/15/2007 at 18:38
Discard: 11/15/2007

ATB-2

Account Number: 12258

ConocoPhillips
Suite 212
1230 W. Washington
Tempe AZ 85281

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCS D Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Ethylbenzene	N.D.	0.001	0.005	mg/kg	103		82-115		
m+p-Xylene	N.D.	0.001	0.005	mg/kg	103		82-117		
o-Xylene	N.D.	0.001	0.005	mg/kg	102		82-117		
Bromoform	N.D.	0.001	0.005	mg/kg	83		63-120		
1,1,2,2-Tetrachloroethane	N.D.	0.001	0.005	mg/kg	94		64-121		
1,3-Dichlorobenzene	N.D.	0.001	0.005	mg/kg	103		76-112		
1,4-Dichlorobenzene	N.D.	0.001	0.005	mg/kg	102		78-108		
1,2-Dichlorobenzene	N.D.	0.001	0.005	mg/kg	102		81-109		
Ethanol	N.D.	0.10	0.50	mg/kg	105		48-149		
trans-1,3-Dichloropropene	N.D.	0.001	0.005	mg/kg	92		79-112		
cis-1,3-Dichloropropene	N.D.	0.001	0.005	mg/kg	95		80-111		
Freon 113	N.D.	0.002	0.010	mg/kg	121		68-121		
Batch number: A072781AA Sample number(s): 5170557-5170558									
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	102		72-117		
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	98		72-120		
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	98		72-115		
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	99		73-116		
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	103		59-154		
Chloromethane	N.D.	0.002	0.005	mg/kg	86		44-115		
Vinyl Chloride	N.D.	0.001	0.005	mg/kg	86		52-111		
Bromomethane	N.D.	0.002	0.005	mg/kg	78		53-124		
Chloroethane	N.D.	0.002	0.005	mg/kg	79		63-120		
Trichlorofluoromethane	N.D.	0.002	0.005	mg/kg	97		58-125		
1,1-Dichloroethene	N.D.	0.001	0.005	mg/kg	109		83-121		
Methylene Chloride	N.D.	0.002	0.005	mg/kg	105		75-120		
trans-1,2-Dichloroethene	N.D.	0.001	0.005	mg/kg	106		84-116		
1,1-Dichloroethane	N.D.	0.001	0.005	mg/kg	102		82-116		
cis-1,2-Dichloroethene	N.D.	0.001	0.005	mg/kg	101		84-113		
Chloroform	N.D.	0.001	0.005	mg/kg	101		81-117		
1,1,1-Trichloroethane	N.D.	0.001	0.005	mg/kg	100		74-127		
Carbon Tetrachloride	N.D.	0.001	0.005	mg/kg	98		76-122		
Benzene	N.D.	0.0005	0.005	mg/kg	102		84-115		
1,2-Dichloroethane	N.D.	0.001	0.005	mg/kg	106		76-126		
Trichloroethene	N.D.	0.001	0.005	mg/kg	101		81-114		
1,2-Dichloropropane	N.D.	0.001	0.005	mg/kg	102		78-119		
Bromodichloromethane	N.D.	0.001	0.005	mg/kg	100		77-116		
Toluene	N.D.	0.001	0.005	mg/kg	100		81-116		
1,1,2-Trichloroethane	N.D.	0.001	0.005	mg/kg	105		81-112		
Tetrachloroethene	N.D.	0.001	0.005	mg/kg	107		77-120		
Dibromochloromethane	N.D.	0.001	0.005	mg/kg	103		80-113		
Chlorobenzene	N.D.	0.001	0.005	mg/kg	103		81-112		
Ethylbenzene	N.D.	0.001	0.005	mg/kg	100		82-115		
m+p-Xylene	N.D.	0.001	0.005	mg/kg	101		82-117		
o-Xylene	N.D.	0.001	0.005	mg/kg	101		82-117		
Bromoform	N.D.	0.001	0.005	mg/kg	95		63-120		
1,1,2,2-Tetrachloroethane	N.D.	0.001	0.005	mg/kg	106		64-121		
1,3-Dichlorobenzene	N.D.	0.001	0.005	mg/kg	101		76-112		
1,4-Dichlorobenzene	N.D.	0.001	0.005	mg/kg	101		78-108		
1,2-Dichlorobenzene	N.D.	0.001	0.005	mg/kg	103		81-109		
Ethanol	N.D.	0.10	0.50	mg/kg	97		48-149		
trans-1,3-Dichloropropene	N.D.	0.001	0.005	mg/kg	94		79-112		
cis-1,3-Dichloropropene	N.D.	0.001	0.005	mg/kg	96		80-111		
Freon 113	N.D.	0.002	0.010	mg/kg	113		68-121		

