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TRANSMITTAL

DATE: June 8, 2012 REFERENCE NO.: 311965
PROJECT NAME: Former Chevron Service Station 93600
TO: Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RECEIVED

1:31 pm, Jun 19, 2012

Alameda County
Environmental Health

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QUANTITY	DESCRIPTION
1	Subsurface Investigation Report and Case Closure Request

As Requested For Review and Comment
 For Your Use For Review and Signature

COMMENTS:
Should you have any questions or concerns with this document, please contact Nathan Lee at (510) 420-3333.

Copy to: Ms. Catalina Espino Devine , Chevron
Mr. George Kim, Chong and Myung, Inc.
Mr. Christopher Curtis, MV Broadway, LLC

Completed by: Tina M. Hariu Signed: *Tina M. Hariu*
[Please Print]

Filing: **Correspondence File**



**Catalina Espino
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Project Manager
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Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station No. 9-3600
2200 Telegraph Avenue
Oakland, CA

I have reviewed the attached report dated June 8, 2012.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in black ink, appearing to read "Catalina Espino Devine".

Catalina Espino Devine
Project Manager

Attachment: Report



SUBSURFACE INVESTIGATION REPORT AND CASE CLOSURE REQUEST

**FORMER CHEVRON SERVICE STATION 93600
2200 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA
Fuel Leak Case No. RO00002435**

Prepared For:

**Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502 6577**

**Prepared by:
Conestoga-Rovers
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**JUNE 8, 2012
REF. NO. 311965 (11)**

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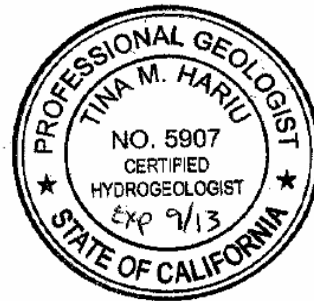


SUBSURFACE INVESTIGATION REPORT AND CASE CLOSURE REQUEST

FORMER CHEVRON SERVICE STATION 93600
2200 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA
Fuel Leak Case No. RO00002435

Amanda McDonnell

Tina M. Hariu, PG 5907, CHG 346



Prepared by:
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JUNE 8, 2012

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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) is submitting this *Subsurface Investigation Report and Closure Request* for the site referenced above on behalf of Chevron Environmental Management Company (Chevron) (Figure 1). CRA submitted a *Work Plan for Soil Borings* dated January 30, 2009. The scope of work was conditionally approved by Alameda County Environmental Health (ACEH) in a correspondence dated April 13, 2011 (Appendix A). The work could not be executed until 2012 when all necessary access agreements for the onsite and offsite portion of the investigation were secured.

In the April 13, 2011 approval letter, ACEH requested:

- Delineation of the extent of dissolved-phase petroleum hydrocarbon constituents in groundwater downgradient (offsite) of well MW-1
- Clearance of boreholes for utilities using a hand auger, instead of an air knife as specified in the work plan
- Placement of a soil bore in the vicinity of boring B-8 (near the underground storage tank [UST] pit), where previous borings had been refused

Therefore, the investigation was performed to define the extent of dissolved-phase petroleum hydrocarbons in groundwater downgradient of the site and to attempt a boring in the vicinity of former boring B-8.

Subsurface investigation included advancing one onsite and four offsite soil borings (Figure 2). The field work was conducted between April 12 and 13, 2012. Presented below are site background, a summary of field investigation activities, subsurface investigation results, and a comparison of site data to the low-risk fuel case closure criteria.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION

The site is an active Chevron gasoline service station located at 2200 Telegraph Avenue, in Oakland, California. The property is at the southeast corner of the intersection of Telegraph and West Grand Avenues, and is bound on the east by the Douglas Parking Lot (Figure 2). Surrounding properties are commercial businesses, with a church located to the west across Telegraph Avenue. The Bay Area Rapid Transit (BART) runs directly beneath the site and trends northwest to southeast (Figure 2). Based

on information provided by BART, the top of tunnel is approximately 12 feet below grade (fbg) in this area.

Current site facilities include three 10,000-gallon underground storage tanks (UST) that share a common pit near the northeastern corner of the site, and five dispenser islands covered by a canopy (Figure 2).

2.2 HISTORICAL OWNERSHIP

Chevron purchased the land in 1951 and operated a retail service station until 1983. All facilities and improvements were removed in 1984 when Chevron attempted to sell the land. Due to the presence of the BART right-of-way, Chevron was unable to complete the sale, and in 1985, rebuilt the station into its current configuration. In 2000, Chevron sold the land and facilities to the current station dealer, Mr. George Kim.

2.3 TOPOGRAPHY AND SURFACE HYDROLOGY

The regional ground surface slopes gently toward the east. The nearest surface water body is Lake Merritt, which is located approximately 1,850 feet east of the site (Figure 1). Lake Merritt drains into Oakland Inner Harbor.

The site topography is relatively flat, and the ground surface occurs at an elevation of approximately 17 feet above mean sea level (amsl). The adjacent Parking Lot surface elevation is 1 to 2 feet lower than the site, and slopes slightly to the east toward Valley Street (Figure 2).

2.4 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located on the eastern flank of the San Francisco Basin, a broad Franciscan Complex depression approximately 4 miles east of San Francisco Bay. The basin basement is overlain first by the Pleistocene Santa Clara Formation, then by the Alameda Formation, and lastly by the Temescal Formation. The three units consist of unconsolidated sediments varying in total thickness from approximately 300 to 1,000 feet. The Santa Clara Formation is comprised primarily of alluvial fan deposits interspersed with lake, swamp, river channel, and flood plain deposits. The overlying Alameda Formation was deposited in an estuary environment and consists of organic clays and alluvial deposits. The Temescal Formation is an alluvial deposit ranging in thickness

from 1 to 50 feet and consists primarily of silts and clays overlying a basal gravel unit (California Regional Water Quality Control Board [RWQCB], 1999).¹

The site is within the Oakland subarea of the East Bay Plain groundwater basin. This basin encompasses approximately 115 square miles and is bound by San Pablo Bay to the north, Alameda County to the south, the Hayward Fault to the east and the San Francisco Bay to the west. Groundwater flow direction in the basin typically follows surface topography; however, local groundwater flow direction can be influenced by subsurface features. Groundwater in this basin is designated as beneficial for municipal and domestic water supply, as indicated in the San Francisco Bay Basin Water Quality Control Plan prepared by the RWQCB – Region 2. However, current beneficial water use of groundwater in the basin is minimal due to readily available, high-quality imported surface water.

2.5 PREVIOUS ENVIRONMENTAL WORK

Environmental investigation began at the site in 1986 with replacement of the USTs. Between 1986 and early 2012, the following investigation activities were conducted:

- Collection of 39 soil samples and seven grab-groundwater samples
- Drilling and sampling of eight soil borings
- Installation and sampling of 16 vadose wells with vapor sensors
- Installation and sampling of three groundwater monitoring wells
- Groundwater monitoring since 2002

A summary of previous environmental investigation and remediation is included in Appendix B.

3.0 SUBSURFACE INVESTIGATION ACTIVITIES

Subsurface investigation activities performed at the site are described below.

Access Agreements

Onsite and offsite access agreements were updated and/or negotiated to allow soil and groundwater sampling at one onsite and four offsite boring locations.

¹ California Regional Water Quality Control Board San Francisco Bay Region East Bay Plain Ground Water Basin Beneficial Use Evaluation Report, 1999.

BART Right-of-Way

A BART representative was on site on April 9, 2012 to assess proposed drilling locations in the vicinity of the BART right-of-way prior to drilling. On the basis of CRA discussions with BART personnel, proposed locations were adjusted to outside the BART right-of-way.

Site Health and Safety Plan

CRA performed all work under the guidelines set forth in a comprehensive site health and safety plan (HASP). The plan was reviewed and signed by all site workers and visitors. The HASP was maintained onsite at all times.

Permits

Drilling permits W2012-0198 and W2012-0205 were obtained from ACEH on April 2, 2012 (Appendix C).

Utility Clearance

Prior to drilling, CRA contacted Underground Service Alert (USA) to mark underground utilities near the proposed boring locations. CRA contracted Norcal Geophysical Services (Norcal) of Cotati, California to verify underground utility locations near proposed boring locations. Borings were marked and utilities cleared on April 9 2012. Geophysical methods included performing an electromagnetic (EM) survey and ground penetrating radar, and tracing known electrical lines.

Drilling Company

Gregg Drilling and Testing, Inc. (Gregg Drilling) of Martinez, California (C57 license #485165) performed the drilling activities.

Drilling Dates

Drilling took place on April 12 and 13, 2012.

CRA Personnel

Onsite CRA personnel included Sequoia Patterson and Amanda McDonell. CRA managed the field investigation activities performed by Gregg Drilling. All field work was performed under the supervision of California Professional Geologist Tina Hariu (PG 5907).

Drilling Method

Gregg Drilling advanced five soil borings (B-8B, and B-9 through B-12) using direct-push technology.

Boring Depths

Boring B-8B was attempted twice (within several feet of each other), but both locations were refused at 3 fbg. CRA staff manually explored the boreholes and observed what appeared to be a shiny metal surface at one location. The metal appeared unoxidized and uncoated and is not consistent with the appearance of metal from an underground storage tank used for service station operations (i.e., oxidation resistant coating).

Norcal was later contacted to further re-examine the results of their geophysical survey. The results indicated that no anomaly was detected in the area during the initial screening. However, due to the proximity of steel reinforcement structures above the nearby tank pit, the metal detector sensitivity had to be reduced and the object was not detected.

Borings B-9 through B-12 were advanced to 30 fbg. Soil boring locations are shown on Figure 2.

Soil Sampling

Soil was sampled using dual-tube. This methodology involves advancing an outer hollow rod and then advancing an inner rod with an acetate sheath to collect undisturbed soil samples. Soil was continuously logged according to the ASTM D2488-06 Unified Soil Classification System. Soil was screened for volatile organic compounds using a PID. Boring logs are included in Appendix D.

Soil samples selected for laboratory analyses were capped with Teflon® tape and plastic end caps. All samples were properly sealed, labeled, preserved on ice, logged on chain-of-custody forms, and released to Eurofins/Lancaster Laboratories (Lancaster) of Lancaster, Pennsylvania for analyses.

Grab-Groundwater Sampling

Depth-discrete grab-groundwater samples were collected at first encountered groundwater from each boring using a disposable bailer. Saturated conditions were first observed in borings B-9, B-10, B-11, and B-12 at depths of 13, 18, 20, and 23 fbg, respectively. Unsuccessful attempts were made to collect shallower groundwater samples from B-10 through B-12 by retracting the outer dual-tube rods and waiting for a

minimum of 20 minutes to allow groundwater to enter the bailer. Examination of soil cores collected at B-10, B-11, and B-12 above the depths where first groundwater samples were obtained also provided verification of dry conditions, despite the presence of potential water-bearing sand and silty sand.

Additional grab-groundwater samples were collected at varying intervals (to a maximum depth interval of 30 fbg) on the basis of observed lithology, and the presence or absence of groundwater during soil sampling. Deeper groundwater samples were collected using a screened sleeve inserted into the dual-tube rods, which allowed the collection of depth-discrete samples, while minimizing the potential for cross-contamination from shallower groundwater.

Grab-groundwater samples were decanted into clean, laboratory-supplied containers. All samples were sealed, labeled, logged on a chain-of-custody form, placed on ice, and transported to a State-approved laboratory for analyses.

Laboratory Analyses

Soil and grab-groundwater samples were analyzed by Lancaster for the following constituents:

- Total petroleum hydrocarbons quantified as gasoline (TPHg) using EPA Method 8015 modified; and
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary-amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) using EPA Method 8260B.

Waste Disposal

Soil cuttings and rinsate water were stored onsite in sealed and labeled Department of Transportation (DOT) approved 55-gallon drums. The drums were transported to a Clean Harbors Buttonwillow disposal facility on May 31, 2012.

4.0 INVESTIGATION RESULTS

4.1 SITE GEOLOGY AND HYDROGEOLOGY

Geology

Figure 3 presents the locations of Geologic Cross-Sections A to A' and B to B' (Figures 4 and 5). Cross-Section A to A' was prepared along the direction of

groundwater flow (i.e., northwest to southeast), and B to B' was prepared generally perpendicular to groundwater flow (i.e., northwest to southwest).

As shown on the cross-sections, the shallow subsurface consists of a continuous, poorly graded sand and clayey sand unit that extends to depths up to approximately 7 fbg. This unit is underlain by a low permeability silt and clay unit that ranges in thickness from about 7 feet in the adjacent Douglas Parking Lot on the southeast, to 15 feet on the northwest site of the site (Figure 4). At borings B-10, B-11, and B-12, the silt and clay unit is likely interbedded with coarse materials between 8 and 10 fbg because core material was not recovered from this interval during sampling. The potential significance of this coarse zone is discussed in Section 4.1. Southeast of well MW-1 (in the Parking Lot), a relatively thick (i.e., to up to 17 feet) silty sand, sand, and gravel unit underlies the silt and clay, and extends to the maximum depth explored of 30 fbg (Figure 5).

Hydrogeology

Groundwater beneath the site flows to the southeast, paralleling the BART tunnel. The BART tunnel appears to influence both onsite and offsite groundwater elevations. In this area, the top of tunnel occurs at a depth of approximately 12 fbg (Figure 4). As shown, this depth corresponds with the top of the thick, high permeability silty sand, sand, and gravel unit that occurs immediately southeast of MW-1. It is also in this area where the water table appears to decline rapidly, as discussed below.

According to monitoring well data from the three site wells, onsite (static) groundwater occurs at depths between approximately 10 and 11 fbg (the site monitoring wells are screened between 5 and 20 fbg). Groundwater was first encountered at offsite boring locations B-10, B-11, and B-12 at depths of 18, 20, and 23 fbg, respectively. As shown on Figure 4, potentiometric heads decline rapidly across relatively short lateral distances between MW-1, B-10, and B-12 in the southwestern portion of the Parking Lot. Figure 4 illustrates the top and bottom of the BART tunnel, relative to observed groundwater elevations. Near this area, the BART tunnel begins its descent into the subsurface, and the tunnel appears to slightly dewater the aquifer, resulting in a depression of the water table along the tunnel. Based on this hydrogeologic evaluation, boring B-12 is the most downgradient location from both MW-1 and the former tanks.