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ConocoPhillips

Group Number: 1058509

Reported: 10/15/07 at 06:38 PM

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOO</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: W072812AA	Sample number(s): 5170556,5170561								
Ethanol	N.D.	50.	250.	ug/l	103		31-166		
Methyl Tertiary Butyl Ether	N.D.	0.5	5.	ug/l	99		73-119		
di-Isopropyl ether	N.D.	0.8	5.	ug/l	99		70-123		
Ethyl t-butyl ether	N.D.	0.8	5.	ug/l	100		74-120		
t-Amyl methyl ether	N.D.	0.8	5.	ug/l	98		79-113		
t-Butyl alcohol	N.D.	10.	80.	ug/l	105		74-117		
Chloromethane	N.D.	1.	5.	ug/l	123*		47-122		
Vinyl Chloride	N.D.	1.	5.	ug/l	115		54-123		
Bromomethane	N.D.	1.	5.	ug/l	104		49-117		
Chloroethane	N.D.	1.	5.	ug/l	99		54-117		
Trichlorofluoromethane	N.D.	2.	5.	ug/l	113		59-128		
1,1-Dichloroethene	N.D.	0.8	5.	ug/l	116		76-122		
Methylene Chloride	N.D.	2.	5.	ug/l	109		85-120		
trans-1,2-Dichloroethene	N.D.	0.8	5.	ug/l	106		83-117		
1,1-Dichloroethane	N.D.	1.	5.	ug/l	107		83-127		
cis-1,2-Dichloroethene	N.D.	0.8	5.	ug/l	102		84-117		
Chloroform	N.D.	0.8	5.	ug/l	103		77-125		
1,1,1-Trichloroethane	N.D.	0.8	5.	ug/l	104		83-127		
Carbon Tetrachloride	N.D.	1.	5.	ug/l	98		77-130		
Benzene	N.D.	0.5	5.	ug/l	102		78-119		
1,2-Dichloroethane	N.D.	1.	5.	ug/l	106		69-135		
Trichloroethene	N.D.	1.	5.	ug/l	103		87-117		
1,2-Dichloropropane	N.D.	1.	5.	ug/l	104		80-117		
Bromodichloromethane	N.D.	1.	5.	ug/l	100		83-121		
Toluene	N.D.	0.7	5.	ug/l	98		85-115		
1,1,2-Trichloroethane	N.D.	0.8	5.	ug/l	95		86-113		
Tetrachloroethene	N.D.	0.8	5.	ug/l	100		76-118		
Dibromochloromethane	N.D.	1.	5.	ug/l	96		78-119		
Chlorobenzene	N.D.	0.8	5.	ug/l	93		85-115		
Ethylbenzene	N.D.	0.8	5.	ug/l	95		82-119		
m+p-Xylene	N.D.	0.8	5.	ug/l	95		83-113		
o-Xylene	N.D.	0.8	5.	ug/l	95		83-113		
Bromoform	N.D.	1.	5.	ug/l	78		69-118		
1,1,2,2-Tetrachloroethane	N.D.	1.	5.	ug/l	91		72-119		
1,3-Dichlorobenzene	N.D.	1.	5.	ug/l	94		81-114		
1,4-Dichlorobenzene	N.D.	1.	5.	ug/l	93		84-116		
1,2-Dichlorobenzene	N.D.	1.	5.	ug/l	93		81-112		
trans-1,3-Dichloropropene	N.D.	1.	5.	ug/l	91		79-114		
cis-1,3-Dichloropropene	N.D.	1.	5.	ug/l	92		78-114		
Freon 113	N.D.	2.	10.	ug/l	100		66-125		
Batch number: W072822AA	Sample number(s): 5170560								
Ethanol	N.D.	50.	250.	ug/l	107	95	31-166	11	30
Methyl Tertiary Butyl Ether	N.D.	0.5	5.	ug/l	102	99	73-119	2	30
di-Isopropyl ether	N.D.	0.8	5.	ug/l	98	93	70-123	6	30
Ethyl t-butyl ether	N.D.	0.8	5.	ug/l	100	98	74-120	2	30
t-Amyl methyl ether	N.D.	0.8	5.	ug/l	98	94	79-113	4	30
t-Butyl alcohol	N.D.	10.	80.	ug/l	107	105	74-117	1	30
Chloromethane	N.D.	1.	5.	ug/l	112	97	47-122	15	30
Vinyl Chloride	N.D.	1.	5.	ug/l	106	101	54-123	4	30
Bromomethane	N.D.	1.	5.	ug/l	107	98	49-117	9	30
Chloroethane	N.D.	1.	5.	ug/l	101	95	54-117	6	30
Trichlorofluoromethane	N.D.	2.	5.	ug/l	128	119	59-128	7	30
1,1-Dichloroethene	N.D.	0.8	5.	ug/l	118	112	76-122	6	30

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Methylene Chloride	N.D.	2.	5.	ug/l	106	99	85-120	8	30
trans-1,2-Dichloroethene	N.D.	0.8	5.	ug/l	106	102	83-117	4	30
1,1-Dichloroethane	N.D.	1.	5.	ug/l	107	103	83-127	4	30
cis-1,2-Dichloroethene	N.D.	0.8	5.	ug/l	103	95	84-117	8	30
Chloroform	N.D.	0.8	5.	ug/l	113	106	77-125	6	30
1,1,1-Trichloroethane	N.D.	0.8	5.	ug/l	118	110	83-127	7	30
Carbon Tetrachloride	N.D.	1.	5.	ug/l	114	103	77-130	10	30
Benzene	N.D.	0.5	5.	ug/l	101	93	78-119	8	30
1,2-Dichloroethane	N.D.	1.	5.	ug/l	114	116	69-135	2	30
Trichloroethene	N.D.	1.	5.	ug/l	106	105	87-117	1	30
1,2-Dichloropropane	N.D.	1.	5.	ug/l	101	96	80-117	5	30
Bromodichloromethane	N.D.	1.	5.	ug/l	108	105	83-121	3	30
Toluene	N.D.	0.7	5.	ug/l	101	97	85-115	4	30
1,1,2-Trichloroethane	N.D.	0.8	5.	ug/l	99	99	86-113	1	30
Tetrachloroethene	N.D.	0.8	5.	ug/l	108	99	76-118	8	30
Dibromochloromethane	N.D.	1.	5.	ug/l	105	97	78-119	8	30
Chlorobenzene	N.D.	0.8	5.	ug/l	98	95	85-115	3	30
Ethylbenzene	N.D.	0.8	5.	ug/l	100	94	82-119	6	30
m+p-Xylene	N.D.	0.8	5.	ug/l	100	94	83-113	5	30
o-Xylene	N.D.	0.8	5.	ug/l	98	95	83-113	3	30
Bromoform	N.D.	1.	5.	ug/l	87	85	69-118	3	30
1,1,2,2-Tetrachloroethane	N.D.	1.	5.	ug/l	88	90	72-119	2	30
1,3-Dichlorobenzene	N.D.	1.	5.	ug/l	95	94	81-114	1	30
1,4-Dichlorobenzene	N.D.	1.	5.	ug/l	99	95	84-116	4	30
1,2-Dichlorobenzene	N.D.	1.	5.	ug/l	97	95	81-112	1	30
trans-1,3-Dichloropropene	N.D.	1.	5.	ug/l	96	99	79-114	3	30
cis-1,3-Dichloropropene	N.D.	1.	5.	ug/l	97	93	78-114	4	30
Freon 113	N.D.	2.	10.	ug/l	102	96	66-125	6	30