4.2 SOIL SAMPLING AND ANALYTICAL RESULTS

Twenty-four soil samples were collected for chemical analyses in this investigation. The laboratory analytical report is presented in Appendix E. Concentrations of chemicals detected in this and previous investigations are summarized in Table 1 and presented on Figures 6 and 7. The highest chemical concentrations detected in the current investigation include 15 milligrams per kilogram (mg/kg) TPHg, 0.002 mg/kg benzene and 0.001 mg/kg MTBE.

The detection of low concentrations of TPHg and benzene in soil samples collected at 10 fbg in offsite borings is coincident with the base of the zone of no soil recovery between 8 and 10 fbg at borings B-10 and B-11 (silt was observed at B-9 in that depth interval). "No recovery" is often associated with saturated and/or coarse materials; however, it should be noted that unsaturated conditions were observed below this interval. It is likely then, that perched (ephemeral) groundwater originating onsite may have historically resided in the zone of no recovery depositing low concentrations of residual hydrocarbons in soil.

No TPHg, BTEX, MTBE, or other fuel oxygenates were detected in soil above RWQCB-San Francisco Bay Region Environmental Screening Levels (ESLs).²

4.3 GRAB-GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

Nine grab-groundwater samples were collected from the four offsite borings. Analytical results are presented in Table 2 and on Figure 8. The laboratory analytical report for grab-groundwater is included in Appendix F. The highest concentrations detected include 1,800 micrograms per liter ($\mu\text{g/L}$) TPHg and 5 $\mu\text{g/L}$ MTBE. No benzene was detected.

² California Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final November 2007 (Revised May 2008).

5.0 DISCUSSION AND INVESTIGATION CONCLUSIONS

This investigation was conducted to:

- Evaluate soil conditions in the vicinity of former boring B-8, where refusal had occurred in a previous investigation
- Delineate the extent of dissolved-phase petroleum hydrocarbon constituents in groundwater downgradient (offsite) of well MW-1

5.1 DISCUSSION

Boring B-8

Soil samples were not collected at boring B-8 due to refusal during utility clearance. Two attempts to complete the boring were made (in addition to the original attempt) with no success. Based on numerous attempts to clear utilities with geophysics, and three attempts to drill near B-8, the immediate vicinity appears to contain numerous utilities and subsurface features that make drilling technically impracticable to drill at this location.

Soil

Low concentrations of TPHg and benzene were detected in several shallow (i.e., 10 fbg) soil samples. No ESLs for soil were exceeded and no further investigation is warranted.

Groundwater

No benzene has been detected in any recent groundwater samples from either groundwater monitoring wells or grab-groundwater locations. TPHg, ethylbenzene, total xylenes, and/or MTBE have been detected in groundwater. As shown on Figures 4 and 8, the lateral and vertical extents of petroleum hydrocarbons are delineated downgradient of well MW-1 and boring B-9 (the location of the maximum detected TPHg concentration of 1,800 µg/L) at boring B-12. TPHg exceeded the ESL for a drinking water aquifer in four samples. However, TPHg concentrations attenuate to below detection limits within less than 100 feet downgradient of the former USTs.

5.2 CONCLUSIONS

In conclusion, the results of the investigation indicate that:

- Soil impacts at offsite locations are below ESLs
- The lateral and vertical extents of hydrocarbons and oxygenates in groundwater are limited and adequately delineated

6.0 ADDITIONAL INFORMATION

6.1 SENSITIVE RECEPTOR SURVEY

In 2008, CRA compiled well data provided by California Department of Water Resources (DWR) (Table 3).³ The nearest municipal and irrigation wells are approximately 3,800 and 2,500 feet from the site, respectively. Wells in DWR records with undefined uses are approximately 3,000 feet from the site. The nearest surface water is Lake Merritt, which is located approximately 1,850 feet east of the site. Due to proximity, residual onsite petroleum hydrocarbon concentrations are not expected to impact potential sensitive receptors.

6.2 UTILITY SURVEY

Various utilities have been identified on and around the site. However, it does not appear that the utility lines are acting as preferential pathways for significant hydrocarbon migration because groundwater is below the depth of typical utility depths.

While the BART line appears to affect groundwater flow, the extent of hydrocarbons is adequately defined in the direction of potential groundwater flow affects.

6.3 CONCENTRATION TRENDS

CRA uses the guidance provided within the United States Environmental Protection Agency (EPA) document *Calculation and Use of First-Order Rate Constants for Monitored Natural Attenuation Studies* (November 2002) to estimate the time for groundwater concentrations to reach water quality objectives (WQOs). CRA also uses the EPA

³ The DWR well report was presented to ACEH in the CRA Site Conceptual Model (December 30, 2008).

document *On-line Tools for Assessing Petroleum Releases* (September 2004) to assess the proper methodology of determining where to begin a trend analysis. A receptor is located some distance from the source, and no impact to the receptor is seen when the release first occurs. The analytes take time to travel to the receptor. The first data points that show an analyte detection is called the first arrival time. The first arrival time varies for each receptor based upon distance from the receptor and the transport rates through the heterogeneous medium.

As the analyte plume expands and stabilizes, the analyte concentration reaches the maximum concentration. If the source of the release is finite (e.g., a single release from an underground storage tank), the concentration will eventually decrease from the maximum, to below the concentration of concern. This period is called the duration.

CRA evaluates groundwater monitoring data from each well (the receptor) and creates a degradation trend analysis for site COCs from the maximum detection through the latest sampling date. The starting point can vary from the maximum detection if the transport mechanisms are not sufficiently linear. For example, groundwater monitoring data may show that the maximum concentration occurred at some point in the past and that degradation seemed to be occurring. However, due to the heterogeneous nature of the subsurface and seasonal groundwater level fluctuations, the duration does not demonstrate a steady degradation behavior. The concentrations of the analyte may increase one or more times before showing consistent attenuation towards the concentration objective.

MW-1 is the only well that contains detectable concentrations of petroleum hydrocarbons (i.e., TPHg is currently at 1,600 µg/L). Therefore, CRA prepared a trend graph to estimate the time for the TPHg concentration at MW-1 to achieve the site WQO, which is the RWQCB ESL of 100 µg/L.⁴

CRA used the following first-order exponential decay rate calculation.⁵

$$y = be^{(ax)}$$

Where "a" is a decay constant, "b" is a concentration at time (x), y is concentration (WQO), and "x" is time.

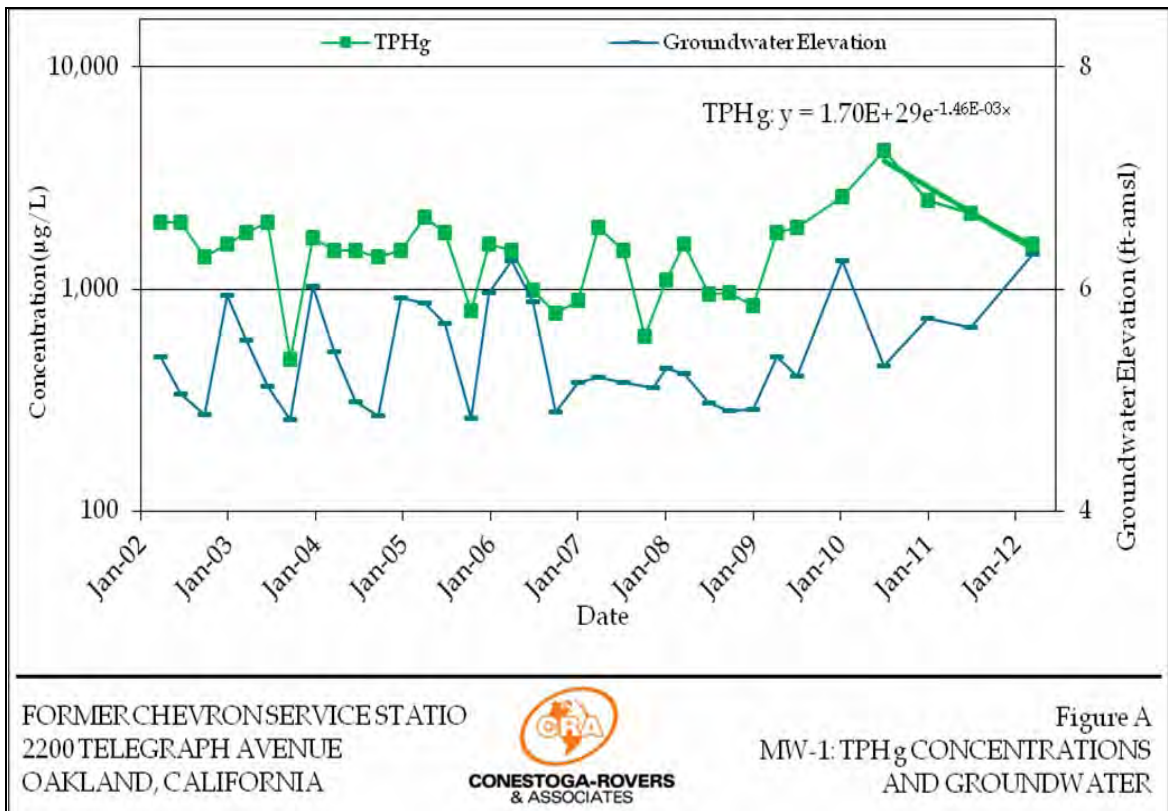
⁴ California Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final November 2007 (Revised May 2008).

⁵ EPA-Groundwater Issue; Calculation and Use of First-Order Rate Constants for Monitored Natural Attenuation Studies; Charles J. Newell, et al., 2002.

The results of this analysis are described below.

6.4 TREND GRAPH

As shown below on Figure A, the TPHg concentration in well MW-1 is generally stable, but saw a slight increase to its maximum concentration of 4,200 µg/L in 2010. While this technically is the peak concentration, it is unlikely that the last four data points shown on Figure A represent a trend decreasing at the rate shown. Therefore, we have not calculated a degradation rate and instead characterize this as a stable plume of limited extent (i.e., TPHg has not traveled as far downgradient as boring B-12).



6.5 LOW-RISK GROUNDWATER CASE CLOSURE CRITERIA

Based on the information presented above, the site meets the RWQCB-SF criteria for a low-risk fuel site. As described in the January 5, 1996 RWQCB-SF memorandum *Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Sites*, a low-risk groundwater case has the following general characteristics:

- The leak has stopped and ongoing sources, including light non-aqueous phase liquids (LNAPL), have been removed or remediated to the maximum extent practicable
- The site has been adequately characterized
- The dissolved petroleum hydrocarbon plume is not migrating
- No municipal or private water wells, deeper drinking water aquifers, surface waters, or other sensitive receptors will be affected by any residual onsite concentrations
- The site presents no significant risk to human health or the environment

Each of the low-risk groundwater case characteristics, as they relate to the site, is discussed below.

6.5.1 THE LEAK WAS STOPPED AND ONGOING SOURCES, INCLUDING LNAPL, HAVE BEEN REMOVED OR REMEDIATED

In October 1986, a previously backfilled UST pit was excavated and sampled prior to the installation of the current USTs. TPHg concentrations detected in soil were de minimis. During station piping upgrades in July 1994, all product piping was removed and replaced. Approximately 100 cubic yards of soil was removed from the site.

No LNAPL has been encountered at the site.

6.5.2 THE SITE HAS BEEN ADEQUATELY CHARACTERIZED

The extent of hydrocarbons and oxygenates is adequately defined by soil samples collected during current and previous subsurface investigations (Figures 4 through 7).

6.5.3 THE DISSOLVED PETROLEUM HYDROCARBON PLUME IS NOT MIGRATING

Dissolved hydrocarbon concentrations are stable and limited in extent. Therefore, the plume is not migrating.

**6.5.4 NO MUNICIPAL OR PRIVATE WATER WELLS,
DEEPER DRINKING WATER AQUIFERS, SURFACE WATERS,
OR OTHER SENSITIVE RECEPTORS WILL BE AFFECTED BY
ANY RESIDUAL CONCENTRATION ONSITE**

The nearest municipal and irrigation wells are approximately 3,800 and 2,500 feet from the site, respectively. The nearest surface water is Lake Merritt, which is located approximately 1,850 feet east of the site. Due to the distance to these receptors, hydrocarbons at the site do not pose a significant risk to potential sensitive receptors.

**6.5.5 THE SITE PRESENTS NO SIGNIFICANT RISK
TO HUMAN HEALTH OR THE ENVIRONMENT**

No benzene is detected in groundwater and no benzene was detected in soil above ESLs. No other analytes are detected at concentrations that pose a significant health risk. Therefore, the site does not pose a significant risk to human health or the environment.

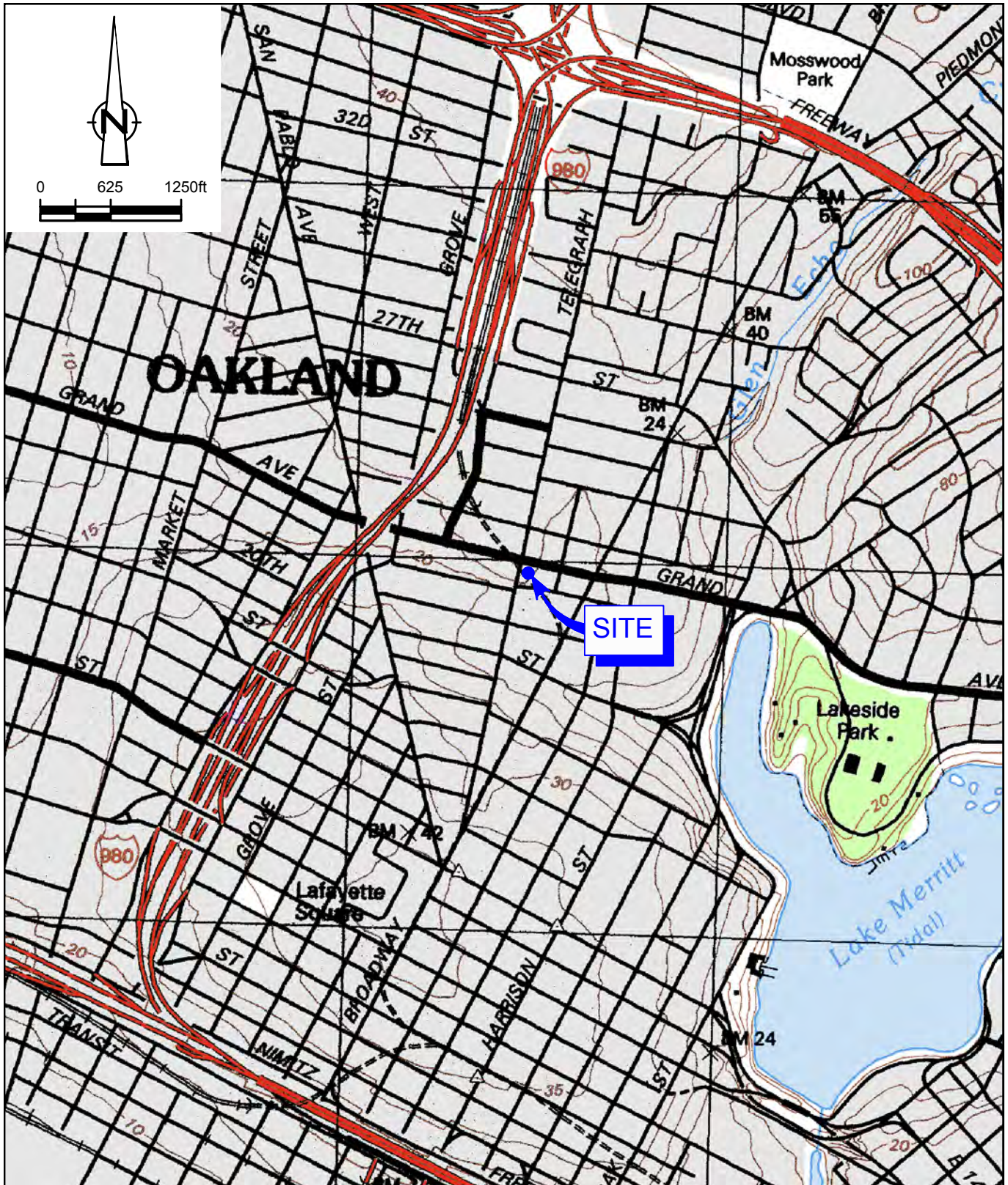
6.6 CONCLUSION

Petroleum hydrocarbons at this site do not appear to pose a significant risk to public human health or the environment under its current-use scenario (i.e., a service station), or in the event it is redeveloped in the future.

On the basis of the site evaluation presented herein, CRA respectfully requests:

- Discontinuation of semiannual monitoring
- Approval to destroy the three existing monitoring wells
- ACEH closure of this site

FIGURES

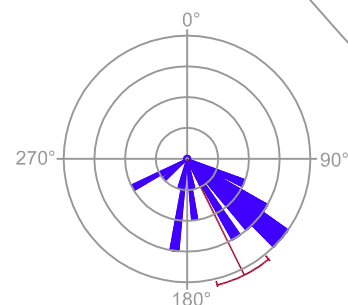
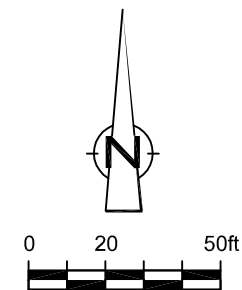


SOURCE: USGS QUADRANGLE MAP: OAKLAND WEST, CA.

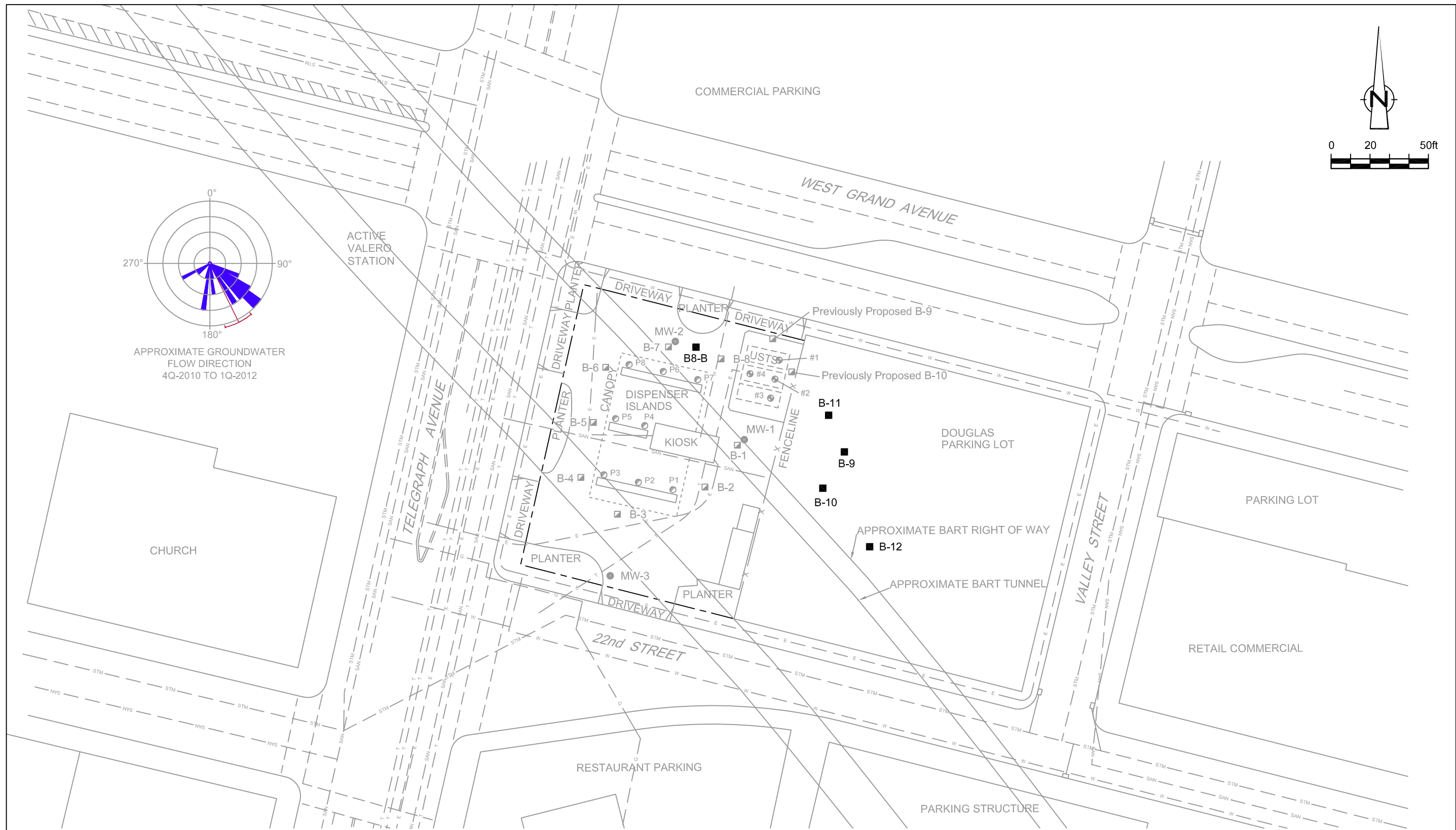
Figure 1

VICINITY MAP
 CHEVRON SERVICE STATION 9-3600
 2200 TELEGRAPH AVENUE
 Oakland, California





APPROXIMATE GROUNDWATER FLOW DIRECTION 4Q-2010 TO 1Q-2012



LEGEND

- B-8B ■ SOIL BORING LOCATION
- MW-1 ● MONITORING WELL LOCATION
- B-1 ▣ SOIL BORING LOCATION (BASELINE INVESTIGATION, 2000)
- P1 ○ PRODUCT LINE SOIL SAMPLE LOCATION (1994)
- #1 ⊙ TANK PIT SOIL SAMPLE LOCATION (1986)

- W --- WATER LINE
- E --- ELECTRICAL LINE
- G --- GAS LINE
- S --- SANITARY SEWER LINE
- STM --- STORM DRAIN LINE
- T --- TELECOMMUNICATIONS LINE

Figure 2
SITE PLAN WITH SOIL BORING LOCATIONS
CHEVRON SERVICE STATION 9-3600
2200 TELEGRAPH AVENUE
Oakland, California



BASEMAP MODIFIED FROM DRAWING PROVIDED BY GETTLER-RYAN INC.

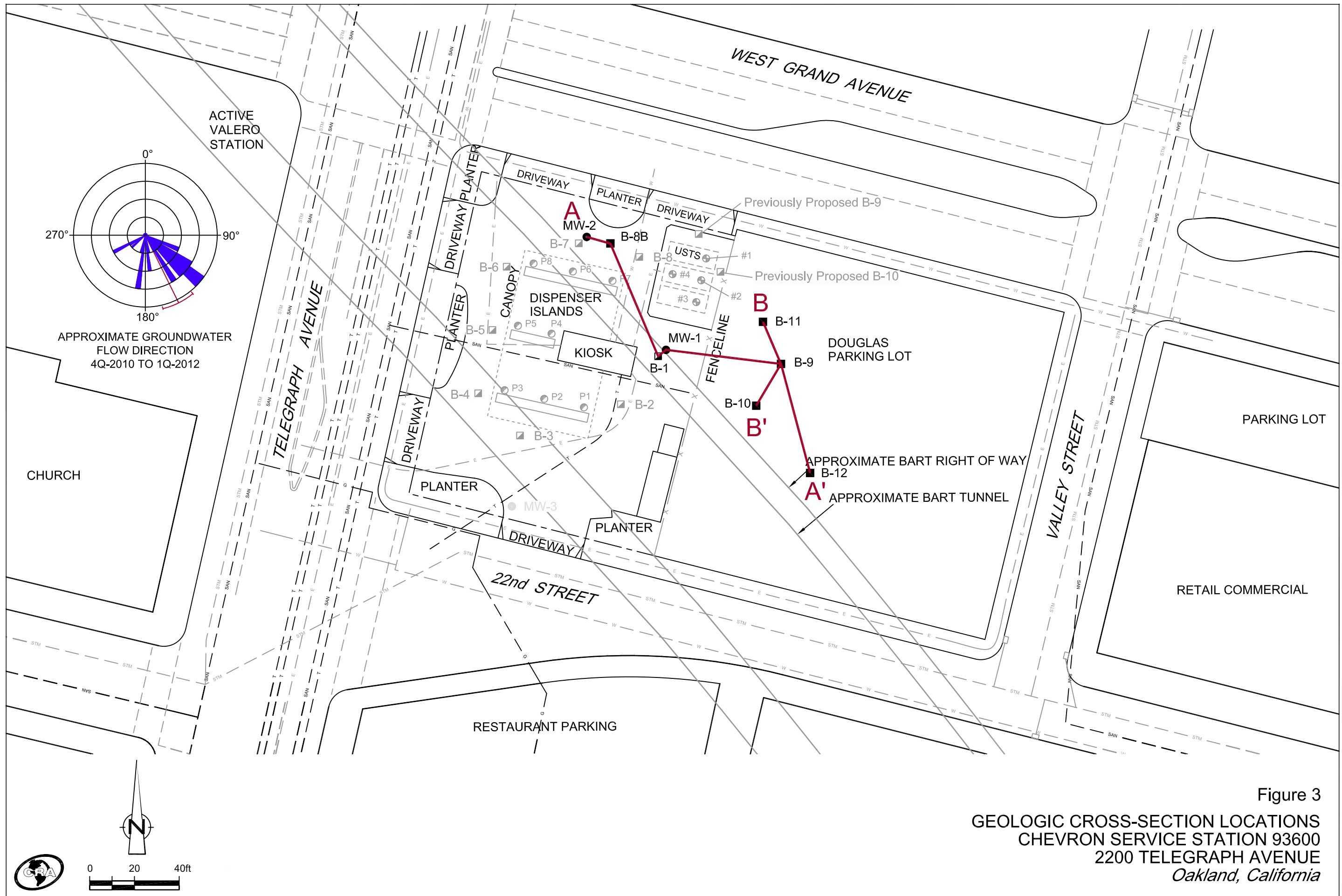


Figure 3
 GEOLOGIC CROSS-SECTION LOCATIONS
 CHEVRON SERVICE STATION 93600
 2200 TELEGRAPH AVENUE
 Oakland, California