Sample Matrix Quality Control

 Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 072750014A TPH-DRO by 8015B	Sample number(s): 5170555,5170557-5170559 -798 (2)	52-117	UNSPK: P171105	10	30	5,600.	BKG: P171105 5,400.	4	20
Batch number: 07275A34A TPH-GRO 8015B - soil	Sample number(s): 5170555,5170557-5170559 45	51 39-118	UNSPK: P165252	10	30				
Batch number: 07276B54A TPH-GRO 8015B - water	Sample number(s): 5170556 112	UNSPK: P170345 63-154							
Batch number: 07277B53A TPH-GRO 8015B - water	Sample number(s): 5170560-5170561 113	UNSPK: P174154 63-154							
Batch number: 072785708001 Lead	Sample number(s): 5170555,5170557-5170559 89	141* 75-125	UNSPK: P175166	18	20	21.2	BKG: P175166 20.7	3	20
Batch number: A072772AA	Sample number(s): 5170555,5170559	UNSPK: P167397							

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Sample Matrix Quality Control

 Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Methyl Tertiary Butyl Ether	91	91	59-119	2	30				
di-Isopropyl ether	93	92	58-113	2	30				
Ethyl t-butyl ether	91	90	60-112	2	30				
t-Amyl methyl ether	90	91	63-112	1	30				
t-Butyl alcohol	96	97	51-134	1	30				
Chloromethane	83	80	38-115	5	30				
Vinyl Chloride	85	80	41-104	6	30				
Bromomethane	80	75	50-114	8	30				
Chloroethane	80	75	52-114	8	30				
Trichlorofluoromethane	100	93	39-122	8	30				
1,1-Dichloroethene	103	99	64-118	5	30				
Methylene Chloride	97	93	50-127	5	30				
trans-1,2-Dichloroethene	100	96	60-110	6	30				
1,1-Dichloroethane	98	95	65-115	5	30				
cis-1,2-Dichloroethene	94	91	67-110	5	30				
Chloroform	97	93	69-117	6	30				
1,1,1-Trichloroethane	98	93	64-118	6	30				
Carbon Tetrachloride	96	93	56-120	5	30				
Benzene	97	93	66-112	5	30				
1,2-Dichloroethane	100	98	62-130	3	30				
Trichloroethene	97	93	48-131	6	30				
1,2-Dichloropropane	96	94	64-112	4	30				
Bromodichloromethane	94	92	66-119	4	30				
Toluene	95	91	50-121	5	30				
1,1,2-Trichloroethane	94	94	64-118	1	30				
Tetrachloroethene	109	107	40-140	3	30				
Dibromochloromethane	94	93	67-113	3	30				
Chlorobenzene	95	93	58-109	4	30				
Ethylbenzene	97	92	54-116	6	30				
m+p-Xylene	95	90	52-117	6	30				
o-Xylene	97	92	52-117	6	30				
Bromoform	82	81	54-114	3	30				
1,1,2,2-Tetrachloroethane	93	93	37-142	2	30				
1,3-Dichlorobenzene	96	92	47-109	6	30				
1,4-Dichlorobenzene	95	92	47-109	4	30				
1,2-Dichlorobenzene	96	93	50-111	4	30				
Ethanol	97	94	35-148	4	30				
trans-1,3-Dichloropropene	86	86	60-110	1	30				
cis-1,3-Dichloropropene	89	87	56-112	3	30				
Freon 113	111	104	47-115	8	30				