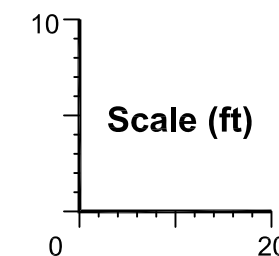
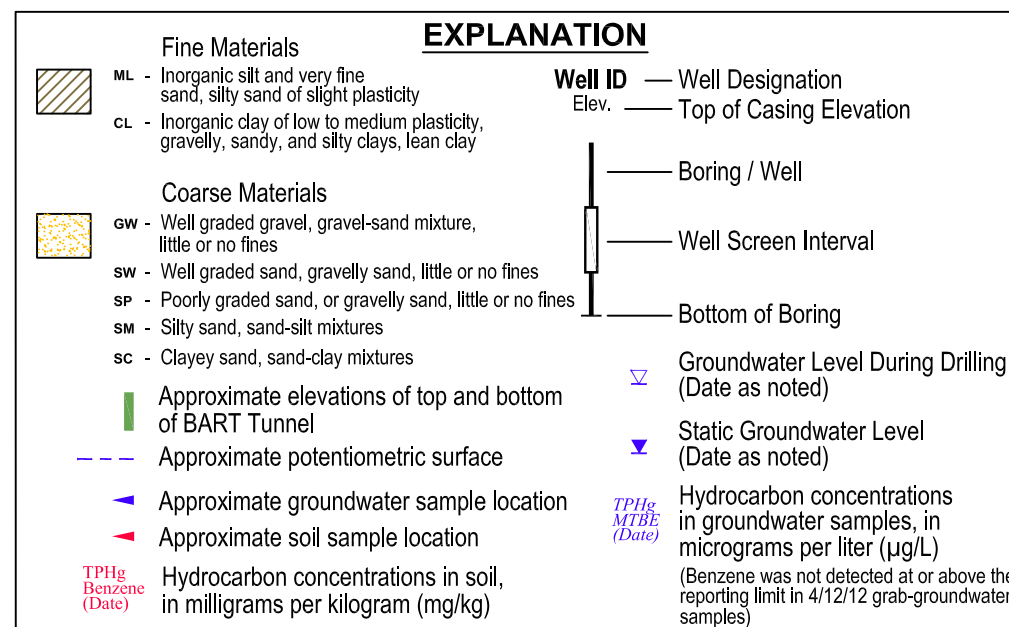
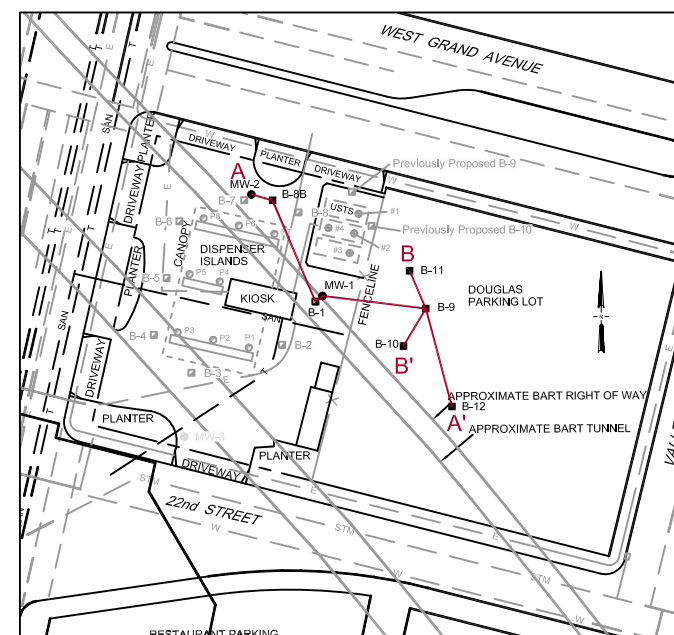
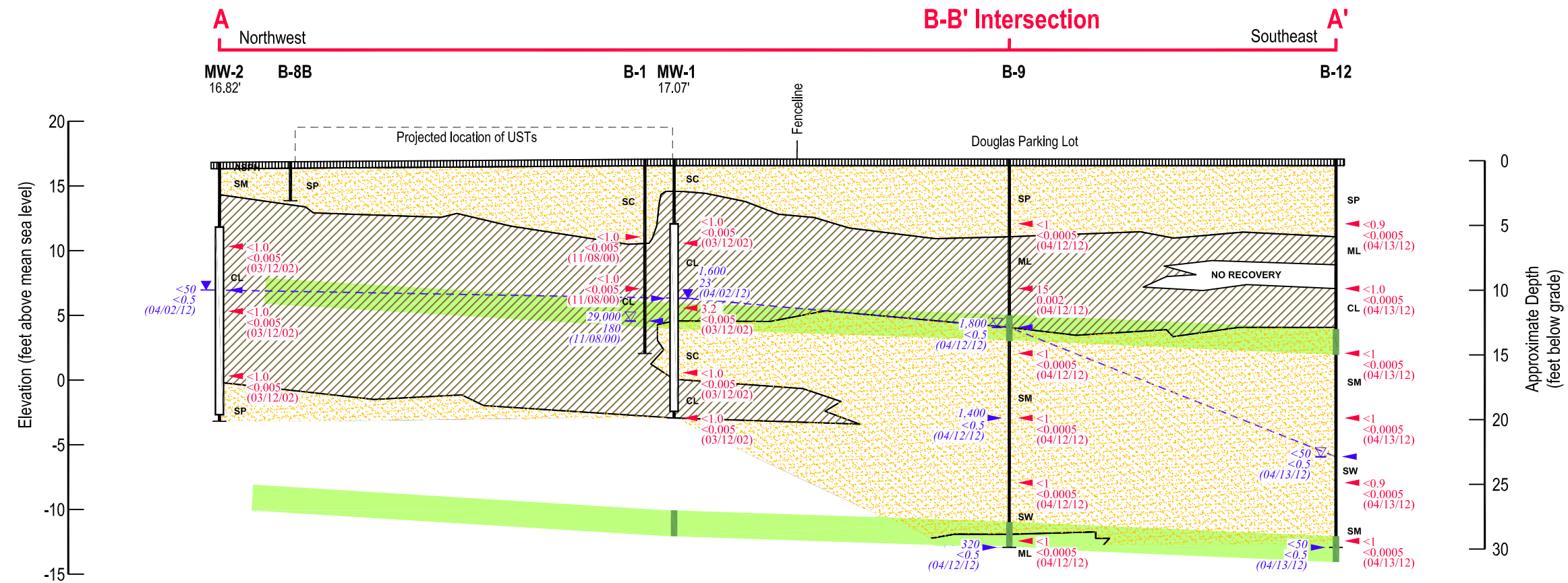
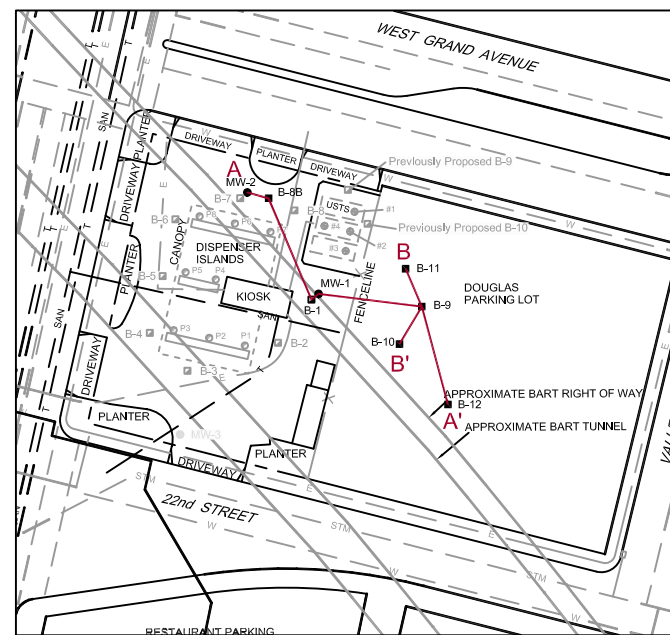
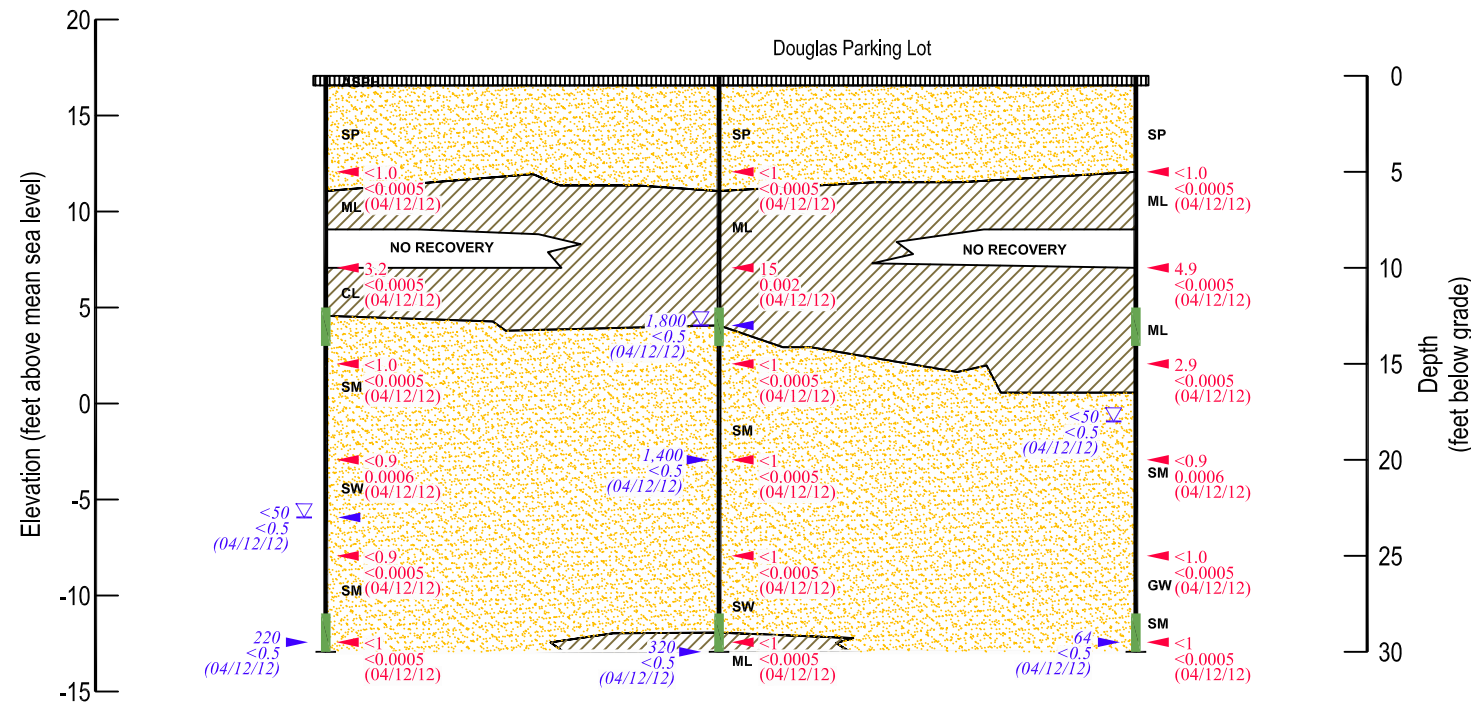


Figure 4
GEOLOGIC CROSS-SECTION A-A'
CHEVRON SERVICE STATION 93600
2200 TELEGRAPH AVENUE
Oakland, California



A-A' Intersection
 Northwest Southwest

B-11 B-9 B-10



EXPLANATION	
	Fine Materials
ML	Inorganic silt and very fine sand, silty sand of slight plasticity
CL	Inorganic clay of low to medium plasticity, gravelly, sandy, and silty clays, lean clay
	Coarse Materials
GW	Well graded gravel, gravel-sand mixture, little or no fines
SW	Well graded sand, gravelly sand, little or no fines
SP	Poorly graded sand, or gravelly sand, little or no fines
SM	Silty sand, sand-silt mixtures
SC	Clayey sand, sand-clay mixtures
	Approximate elevations of top and bottom of BART Tunnel
	Approximate potentiometric surface
	Approximate groundwater sample location
	Approximate soil sample location
	Hydrocarbon concentrations in soil, in milligrams per kilogram (mg/kg)
	Boring ID — Boring Designation
	Boring
	Bottom of Boring
	Groundwater Level During Drilling (Date as noted)
	Static Groundwater Level (Date as noted)
	Hydrocarbon concentrations in groundwater samples, in micrograms per liter (µg/L) (Benzene was not detected at or above the reporting limit in 4/12/12 grab-groundwater samples)

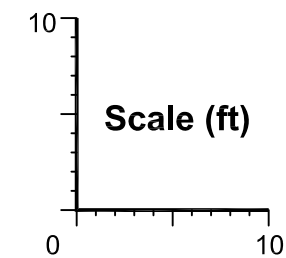
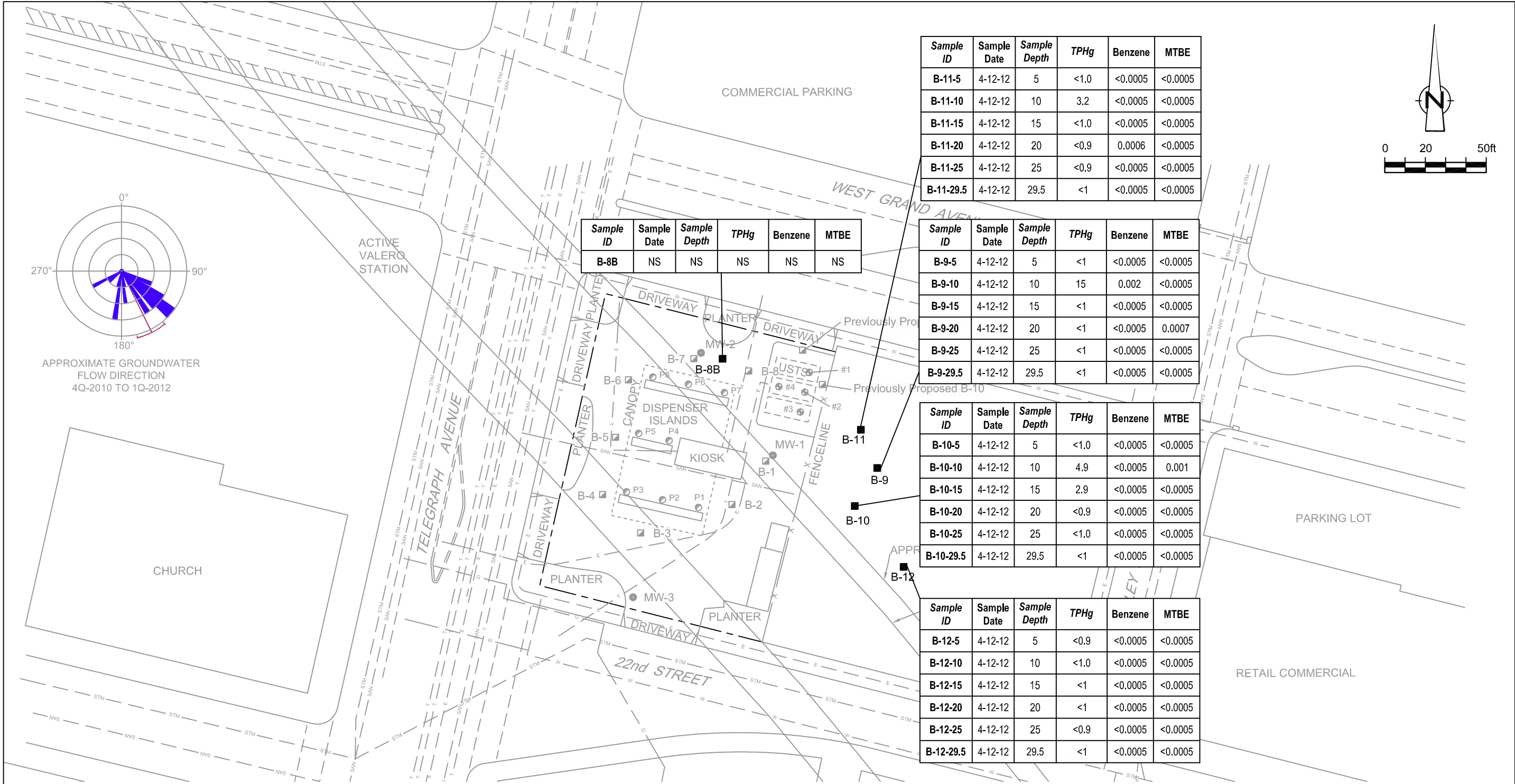


Figure 5
GEOLOGIC CROSS-SECTION B-B'
 CHEVRON SERVICE STATION 93600
 2200 TELEGRAPH AVENUE
 Oakland, California





Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-11-5	4-12-12	5	<1.0	<0.0005	<0.0005
B-11-10	4-12-12	10	3.2	<0.0005	<0.0005
B-11-15	4-12-12	15	<1.0	<0.0005	<0.0005
B-11-20	4-12-12	20	<0.9	0.0006	<0.0005
B-11-25	4-12-12	25	<0.9	<0.0005	<0.0005
B-11-29.5	4-12-12	29.5	<1	<0.0005	<0.0005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-8B	NS	NS	NS	NS	NS

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-9-5	4-12-12	5	<1	<0.0005	<0.0005
B-9-10	4-12-12	10	15	0.002	<0.0005
B-9-15	4-12-12	15	<1	<0.0005	<0.0005
B-9-20	4-12-12	20	<1	<0.0005	0.0007
B-9-25	4-12-12	25	<1	<0.0005	<0.0005
B-9-29.5	4-12-12	29.5	<1	<0.0005	<0.0005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-10-5	4-12-12	5	<1.0	<0.0005	<0.0005
B-10-10	4-12-12	10	4.9	<0.0005	0.001
B-10-15	4-12-12	15	2.9	<0.0005	<0.0005
B-10-20	4-12-12	20	<0.9	<0.0005	<0.0005
B-10-25	4-12-12	25	<1.0	<0.0005	<0.0005
B-10-29.5	4-12-12	29.5	<1	<0.0005	<0.0005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-12-5	4-12-12	5	<0.9	<0.0005	<0.0005
B-12-10	4-12-12	10	<1.0	<0.0005	<0.0005
B-12-15	4-12-12	15	<1	<0.0005	<0.0005
B-12-20	4-12-12	20	<1	<0.0005	<0.0005
B-12-25	4-12-12	25	<0.9	<0.0005	<0.0005
B-12-29.5	4-12-12	29.5	<1	<0.0005	<0.0005

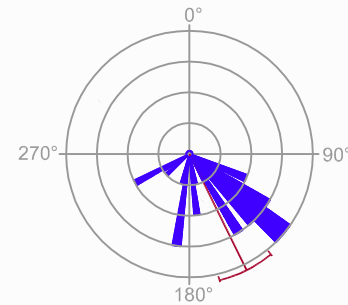
LEGEND

- B-8B ■ SOIL BORING LOCATION
- MW-1 ● MONITORING WELL LOCATION
- B-1 ▣ SOIL BORING LOCATION (BASELINE INVESTIGATION, 2000)
- P1 ○ PRODUCT LINE SOIL SAMPLE LOCATION (1994)
- #1 ⊕ TANK PIT SOIL SAMPLE LOCATION (1986)

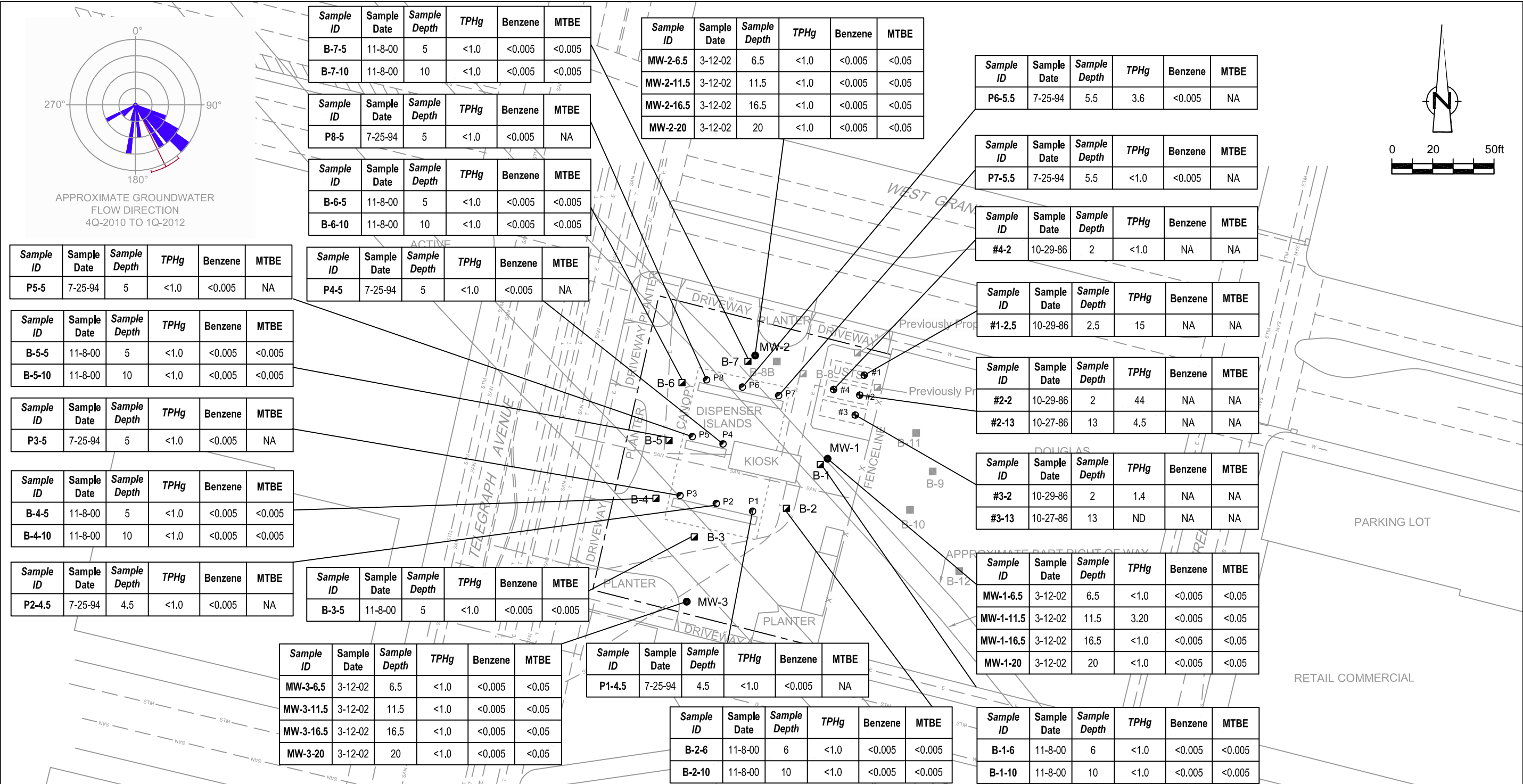
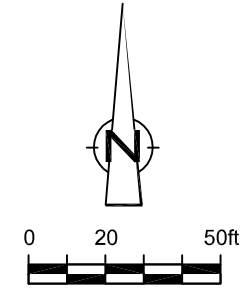
- NS NO SAMPLE COLLECTED AT LOCATION
- <X INDICATES CHEMICAL NOT DETECTED AT OR ABOVE REPORTING LIMIT SHOWN
- CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)
- W — WATER LINE
- E — ELECTRICAL LINE
- G — GAS LINE
- S — SANITARY SEWER LINE
- STM — STORM DRAIN LINE
- T — TELECOMMUNICATIONS LINE

Figure 6
TPHg, BENZENE, AND MTBE CONCENTRATIONS IN SOIL
CHEVRON SERVICE STATION 93600
2200 TELEGRAPH AVENUE
Oakland, California





APPROXIMATE GROUNDWATER FLOW DIRECTION 4Q-2010 TO 1Q-2012



Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-7-5	11-8-00	5	<1.0	<0.005	<0.005
B-7-10	11-8-00	10	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
MW-2-6.5	3-12-02	6.5	<1.0	<0.005	<0.05
MW-2-11.5	3-12-02	11.5	<1.0	<0.005	<0.05
MW-2-16.5	3-12-02	16.5	<1.0	<0.005	<0.05
MW-2-20	3-12-02	20	<1.0	<0.005	<0.05

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P6-5.5	7-25-94	5.5	3.6	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P7-5.5	7-25-94	5.5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
#4-2	10-29-86	2	<1.0	NA	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
#1-2.5	10-29-86	2.5	15	NA	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
#2-2	10-29-86	2	44	NA	NA
#2-13	10-27-86	13	4.5	NA	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
#3-2	10-29-86	2	1.4	NA	NA
#3-13	10-27-86	13	ND	NA	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
MW-1-6.5	3-12-02	6.5	<1.0	<0.005	<0.05
MW-1-11.5	3-12-02	11.5	3.20	<0.005	<0.05
MW-1-16.5	3-12-02	16.5	<1.0	<0.005	<0.05
MW-1-20	3-12-02	20	<1.0	<0.005	<0.05

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P1-4.5	7-25-94	4.5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-2-6	11-8-00	6	<1.0	<0.005	<0.005
B-2-10	11-8-00	10	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-1-6	11-8-00	6	<1.0	<0.005	<0.005
B-1-10	11-8-00	10	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P8-5	7-25-94	5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-6-5	11-8-00	5	<1.0	<0.005	<0.005
B-6-10	11-8-00	10	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P4-5	7-25-94	5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P5-5	7-25-94	5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-5-5	11-8-00	5	<1.0	<0.005	<0.005
B-5-10	11-8-00	10	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P3-5	7-25-94	5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-4-5	11-8-00	5	<1.0	<0.005	<0.005
B-4-10	11-8-00	10	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P2-4.5	7-25-94	4.5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-3-5	11-8-00	5	<1.0	<0.005	<0.005

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
MW-3-6.5	3-12-02	6.5	<1.0	<0.005	<0.05
MW-3-11.5	3-12-02	11.5	<1.0	<0.005	<0.05
MW-3-16.5	3-12-02	16.5	<1.0	<0.005	<0.05
MW-3-20	3-12-02	20	<1.0	<0.005	<0.05

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
P1-4.5	7-25-94	4.5	<1.0	<0.005	NA

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-2-6	11-8-00	6	<1.0	<0.005	<0.005
B-2-10	11-8-00	10	<1.0	<0.005	<0.005

LEGEND

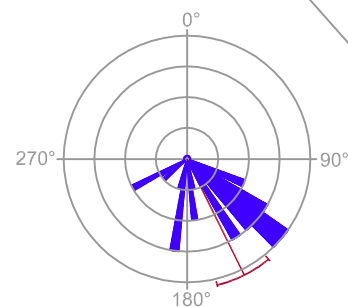
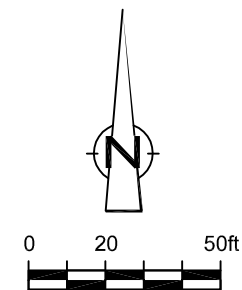
- B-8B ■ SOIL BORING LOCATION
- MW-1 ● MONITORING WELL LOCATION
- B-1 ▣ SOIL BORING LOCATION (BASELINE INVESTIGATION, 2000)
- P1 ● PRODUCT LINE SOIL SAMPLE LOCATION (1994)
- #1 ● TANK PIT SOIL SAMPLE LOCATION (1986)

- NS NO SAMPLE COLLECTED AT LOCATION
- NA NOT ANALYZED
- <X INDICATES CHEMICAL NOT DETECTED AT OR ABOVE REPORTING LIMIT SHOWN
- CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)
- W --- WATER LINE
- E --- ELECTRICAL LINE
- G --- GAS LINE
- S --- SANITARY SEWER LINE
- STM --- STORM DRAIN LINE
- T --- TELECOMMUNICATIONS LINE

HISTORIC TPHg, BENZENE, AND MTBE CONCENTRATIONS IN SOIL CHEVRON SERVICE STATION 93600 2200 TELEGRAPH AVENUE Oakland, California



BASEMAP MODIFIED FROM DRAWING PROVIDED BY GETTLER-RYAN INC.



APPROXIMATE GROUNDWATER FLOW DIRECTION 4Q-2010 TO 1Q-2012

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
MW-2	4-2-12	NS	<50	<0.5	<0.5

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-8B	NS	NS	NS	NS	NS

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-11-23	4-12-12	23	<50	<0.5	<0.5
B-11-29.5	4-12-12	29.5	220	<0.5	<0.5

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
MW-1	4-2-12	NS	1,600	<0.5	23

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-9-13	4-12-12	13	1,800	<0.5	<0.5
B-9-20	4-12-12	20	1,400	<0.5	5
B-9-30	4-12-12	30	320	<0.5	1

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
MW-3	4-2-12	NS	<50	<0.5	<0.5

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-10-18	4-12-12	18	<50	<0.5	5
B-10-29.5	4-12-12	29.5	64	<0.5	1

Sample ID	Sample Date	Sample Depth	TPHg	Benzene	MTBE
B-12-23	4-13-12	23	<50	<0.5	<0.5
B-12-30	4-13-12	30	<50	<0.5	<0.5

LEGEND

- B-8B ■ SOIL BORING LOCATION
- MW-1 ● MONITORING WELL LOCATION
- B-1 ▣ SOIL BORING LOCATION (BASELINE INVESTIGATION, 2000)
- P1 ○ PRODUCT LINE SOIL SAMPLE LOCATION (1994)
- #1 ⊕ TANK PIT SOIL SAMPLE LOCATION (1986)

NS NO SAMPLE COLLECTED AT LOCATION
 <X INDICATES CHEMICAL NOT DETECTED AT OR ABOVE REPORTING LIMIT SHOWN
 CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L)

- W — WATER LINE
- E — ELECTRICAL LINE
- G — GAS LINE
- S — SANITARY SEWER LINE
- STM — STORM DRAIN LINE
- T — TELECOMMUNICATIONS LINE



BASEMAP MODIFIED FROM DRAWING PROVIDED BY GETTLER-RYAN INC.