Batch number: A072781AA Sample number(s): 5170557-5170558 UNSPK: P174594

Methyl Tertiary Butyl Ether	83	86	59-119	4	30
di-Isopropyl ether	83	86	58-113	2	30
Ethyl t-butyl ether	80	84	60-112	4	30
t-Amyl methyl ether	79	84	63-112	5	30
t-Butyl alcohol	95	94	51-134	1	30
Chloromethane	73	75	38-115	3	30
Vinyl Chloride	71	76	41-104	7	30
Bromomethane	71	74	50-114	4	30
Chloroethane	69	72	52-114	4	30
Trichlorofluoromethane	82	88	39-122	7	30
1,1-Dichloroethene	90	97	64-118	8	30

*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Sample Matrix Quality Control

 Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Methylene Chloride	101	100	50-127	1	30				
trans-1,2-Dichloroethene	89	93	60-110	4	30				
1,1-Dichloroethane	88	91	65-115	3	30				
cis-1,2-Dichloroethene	85	89	67-110	4	30				
Chloroform	87	90	69-117	4	30				
1,1,1-Trichloroethane	84	89	64-118	6	30				
Carbon Tetrachloride	82	88	56-120	6	30				
Benzene	87	91	66-112	4	30				
1,2-Dichloroethane	88	91	62-130	3	30				
Trichloroethene	85	90	48-131	6	30				
1,2-Dichloropropane	86	90	64-112	4	30				
Bromodichloromethane	84	88	66-119	4	30				
Toluene	86	89	50-121	3	30				
1,1,2-Trichloroethane	86	91	64-118	4	30				
Tetrachloroethene	96	101	40-140	5	30				
Dibromochloromethane	84	89	67-113	5	30				
Chlorobenzene	88	91	58-109	3	30				
Ethylbenzene	86	89	54-116	4	30				
m+p-Xylene	87	90	52-117	3	30				
o-Xylene	87	90	52-117	3	30				
Bromoform	72	77	54-114	6	30				
1,1,2,2-Tetrachloroethane	82	88	37-142	7	30				
1,3-Dichlorobenzene	87	90	47-109	2	30				
1,4-Dichlorobenzene	87	90	47-109	2	30				
1,2-Dichlorobenzene	88	91	50-111	3	30				
Ethanol	101	93	35-148	9	30				
trans-1,3-Dichloropropene	78	81	60-110	4	30				
cis-1,3-Dichloropropene	80	83	56-112	4	30				
Freon 113	94	102	47-115	7	30				

Batch number: W072812AA	Sample number(s): 5170556,5170561	UNSPK: P168840
Ethanol	100	100
Methyl Tertiary Butyl Ether	111	106
di-Isopropyl ether	111	104
Ethyl t-butyl ether	107	102
t-Amyl methyl ether	104	100
t-Butyl alcohol	102	54*
Chloromethane	144*	138*
Vinyl Chloride	136*	129
Bromomethane	117	106
Chloroethane	114	106
Trichlorofluoromethane	136	126
1,1-Dichloroethene	138	134
Methylene Chloride	115	107
trans-1,2-Dichloroethene	125	120
1,1-Dichloroethane	118	114
cis-1,2-Dichloroethene	113	108
Chloroform	116	111
1,1,1-Trichloroethane	116	110
Carbon Tetrachloride	114	107
Benzene	162*	170*
1,2-Dichloroethane	114	107
Trichloroethene	115	104

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Sample Matrix Quality Control

 Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
1,2-Dichloropropane	116	110	83-129	6	30				
Bromodichloromethane	108	105	80-137	3	30				
Toluene	179*	212*	83-127	6	30				
1,1,2-Trichloroethane	104	105	77-125	1	30				
Tetrachloroethene	-10 (2)	-27 (2)	78-133	1	30				
Dibromochloromethane	97	93	82-119	4	30				
Chlorobenzene	103	99	83-120	4	30				
Ethylbenzene	201 (2)	268 (2)	82-129	9	30				
m+p-Xylene	220 (2)	311 (2)	82-130	9	30				
o-Xylene	187 (2)	251 (2)	82-130	9	30				
Bromoform	80	74	64-119	8	30				
1,1,2,2-Tetrachloroethane	90	87	73-121	3	30				
1,3-Dichlorobenzene	103	95	79-123	8	30				
1,4-Dichlorobenzene	101	97	81-122	4	30				
1,2-Dichlorobenzene	98	95	82-117	3	30				
trans-1,3-Dichloropropene	91	87	77-123	5	30				
cis-1,3-Dichloropropene	98	93	80-126	5	30				
Freon 113	123	116	78-146	6	30				

Batch number: W072822AA	Sample number(s): 5170560 UNSPK: P170621	
Ethanol	92	32-164
Methyl Tertiary Butyl Ether	111	69-127
di-Isopropyl ether	100	68-129
Ethyl t-butyl ether	109	78-119
t-Amyl methyl ether	104	72-125
t-Butyl alcohol	110	70-121
Chloromethane	134*	47-133
Vinyl Chloride	127	55-130
Bromomethane	118	52-129
Chloroethane	119	57-130
Trichlorofluoromethane	169*	67-150
1,1-Dichloroethene	135	87-145
Methylene Chloride	107	79-133
trans-1,2-Dichloroethene	119	82-133
1,1-Dichloroethane	121	85-135
cis-1,2-Dichloroethene	111	83-126
Chloroform	126	83-139
1,1,1-Trichloroethane	137	81-142
Carbon Tetrachloride	140	82-149
Benzene	110	83-128
1,2-Dichloroethane	133	70-143
Trichloroethene	120	83-136
1,2-Dichloropropane	105	83-129
Bromodichloromethane	121	80-137
Toluene	108	83-127
1,1,2-Trichloroethane	101	77-125
Tetrachloroethene	116	78-133
Dibromochloromethane	109	82-119
Chlorobenzene	104	83-120
Ethylbenzene	110	82-129
m+p-Xylene	108	82-130
o-Xylene	106	82-130
Bromoform	90	64-119

*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Sample Matrix Quality Control

 Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
1,1,2,2-Tetrachloroethane	94		73-121						
1,3-Dichlorobenzene	107		79-123						
1,4-Dichlorobenzene	107		81-122						
1,2-Dichlorobenzene	105		82-117						
trans-1,3-Dichloropropene	100		77-123						
cis-1,3-Dichloropropene	94		80-126						
Freon 113	130		78-146						

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

 Analysis Name: TPH-DRO (Waters)
 Batch number: 072720007A
 Orthoterphenyl

5170556	54*
5170560	78
5170561	51*
Blank	90
LCS	106
LCSD	108

Limits: 59-131

 Analysis Name: TPH-DRO by 8015B
 Batch number: 072750014A
 Orthoterphenyl

5170555	86
5170557	96
5170558	87
5170559	92
Blank	93
DUP	513*
LCS	102
MS	489*

Limits: 59-129

 Analysis Name: TPH-GRO 8015B - soil
 Batch number: 07275A34A
 Trifluorotoluene-F

5170555	81
5170557	84
5170558	81
5170559	79
Blank	89

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

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Quality Control Summary

Client Name: ConocoPhillips
Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Surrogate Quality Control

LCS 93
MS 86
MSD 85

Limits: 61-122

Analysis Name: TPH-GRO 8015B - water
Batch number: 07276B54A
Trifluorotoluene-F

5170556 82
Blank 89
LCS 91
LCSD 92
MS 93

Limits: 63-135

Analysis Name: TPH-GRO 8015B - water
Batch number: 07277B53A
Trifluorotoluene-F

5170560 96
5170561 81
Blank 83
LCS 89
LCSD 89
MS 88

Limits: 63-135

Analysis Name: EPA SW846/8260 (soil)
Batch number: A072772AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5170555	91	88	94	84
5170559	90	85	91	106
Blank	91	89	93	84
LCS	91	88	93	85
MS	92	90	93	85
MSD	92	91	93	85