Figure 8
 TPHg, BENZENE, AND MTBE CONCENTRATIONS IN GROUNDWATER
 CHEVRON SERVICE STATION 93600
 2200 TELEGRAPH AVENUE
 Oakland, California

TABLES

TABLE 1

SOIL ANALYTICAL DATA
CHEVRON #93600
2220 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Pb	TBA	DIPE	ETBE	TAME
		<i>fbg</i>	←————— Milligrams per kilogram (mg/kg) —————→										
<i>ESL (Groundwater is a Current or Potential Drinking Water Resource)</i>													
<i>ESL Table¹ K-1 Direct Exposure: Residential (mg/kg)</i>			110	0.12	63	2.3	31	30	260	320,000	NE	NE	NE
<i>ESL Table¹ K-2 Direct Exposure: Commerical/Industrial Worker (mg/kg)</i>			450	0.27	210	5.0	100	65	750	320,000	NE	NE	NE
<i>ESL Table¹ K-3 Direct Exposure: Construction/Trench Worker (mg/kg)</i>			4,200	12	650	210	420	2,800	750	320,000	NE	NE	NE

2012 CRA Soil Boring Investigation

B-9	4/12/2012	5	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-9	4/12/2012	10	15	0.002	<0.001	0.39	0.051	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-9	4/12/2012	15	<1	<0.0005	<0.001	0.002	0.007	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-9	4/12/2012	20	<1	<0.0005	<0.001	0.003	0.007	0.0007	--	<0.020	<0.001	<0.001	<0.001
B-9	4/12/2012	25	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-9	4/12/2012	29.5	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-10	4/12/2012	5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-10	4/12/2012	10	4.9	<0.0005	<0.001	0.001	<0.001	0.001	--	<0.021	<0.001	<0.001	<0.001
B-10	4/12/2012	15	2.9	<0.0005	<0.001	0.047	0.062	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-10	4/12/2012	20	<0.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-10	4/12/2012	25	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-10	4/12/2012	29.5	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-11	4/12/2012	5	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	--	<0.019	<0.0009	<0.0009	<0.0009
B-11	4/12/2012	10	3.2	<0.0005	<0.001	<0.001	0.001	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-11	4/12/2012	15	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-11	4/12/2012	20	<0.9	0.0006	<0.001	0.011	0.011	<0.0005	--	<0.020	<0.001	<0.001	<0.001

TABLE 1

SOIL ANALYTICAL DATA
CHEVRON #93600
2220 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Pb	TBA	DIPE	ETBE	TAME
			Milligrams per kilogram (mg/kg)										
<i>fbg</i>			ESL (Groundwater is a Current or Potential Drinking Water Resource)										
<i>ESL Table¹ K-1 Direct Exposure: Residential (mg/kg)</i>			110	0.12	63	2.3	31	30	260	320,000	NE	NE	NE
<i>ESL Table¹ K-2 Direct Exposure: Commerical/Industrial Worker (mg/kg)</i>			450	0.27	210	5.0	100	65	750	320,000	NE	NE	NE
<i>ESL Table¹ K-3 Direct Exposure: Construction/Trench Worker (mg/kg)</i>			4,200	12	650	210	420	2,800	750	320,000	NE	NE	NE
B-11	4/12/2012	25	<0.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.019	<0.001	<0.001	<0.001
B-11	4/12/2012	29.5	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-12	4/13/2012	5	<0.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-12	4/13/2012	10	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.019	<0.001	<0.001	<0.001
B-12	4/13/2012	15	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.021	<0.001	<0.001	<0.001
B-12	4/13/2012	20	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.019	<0.001	<0.001	<0.001
B-12	4/13/2012	25	<0.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
B-12	4/13/2012	29.5	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.020	<0.001	<0.001	<0.001
2002 Delta Monitoring Well Installation													
MW-1	3/12/2002	6.5	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--
MW-1	3/12/2002	11.5	3.2	<0.005	<0.005	0.15	<0.15	<0.05	--	--	--	--	--
MW-1	3/12/2002	16.5	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--
MW-1	3/12/2002	20	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--
MW-2	3/12/2002	6.5	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--
MW-2	3/12/2002	11.5	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--
MW-2	3/12/2002	16.5	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--
MW-2	3/12/2002	20	<1.0	<0.005	<0.005	<0.005	<0.15	<0.05	--	--	--	--	--

TABLE 1

SOIL ANALYTICAL DATA
CHEVRON #93600
2220 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Pb	TBA	DIPE	ETBE	TAME
			Milligrams per kilogram (mg/kg)										
<i>fbg</i>													
ESL (Groundwater is a Current or Potential Drinking Water Resource)													
<i>ESL Table¹ K-1 Direct Exposure: Residential (mg/kg)</i>			110	0.12	63	2.3	31	30	260	320,000	NE	NE	NE
<i>ESL Table¹ K-2 Direct Exposure: Commerical/Industrial Worker (mg/kg)</i>			450	0.27	210	5.0	100	65	750	320,000	NE	NE	NE
<i>ESL Table¹ K-3 Direct Exposure: Construction/Trench Worker (mg/kg)</i>			4,200	12	650	210	420	2,800	750	320,000	NE	NE	NE
B-7	11/8/2000	10	<1.0	<.005	<.005	<.005	<.005	<.005	6.8	--	--	--	--
1994 Touchstone Product-Line Removal and Sampling Report													
P1	7/25/1994	4.5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
P2	7/25/1994	4.5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
P3	7/25/1994	5	<1.0	<0.005	0.012	0.008	0.045	--	--	--	--	--	--
P4	7/25/1994	5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
P5	7/25/1994	5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
P6	7/25/1994	5.5	3.6	<0.005	0.03	0.012	1.3	--	--	--	--	--	--
P7	7/25/1994	5.5	<1.0	<0.005	0.005	<0.005	0.007	--	--	--	--	--	--
P8	7/25/1994	5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
1986 Blaine Tech Services Tank Pit Sampling													
#1	10/29/1986	2.5	15	--	--	--	--	--	--	--	--	--	--
#2	10/29/1986	2	44	--	--	--	--	--	--	--	--	--	--
#2	10/27/1986	13	4.5	--	--	--	--	--	--	--	--	--	--
#3	10/29/1986	2	1.4	--	--	--	--	--	--	--	--	--	--
#3	10/27/1986	13	ND	--	--	--	--	--	--	--	--	--	--

GRAB-GROUNDWATER ANALYTICAL DATA
 FORMER CHEVRON SERVICE STATION #93600
 2200 TELEGRAPH AVENUE
 OAKLAND, CALIFORNIA

Location	Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME
ESL Table ¹	fbg		←----- Micrograms per liter (µg/L) -----→									
ESL (Groundwater is a Current or Potential Drinking Water Resource)												
ESL Table F-1A: Groundwater is a Current or Potential Source of Drinking Water (Residential)			100	1	40	30	20	5	320,000	NE	NE	NE
ESL Table F-4A: Lowest Freshwater Aquatic Habitat Goal			210	46	130	290	100	66,000	320,000	NE	NE	NE
ESL Table E-1: Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (Residential)			(Use Soil Gas)	540	380,000	170,000	160,000	24,000	320,000	NE	NE	NE
B-9	13	4/12/2012	1,800	<0.5	<0.5	43	130	<0.5	<2	<0.5	<0.5	<0.5
B-9	20	4/12/2012	1,400	<0.5	<0.5	51	150	5	<2	<0.5	<0.5	<0.5
B-9	30	4/12/2012	320	<0.5	<0.5	13	40	1	<2	<0.5	<0.5	<0.5
B-10	18	4/12/2012	<50	<0.5	<0.5	0.7	0.8	5	<2	<0.5	<0.5	<0.5
B-10	29.5	4/12/2012	64	<0.5	<0.5	1	2	1	<2	<0.5	<0.5	<0.5
B-11	23	4/12/2012	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5
B-11	29.5	4/12/2012	220	<0.5	<0.5	10	8	<0.5	<2	<0.5	<0.5	<0.5
B-12	23	4/13/2012	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5
B-12	30	4/13/2012	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5

NOTES:

TPHg = Total petroleum hydrocarbons quantified as gasoline analyzed by EPA Method 8015 modified.

Benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), di-sopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), and tertiary-amyl methyl ether (TAME) analyzed by EPA Method 8260B.

¹ESL = Environmental Screening Levels: California Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final - November 2007 (Revised May 2008).

fbg = Feet below grade.

NE = Not established.

µg/L = Micrograms per liter.

Bold = Concentration exceeds ESL.

<x = Chemical not detected at or above laboratory reporting limit shown.

**WELL SURVEY DATA
FORMER CHEVRON STATION #93600
2200 TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

<i>Well Address</i>	<i>Well ID</i>	<i>Distance from Site (feet)</i>	<i>Well Type/Use</i>	<i>DWR File Name</i>	<i>Destroyed</i>
2225 Telegraph Ave., Oakland, CA	MW-6A	110	monitoring	51286105	NO RECORD
2225 Telegraph Ave., Oakland, CA	MW-6C	110	monitoring	51286107	YES
2225 Telegraph Ave., Oakland, CA	MW-6D	110	monitoring	51286108	NO RECORD
2225 Telegraph Ave., Oakland, CA	MW-6H	110	monitoring	51286114	NO RECORD
2225 Telegraph Ave., Oakland, CA	RW-1	120	monitoring	51286111	NO RECORD
2225 Telegraph Ave., Oakland, CA	MW-6B	135	monitoring	51286106	NO RECORD
2225 Telegraph Ave., Oakland, CA	RW-3	190	monitoring	51286110	YES
2225 Telegraph Ave., Oakland, CA	RW-3A	190	remediation	51286116	NO RECORD
2225 Telegraph Ave., Oakland, CA	MW-6I	205	monitoring	51286115	NO RECORD
2225 Telegraph Ave., Oakland, CA	MW-6G	220	monitoring	51286113	NO RECORD
20th Street b/n Broadway and Telegraph, Oakland, CA	MW-9	800	test	51286188	NO RECORD
2345 Broadway, Oakland, CA	MW-1	950	monitoring	51286103	NO RECORD
1911 Telegraph Ave, Oakland, CA	MW-1	1,100	test	51286177	NO RECORD
611 20th Street, Oakland, CA	MW-12	1,140	test	51286172	NO RECORD
612 Williams Street, Oakland, CA	MW-13	1,140	test	51286173	NO RECORD
585 Williams Street, Oakland, CA	MW-14	1,140	test	51286174	NO RECORD
588-596 Williams Street, Oakland, CA	MW-15	1,140	test	51286175	NO RECORD
536 20th Street, Oakland, CA	MW-16	1,140	test	51286176	NO RECORD
552 19th Street, Oakland, CA	MW-1	1,290	test	51286187	NO RECORD
23rd and Valdez, Oakland, CA	MW-1	1,300	monitoring	51286083	NO RECORD
23rd and Valdez, Oakland, CA	MW-2	1,300	monitoring	51286085	NO RECORD
23rd and Valdez, Oakland, CA	MW-2	1,300	monitoring	51286086	NO RECORD
23rd and Valdez, Oakland, CA	SB1	1,300	boring	51286088	NO RECORD
23rd and Valdez, Oakland, CA	SB2	1,300	boring	51286089	NO RECORD
23rd and Valdez, Oakland, CA	SB3	1,300	boring	51286090	NO RECORD
23rd and Valdez, Oakland, CA	SB4/MW-4	1,300	monitoring	51286091	NO RECORD
23rd and Valdez, Oakland, CA	SB-5/MW-5	1,300	monitoring	51286092	NO RECORD
23rd and Valdez, Oakland, CA	SB-6/MW-6	1,300	monitoring	51286093	NO RECORD
23rd and Valdez, Oakland, CA	SB-7/MW-7	1,300	monitoring	51286094	NO RECORD
23rd and Valdez, Oakland, CA	SB-8	1,300	boring	51286095	NO RECORD
23rd and Valdez, Oakland, CA	SB-9	1,300	boring	51286096	NO RECORD
23rd and Valdez, Oakland, CA	SB-10	1,300	boring	51286097	NO RECORD
23rd and Valdez, Oakland, CA	SB-11	1,300	boring	51286098	NO RECORD
23rd and Valdez, Oakland, CA	SB-12	1,300	boring	51286099	NO RECORD
23rd and Valdez, Oakland, CA	MW-8	1,300	monitoring	51286101	NO RECORD
23rd and Valdez, Oakland, CA	MW-9	1,300	monitoring	51286102	NO RECORD
19th Street b/n Broadway and Telegraph, Oakland, CA	MW-8	1,350	test	51286186	NO RECORD
2103 San Pablo Ave, Oakland, CA	ES-1	1,360	monitoring	51286121	NO RECORD
2103 San Pablo Ave, Oakland, CA	ES-2	1,360	monitoring	51286122	NO RECORD