Limits: 71-114 70-109 70-123 70-111

Analysis Name: EPA SW846/8260 (soil)
Batch number: A072781AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5170557	89	88	94	81
5170558	89	85	95	81
Blank	90	89	93	83
LCS	92	93	92	85
MS	91	87	94	85
MSD	91	89	93	85

Limits: 71-114 70-109 70-123 70-111

Analysis Name: EPA SW846/8260 (water)

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ConocoPhillips
Reported: 10/15/07 at 06:38 PM

Group Number: 1058509

Surrogate Quality Control

Batch number: W072812AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5170556	96	95	96	91
5170561	95	92	95	90
Blank	95	91	94	89
LCS	96	93	97	93
MS	93	94	95	93
MSD	93	86	96	92
Limits:	80-116	77-113	80-113	78-113

Analysis Name: EPA SW846/8260 (water)

Batch number: W072822AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5170560	97	86	100	99
Blank	100	97	96	90
LCS	98	92	98	97
LCSD	98	89	96	94
MS	98	94	95	97
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Account# 12258

Group# 1058509

Sample# 5170555-6)



6602 Owens Drive, Suite 100
Pleasanton, CA 94588
Main Line: (925) 460-5300
Facsimile: (925) 463-2559

CHAIN OF CUSTODY FORM

Project Name: 251028 Client: CO.
Project Number: 34,75118, 3105 Task: 75001
Global I.D.: _____
Project Address: 5300 Broadway, Oakland CA
Laboratory: Lanaster Labs Contact: Megan Mueller
Lab Address/Phone: Lanaster PA 776562300
ATC Project Manager: Wynne Moxie jwynnemoxie@atcassociates.com
ATC PM Ph. No.: (925) 225-526 966 ext 8 Email: @atc-enviro.com
ATC Sampler: JF Phone: (925) 225-7510

Turnaround 10 day 3 day 2-8 hr
Time: 7 day 2 day other
(working days) 5 day 24 hr ()

Analyses Requested

ATC Sample ID	Sample Information			Container Information			Field Pt. I.D.- Check if same as Sample I.D.	TPHg/BTEX/MTBE (8016M/8021)	Confirm MTBE by GC/MS Fuel Oxygenates (8260B)	TPHd (8015M)/TPH-g	HVOCs (8010) 8260	SVOC's (8270)	VOCs (8260) BTEX	PP Metals (low detect) (7000/6010)	Cyanide, Total (335.2)	TPHg/BTEX/MTBE (8015M/8260B)	TPHg/BTEX/5 Fuel Oxy's (8260B)	TPHg/BTEX/5 Fuel Oxy's/1,2 DCA & EDB (8260B)	Ethanol 8260
	Date	Time	Matrix Soil Water Vapor	No.	Type	Preser- vative													
ATC-2 D-5'	7/27/07	0925	X			1	liner			X	X	X	X						X
ATC-2 W		0940		X		8	VA/LAG Hcl												
ATC-4 D-10'		310	X			1	liner												
ATC-5 D-10'		1140	X			↓	liner												
ATC-5 D-5'		1140	X			↓	↓												
ATC-5 W		1155		X		8	VA/LAG Hcl			↓	↓	↓	↓						↓
B-2	9/27	0950		X		8			X	X	X		X						X
↳ analyze per JF.																			

Additional Comments: Ento #4880

EDF Format

Relinquished By: [Signature] Date/Time: 9/27/07 1230 Received By: Joe Salacuo Date/Time: 9/27/07
Relinquished By: _____ Date/Time: _____ Received By: [Signature] Date/Time: _____
Relinquished By: _____ Date/Time: _____ Received By: [Signature] Date/Time: 9/28/07 0915
Sample Condition. Good? Yes No On Ice? Yes No Cooler Temp 3.0-3.4°C Transportation Method: _____ Page ___ of ___

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	l	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml
<	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.		