**WELL SURVEY DATA
FORMER CHEVRON STATION #93600
2200 TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

<i>Well Address</i>	<i>Well ID</i>	<i>Distance from Site (feet)</i>	<i>Well Type/Use</i>	<i>DWR File Name</i>	<i>Destroyed</i>
2103 San Pablo Ave, Oakland, CA	ES-3	1,360	monitoring	51286123	NO RECORD
2103 San Pablo Ave, Oakland, CA	ES-4	1,360	monitoring	51286124	NO RECORD
2103 San Pablo Ave, Oakland, CA	ES-5	1,360	monitoring	51286125	NO RECORD
577 19th Street, Oakland, CA	MW-6	1,380	test	51286185	NO RECORD
2633 Telegraph Ave., Oakland, CA	MW-1	1,400	monitoring	51286059	NO RECORD
2633 Telegraph Ave., Oakland, CA	MW-2	1,400	monitoring	51286060	NO RECORD
2633 Telegraph Ave., Oakland, CA	MW-3	1,400	monitoring	51286061	NO RECORD
2633 Telegraph Ave., Oakland, CA	MW-4	1,400	monitoring	51286062	NO RECORD
2633 Telegraph Ave., Oakland, CA	MW-5	1,400	monitoring	51286063	NO RECORD
San Pablo and 19th, Oakland, CA	SB1	1,400	boring	51286154	NO RECORD
San Pablo and 19th, Oakland, CA	SB2	1,400	boring	51286155	NO RECORD
San Pablo and 19th, Oakland, CA	SB3	1,400	boring	51286156	NO RECORD
San Pablo and 19th, Oakland, CA	SB4	1,400	boring	51286157	NO RECORD
San Pablo and 19th, Oakland, CA	SB5	1,400	boring	51286158	NO RECORD
San Pablo and 19th, Oakland, CA	SB6	1,400	boring	51286159	NO RECORD
San Pablo and 19th, Oakland, CA	SB6	1,400	boring	51286158	NO RECORD
San Pablo and 19th, Oakland, CA	MW-11	1,400	test	51286171	NO RECORD
1975 Webster Street, Oakland, CA	MW-1/SB7	1,400	monitoring	51286198	NO RECORD
1975 Webster Street, Oakland, CA	MW-2/SB8	1,400	monitoring	51286199	NO RECORD
1975 Webster Street, Oakland, CA	MW-3/SB9	1,400	monitoring	51286200	NO RECORD
1975 Webster Street, Oakland, CA	MW-4/SB10	1,400	monitoring	51286201	NO RECORD
1975 Webster Street, Oakland, CA	SB1	1,400	monitoring	51286202	NO RECORD
1975 Webster Street, Oakland, CA	SB2	1,400	monitoring	51286203	NO RECORD
1975 Webster Street, Oakland, CA	SB3	1,400	monitoring	51286204	NO RECORD
1975 Webster Street, Oakland, CA	SB4	1,400	monitoring	51286205	NO RECORD
1975 Webster Street, Oakland, CA	SB5	1,400	monitoring	51286206	NO RECORD
1975 Webster Street, Oakland, CA	SB6	1,400	monitoring	51286207	NO RECORD
513 18th Street, Oakland, CA	MW-4	1,500	test	51286189	NO RECORD
One Kaiser Plaza, Oakland, CA	MW-1	1,500	monitoring	51286208	NO RECORD
One Kaiser Plaza, Oakland, CA	MW-2	1,500	monitoring	51286209	NO RECORD
One Kaiser Plaza, Oakland, CA	MW-3	1,500	monitoring	51286210	NO RECORD
One Kaiser Plaza, Oakland, CA	B1	1,500	boring	51286211	NO RECORD
537 18th Street, Oakland, CA	MW-2	1,550	monitoring	51286169	NO RECORD
18th and Jefferson, Oakland, CA	MW-1	1,600	monitoring	51286161	NO RECORD
18th and Jefferson, Oakland, CA	MW-2	1,600	monitoring	51286162	NO RECORD
18th and Jefferson, Oakland, CA	MW-3	1,600	monitoring	51286163	NO RECORD
18th and Jefferson, Oakland, CA	MW-1A	1,600	monitoring	51286166	NO RECORD
18th and Jefferson, Oakland, CA	MW-4	1,600	monitoring	51286167	NO RECORD
18th and Jefferson, Oakland, CA	#1	1,600	test	51286168	NO RECORD

**WELL SURVEY DATA
FORMER CHEVRON STATION #93600
2200 TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

<i>Well Address</i>	<i>Well ID</i>	<i>Distance from Site (feet)</i>	<i>Well Type/Use</i>	<i>DWR File Name</i>	<i>Destroyed</i>
570 18th Street, Oakland, CA	MW-7	1,700	monitoring	51286170	NO RECORD
17th Street b/n Broadway and Telegraph, Oakland, CA	MW-5	1,700	test	51286184	NO RECORD
300 Lakeside Drive, Oakland, CA	MW-1	1,700	monitoring	51286190	NO RECORD
300 Lakeside Drive, Oakland	MW-2	1,700	monitoring	51286194	NO RECORD
17th and Broadway Street, Oakland, CA	B3	1,700	boring	51343201	NO RECORD
509 17th Street, Oakland, CA	MW-3	1,750	test	51315010	NO RECORD
2100 Harrison Street, Oakland, CA	MW-1	1,800	monitoring	51286191	NO RECORD
2100 Harrison Street, Oakland, CA	MW-2	1,800	monitoring	51286192	NO RECORD
21st and Harrison Street, Oakland	MW-3	1,800	monitoring	51286195	NO RECORD
545 17th Street, Oakland, CA	MW-1	1,800	test	51315009	NO RECORD
Broadway and 27th Street	MW-1	2,000	monitoring	51286072	NO RECORD
Broadway and 27th Street	MW-2	2,000	monitoring	51286073	NO RECORD
Broadway and 27th Street	MW-3	2,000	monitoring	51286074	NO RECORD
294 27th Street, Oakland	SB-1	2,050	boring	51286065	NO RECORD
294 27th Street, Oakland	SB-2	2,050	boring	51286066	NO RECORD
294 27th Street, Oakland	SB-2A	2,050	boring	51286067	NO RECORD
294 27th Street, Oakland	SB-3	2,050	boring	51286068	NO RECORD
294 27th Street, Oakland, CA	MW-1	2,050	monitoring	51286081	NO RECORD
294 27th Street, Oakland, CA	MW-2	2,050	monitoring	51286082	NO RECORD
2800 Telegraph Ave., Oakland, CA	SB-1	2,100	monitoring	F37	YES
2800 Telegraph Ave., Oakland, CA	S-1	2,100	monitoring	F38	YES
2800 Telegraph Ave., Oakland, CA	S-4	2,100	monitoring	F39	YES
2800 Telegraph Ave., Oakland, CA	S-5	2,100	monitoring	F3A	YES
2800 Telegraph Ave., Oakland, CA	S-10	2,100	monitoring	F3B	YES
2800 Telegraph Ave., Oakland, CA	S-2	2,100	monitoring	51286047	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-3	2,100	monitoring	51286048	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-6	2,100	monitoring	51286052	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-7	2,100	monitoring	51286053	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-8	2,100	monitoring	51286055	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-9	2,100	monitoring	51286056	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-10	2,100	monitoring	51286057	NO RECORD
2800 Telegraph Ave., Oakland, CA	S-11	2,100	monitoring	51286058	NO RECORD
633 Sycamore St., Oakland, CA	MW-1	2,670	monitoring	51286042	NO RECORD
633 Sycamore St., Oakland, CA	MW-2	2,670	monitoring	51286043	NO RECORD
633 Sycamore St., Oakland, CA	MW-3	2,670	monitoring	51286044	NO RECORD
Five City Center, Oakland, CA	MW-1,2,3	2,700	monitoring	51315036	NO RECORD
Five City Center, Oakland, CA	B4	2,700	boring	51315037	NO RECORD
Five City Center, Oakland, CA	B1	2,700	boring	51315040	NO RECORD
Five City Center, Oakland, CA	B2	2,700	boring	51315041	NO RECORD

**WELL SURVEY DATA
FORMER CHEVRON STATION #93600
2200 TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

<i>Well Address</i>	<i>Well ID</i>	<i>Distance from Site (feet)</i>	<i>Well Type/Use</i>	<i>DWR File Name</i>	<i>Destroyed</i>
Five City Center, Oakland, CA	B3	2,700	boring	51315042	NO RECORD
Middle School (Location uncertain)	N/A	NC	Irrigation	51286015	NO RECORD
No Address	E2	NC	boring	51315011	NO RECORD
No Address	E3	NC	boring	51315012	NO RECORD
No Address	A2	NC	boring	51315013	NO RECORD
No Address	A3	NC	boring	51315014	NO RECORD
No Address	A5	NC	boring	51315015	NO RECORD
No Address	A6	NC	boring	51315016	NO RECORD
No Address	B1	NC	boring	51315017	NO RECORD
No Address	B3	NC	boring	51315018	NO RECORD
No Address	B4	NC	boring	51315019	NO RECORD
No Address	B6	NC	boring	51315020	NO RECORD
No Address	C2	NC	boring	51315022	NO RECORD
No Address	C5	NC	boring	51315023	NO RECORD
No Address	C6	NC	boring	51315024	NO RECORD
No Address	D1	NC	boring	51315025	NO RECORD
No Address	D2	NC	boring	51315026	NO RECORD
No Address	D3	NC	boring	51315027	NO RECORD
No Address	D5	NC	boring	51315028	NO RECORD
No Address	D7	NC	boring	51315029	NO RECORD
No Address	E4	NC	boring	51315030	NO RECORD
No Address	E4.4	NC	boring	51315031	NO RECORD
No Address	E4.7	NC	boring	51315032	NO RECORD
No Address	E5.3	NC	boring	51315033	NO RECORD
No Address	E6	NC	boring	51315034	NO RECORD

Notes:

Survey conducted in a 2,000-foot radius of site.

Compiled from data provided by California Department of Water Resources.

Department of Water Resources data are confidential.

NC = Not calculated.

APPENDIX A
ACEH CORRESPONDENCE



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

April 13, 2011

Mr. Dave Patton
Chevron Environmental Management
6001 Bollinger Canyon Road
San Ramon, CA 94583

Ui Hwang
909 Trent Street
Concord, CA 94518

Choung & Myung Inc.
2200 Telegraph Avenue
Oakland, CA 94612-2316

(sent via electronic mail to drpatten@chevron.com)

Subject: Approval With Modifications to Work Plan; Fuel Leak Case No. RO0002435 and Geotracker Global ID T0600161613, Chevron # 9-3600, 2200 Telegraph Avenue, Oakland, CA 94612

Dear Responsible Parties:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Site Conceptual Model*, dated December 30, 2008, the *Work Plan for Soil Borings*, dated January 30, 2009, and the *First Semi-Annual 2011 Groundwater Monitoring and Sampling Report*, dated March 21, 2011; all submitted on your behalf by Conestoga-Rovers & Associates (CRA). Thank you for submitting the reports.

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed field investigation. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or technical comments below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Work Plan Modifications** – The work plan proposed the installation of four thirty-foot soil bores on an adjacent car parking lot, in the down gradient direction of ground water flow. One bore was proposed as a replacement bore for a previously approved bore location (B-10) that could not be installed due to surface impediments (billboard and fence). A second bore was included to construct a nominal transect roughly parallel to the former eastern edge of UST complex, and roughly perpendicular to the direction of groundwater flow. Two additional bores are intended to delineate groundwater and are proposed to be installed approximately 20 feet further downgradient in a second row. Soil samples will be collected and depth-discrete grab groundwater samples will be collected every 10 feet vertically, beginning at first encountered groundwater, to vertically define groundwater. ACEH requests the following modifications to the work plan:

- a. **Representative Shallow Soil Samples** – The work plan addendum proposes the use of an air knife or hand auger to a depth of 8 feet below grade surface (bgs). As discussed in previous letters ACEH agrees that hand clearing soil bores is an important step, and recognizes that Chevron corporate preferences exist; however, ACEH is concerned that the proposed total depth for hand clearing the bores may preclude collection of important shallow soil data including analytical sample collection. ACEH is also concerned that use of an air knife will volatilize target compounds resulting in low-biased analytical results as the majority of the vadose zone would be air knifed (8 of approximately 11 feet). To ensure proper collection of shallow soil samples in the

vadose zone, including adequate instrument screening (PID or other), sampling, and analysis, when appropriate, ACEH requests the bores be cleared with a hand auger. The apparent lack of utilities in the area of the proposed bores provides additional rationale for the elimination of the use of an air knife at the site.

- b. **Delineation downgradient of Well MW-1** – ACEH additionally requests the installation of one or more soil bores downgradient of well MW-1 to delineate the downgradient extent of impacted groundwater. These can be installed as extensions of the two proposed nominal transects discussed above.
 - c. **Soil Bore B-8 Replacement** – To assist in expediting future appropriate actions ACEH also requests (reaffirms the previous request) for the installation of a replacement soil bore in the vicinity of bore B-8. With the inclusion of underground utilities on site plans, it is understood that B-8 likely hit refusal on the water line that services the kiosk. A bore in this approximate location would assist in addressing any potential sources associated with the UST complex, or potentially elsewhere, and upgradient of well MW-1 (MW-2 is a minimum of 35 feet from the UST complex). It may not be necessary to extend the bore to 30 feet, as planned downgradient of the UST complex, depending on the presence or absence of impacted media.
 - d. **Collection and Analysis of Soil & Groundwater** – ACEH generally concurs with the proposed collection and the selected analytical suite outlined for soil and groundwater data contained in the work plan; however, ACEH did not locate details for the minimum number of soil samples proposed to be submitted for analysis. Please ensure that the soil samples are collected and submitted for analysis at changes in lithology, the capillary fringe, saturated zone, and zones with high PID readings, odor, or discoloration.
- 2. Groundwater Sampling Interval** – Please place the site on an annual groundwater sampling basis coinciding with the second quarter of the year. The addition of similar groundwater monitoring data is not anticipated to significantly increase our understanding of the site. This will place the next sampling in April 2012.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH, according to the following schedule:

- **June 24, 2011** - Soil and Groundwater Investigation Report

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.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Mark E. Detterman, PG, CEG
Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Nathan Lee, Conestoga-Rovers & Assoc., 5900 Hollis Street, Suite A, Emeryville, CA 94608
(sent via electronic mail to NLee@craworld.com)
Donna Drogos, ACEH, (sent via electronic mail to donna.drogos@acgov.org)
Mark Detterman, ACEH, (sent via electronic mail to mark.detterman@acgov.org)

GeoTracker, eFile

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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 web site for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: July 20, 2010
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

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

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection.**
- 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)

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 deh.loptoxic@acgov.org
 - 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, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - 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 deh.loptoxic@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 @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) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX B
SITE ENVIRONMENTAL HISTORY

APPENDIX B
SUMMARY OF PREVIOUS ENVIRONMENTAL WORK
FORMER CHEVRON SERVICE STATION 93600
2200 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA

1986 Tank Pit Sampling

In October 1986, new gasoline USTs were installed in the location of the original tank pit. Soil and groundwater samples were collected by Blaine Tech Services, Inc. (Blaine Tech) prior to installation of the new USTs. Additional information on soil and groundwater sampling is available in Blaine Tech's account of site activities dated November 21 and 28, 1986.