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ATTACHMENT D

CPT Field Procedures

CPT FIELD PROCEDURES

Pre-Field Investigation Activities:

Prior to field activities, Delta will obtain exploratory boring permits and prepare a site-specific Health and Safety (H&S) plan in accordance Title 8, Section 5192 of the California Code of Regulations. The H&S plan will contain a list of emergency contacts, as well as a hospital route map to the nearest emergency facility.

A private utility locator will be contracted to identify site utilities prior to conducting the field investigation. Underground Services Alert (USA) will be notified at least 48 hours prior to drilling operations, and the services of a private utility locating company will be utilized to reduce the risk of damage to utilities beneath the property. Additionally, the first five feet of each borehole will be cleared utilizing air-vacuum equipment (air-knife). The purpose of using air-knife technology is to minimize the possibility of encountering unmarked underground utilities during drilling.

Boring and Sampling Procedures:

The proposed CPT locations (Figure 2) will be advanced by a licensed contractor using a CPT rig. Four separate boreholes will be advanced at each proposed CPT boring location. The first boring will be advanced for stratigraphic profiling and a second for collecting discrete soil samples, while the remaining two will be used to collect discrete groundwater samples. The CPT locations have been chosen to better aid in assessing the subsurface conditions.

CPT soil classifications are based on the cone penetration resistance, sleeve friction, and friction ratio. A soil classification graph will be generated during the advancement of the CPT borehole. CPT equipment will be provided and operated by Gregg In Situ, Inc. (License C57-656407). Grout will be pumped into the initial borehole from the bottom of the boring upward using a grout collar as the CPT rods are sequentially retracted and removed (retraction grouting).

Soil samples will be collected using a direct push piston sampler. A sealed pointed piston will be advanced within the core barrel of the CPT to the desired sample depth. The piston will then be opened and driven to further depth to collect a soil sample at which time the piston assembly will be removed and the soil sample recovered. The sample tube from each interval will be sealed with Teflon tape and plastic end caps and placed in an ice chest cooled with ice for delivery to the analytical laboratory for analysis under chain-of-custody protocol. The remaining soil collected from the sample tubes will be used for field screening and lithologic description purposes.

Soil samples from each sample interval will be field screened for the presence of VOCs using a PID. It is anticipated that a minimum three soil samples per boring will be collected for laboratory analysis. Additional soil samples will be submitted for analysis if the PID measurements show evidence of substantial petroleum hydrocarbon impact. The PID measurements will be recorded on the soil boring log by the field geologist. Each soil sample will be logged using the Unified Soil Classification System (USCS).

Groundwater samples will be collected, as appropriate, from each borehole based on field observations and from the CPT stratigraphic profile as further detailed in the current work plan. The assembly is driven with the outer tube casing in place. When the desired groundwater sample depth is reached, the outer casing is retracted to expose the screen to groundwater. A small-diameter bailer will then be lowered CPT rods and a groundwater sample collected. The expendable drive point is left in place when the CPT rods and sampling assembly are removed.

Each groundwater sample will be decanted from the bailer into an appropriately labeled container, sealed, and placed in an ice chest cooled with ice and transported to a state-certified laboratory for analysis under chain-of-custody protocol.

Upon completion of each boring, Delta will oversee Gregg Drilling (Gregg) backfill the borehole with Portland I/II cement mixed with potable water to form a cement mixture. Retraction grouting will be conducted at each borehole in the manner described above. The cement mixture will be placed to within 1-2 feet of ground surface in each boring. The top 1-2 feet of each boring will be finished to grade using concrete.

Upon completing the backfill at each borehole location, all down-hole tools will be decontaminated to avoid cross contamination. The decontamination procedure will entail multiple wash and rinse cycles using potable water and a non-phosphate detergent.

All soil cuttings and waste materials will be containerized in Department of Transportation approved drums and stored on-site. The containers will be labeled and later transferred off-site following waste profiling. Boreholes will not be left open for more than a 24-hour period.