October 1992 Vadose Zone Well Sampling

In October 1992, Groundwater Technology, Inc. collected a groundwater sample from onsite vadose well VW-2-1 at the request of Chevron. Because these wells do not currently exist, nor is there any record of their installation, the location and depth of the well is unknown. Additional information is available in Groundwater Technology, Inc.'s *Monitoring and Sampling Report of Vadose Well 2-1* dated November 20, 1992.

1994 Product Line Replacement

In July 1994, gasoline product lines were removed and replaced. Excavation of approximately 100 cubic yards of soil was performed and Touchstone Developments collected compliance soil samples P-1 through P-8 from product line trenches at depths between approximately 4.5 and 5.5 fbg. Additional information is available in Touchstone Developments' August 9, 1994 *Product-Line Removal and Sampling Report*.

2000 Baseline Evaluation

In November 2000, G-R advanced soil borings B-1 through B-8 to depths ranging from 4 to 16 fbg for a baseline evaluation for Chevron prior to property transfer. Boring B-2 through B-6 were advanced above the BART underground tunnel and were therefore only advanced to 10 fbg in accordance with BART restrictions. Additional information is available in G-R's November 21, 2000 *Baseline Evaluation*.

2002 Monitoring Well Installation

In March 2002, G-R installed groundwater monitor wells MW-1 through MW-3 to a depth of 20 fbg. Additional information is available in G-R's May 30, 2002 *Monitoring Well Installation Report*.

APPENDIX C
DRILLING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 04/02/2012 By jamesy

Permit Numbers: W2012-0198
Permits Valid from 04/12/2012 to 04/13/2012

Application Id: 1332794538757
Site Location: 2200 Telegraph Ave
Project Start Date: 04/12/2012
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site:Oakland

Completion Date:04/13/2012

Applicant: Conestoga Rovers & Associates - Amanda
McDonell
5900 Hollis St Suite A, Emeryville, CA 94608
Phone: 510-420-3353

Property Owner: George Kim
2601 Telegraph Ave, Oakland, CA 94612
Phone: 415-209-4066

Client: Chevron EMC
6101 Bollinger Canyon Road, San Ramon, CA 94583
Phone: --

Receipt Number: WR2012-0087
Payer Name : conestoga rovers & associates
Total Due: \$265.00
Total Amount Paid: \$265.00
Paid By: CHECK
PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 1 Boreholes
Driller: Gregg Drilling and Testing - Lic #: 485165 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2012-0198	04/02/2012	07/11/2012	1	2.00 in.	30.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Alameda County Public Works Agency - Water Resources Well Permit

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

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

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: 04/02/2012 By jamesy

Permit Numbers: W2012-0205
Permits Valid from 04/12/2012 to 04/13/2012

Application Id: 1332953976208
Site Location: 2201 Valley Street
Project Start Date: 04/12/2012
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site:Oakland

Completion Date:04/13/2012

Applicant: Conestoga Rovers and Associates - Amanda
McDonell
5900 Hollis St. Suite A, Emeryville, CA 94608
Property Owner: MV Broadway LLC
580 Second Street Suite 260, Oakland, CA 94607
Client: Chevron EMC
6101 Billinger Canyon Road, San Ramon, CA 94583

Phone: 510-420-3353

Phone: 510-839-4000

Phone: --

Receipt Number: WR2012-0094
Payer Name : Conestoga

Total Due: \$265.00
Total Amount Paid: \$265.00
Paid By: CHECK PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitoring Study - 4 Boreholes
Driller: Gregg drilling and testing - Lic #: 485165 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2012-0205	04/02/2012	07/11/2012	4	2.00 in.	30.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Alameda County Public Works Agency - Water Resources Well Permit

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

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

APPENDIX D
BORING LOGS



Conestoga Rovers & Associates Inc.
 5900 Hollis Street, Suite A
 Emeryville, CA 94608
 Telephone: 510-420-0700
 Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	<u>Chevron Environmental Management Company</u>	BORING/WELL NAME	<u>B-8B</u>
JOB/SITE NAME	<u>93600</u>	DRILLING STARTED	<u>12-Apr-12</u>
LOCATION	<u>2200 Telegraph Avenue, Oakland, CA</u>	DRILLING COMPLETED	<u>12-Apr-12</u>
PROJECT NUMBER	<u>311965</u>	WELL DEVELOPMENT DATE (YIELD)	<u>NA</u>
DRILLER	<u>Gregg Drilling, C-57 #485165</u>	GROUND SURFACE ELEVATION	<u>NA</u>
DRILLING METHOD	<u>Direct push</u>	TOP OF CASING ELEVATION	<u>NA</u>
BORING DIAMETER	<u>2-inches</u>	SCREENED INTERVALS	<u>NA</u>
LOGGED BY	<u>A. McDonell</u>	DEPTH TO WATER (First Encountered)	<u>NA</u>
REVIEWED BY	<u>T. Hariu, PG #5907</u>	DEPTH TO WATER (Static)	<u>NA</u>
REMARKS	<u>Refusal - Metal object in subsurface</u>		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
			█		█	ASPHALT	0.5	<p>Portland Type I/II</p> <p>Bottom of Boring @ 3 fbg</p>
			█	SP	█	SAND: Brown; moist; poorly graded; fine to medium sand.	3.0	
						@ 3 fbg - refusal due to metal obstruction in subsurface.		

WELL LOG (PID) I:\CHEVRON\3119-1\311965-3\311965-B-9 THROUGH B-12.GPJ DEFAULT.GDT 5/25/12



Conestoga Rovers & Associates Inc.
 5900 Hollis Street, Suite A
 Emeryville, CA 94608
 Telephone: 510-420-0700
 Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	B-9
JOB/SITE NAME	93600	DRILLING STARTED	12-Apr-12
LOCATION	2200 Telegraph Avenue, Oakland, CA	DRILLING COMPLETED	12-Apr-12
PROJECT NUMBER	311965	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling, C-57 #485165	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Direct push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2-inches	SCREENED INTERVALS	NA
LOGGED BY	A. McDonell	DEPTH TO WATER (First Encountered)	13.50 fbg
REVIEWED BY	T. Hariu, PG #5907	DEPTH TO WATER (Static)	NA
REMARKS	Utility cleared to 8 fbg by hand auger		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
				0.5			ASPHALT	0.5	
				5.0	SP		SAND: Brown; moist; poorly graded; medium sand.		
1.0		B-9 -5		5				6.0	
				8.0			SILT with sand: Black; moist.		
				9.0			@ 8 fbg - Dark gray; increase clay; low plasticity.		
				10.0	ML		@ 9 fbg - Brownish gray.		
25		B-9 -10		10			@ 11 fbg - Gray; increase clay and sand content; fine sand.		
				13.5			Silty SAND with gravel: Gray; moist; well graded; medium to coarse sand, fine gravel.	13.0	
				15.0			@ 13.5 - wet.		
1.0		B-9 -15		15			@ 15 fbg - Brown; no gravel; poorly graded; fine sand.		
				17.0			@ 17 fbg - increase sand; well graded; fine to medium sand.		
0.6		B-9 -20		20	SM		@ 20 fbg - Silty SAND: Brown; wet; well graded; fine to coarse sand; trace fine gravel.		
				24.0			@ 24 fbg - Gray.		
				25.0					
-		B-9 -25		25				26.0	
				26.0	SW		SAND with gravel: Brown; wet; well graded; fine to coarse sand; fine gravel.		
				29.0				29.0	
0.7		B-9 -29.5		30	ML		Sandy SILT: Dark brown; wet; fine sand.	30.0	
				30.0					



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 Emeryville, CA 94608
 Telephone: 510-420-0700
 Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	B-10
JOB/SITE NAME	93600	DRILLING STARTED	12-Apr-12
LOCATION	2200 Telegraph Avenue, Oakland, CA	DRILLING COMPLETED	12-Apr-12
PROJECT NUMBER	311965	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling, C-57 #485165	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Direct push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2-inches	SCREENED INTERVALS	NA
LOGGED BY	A. McDonell	DEPTH TO WATER (First Encountered)	18.00 fbg
REVIEWED BY	T. Hariu, PG #5907	DEPTH TO WATER (Static)	NA
REMARKS	Utility cleared to 8 fbg by hand auger		

WELL LOG (PID) I:\CHEVRON\3119-1\311965 9-3600 OAKLAND\311965-BORING LOGS\311965-B-9 THROUGH B-12.GPJ DEFAULT.GDT 5/29/12

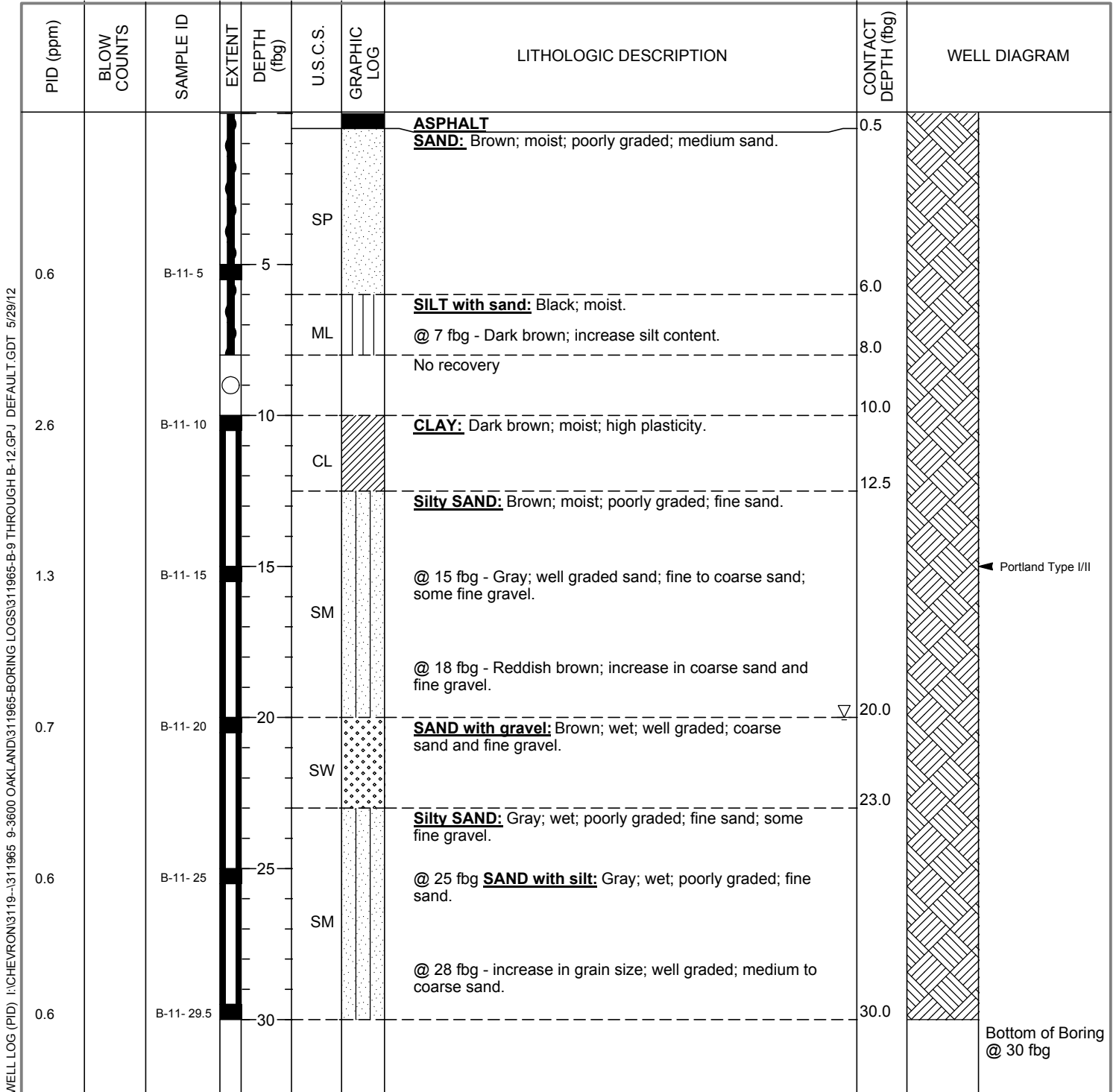
PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
				0.5			ASPHALT	0.5	
				5.0	SP		SAND: Brown; moist; poorly graded; medium sand.		
1.5		B-10- 5		5			Sandy SILT: Dark brown; moist; well graded; fine to medium sand. @ 6 fbg - Black.	5.0	
				8.0	ML		No recovery	8.0	
				10.0			SILT: Gray; dry; trace clay.	10.0	
4.0		B-10- 10		10			@ 13 fbg - SILT with sand: Gray; moist; poorly graded; fine sand.		
				15.0	ML			15.0	
3.0		B-10- 15		15			Silty SAND: Brown; moist; poorly graded; fine sand; lenses of medium sand up to 1" thick. @ 18 fbg - wet	16.5	
				20.0			@ 20 fbg - increase sand; well graded, fine to medium sand.		
0.5		B-10- 20		20	SM		@ 22 fbg - SAND with silt: Brown; wet; well graded; medium to coarse sand; trace fine gravel.		
				25.0			GRAVEL with sand: Reddish brown; wet; well graded; medium to coarse sand; fine gravel.	25.0	
0.5		B-10- 25		25	GW			25.0	
				28.0			Silty SAND: Tan; wet; poorly graded; fine sand.	28.0	
0.2		B-10- 29.5		30	SM			30.0	
									Bottom of Boring @ 30 fbg



Conestoga Rovers & Associates Inc.
 5900 Hollis Street, Suite A
 Emeryville, CA 94608
 Telephone: 510-420-0700
 Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	B-11
JOB/SITE NAME	93600	DRILLING STARTED	12-Apr-12
LOCATION	2200 Telegraph Avenue, Oakland, CA	DRILLING COMPLETED	12-Apr-12
PROJECT NUMBER	311965	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling, C-57 #485165	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Direct push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2-inches	SCREENED INTERVALS	NA
LOGGED BY	A. McDonell	DEPTH TO WATER (First Encountered)	20.00 fbg
REVIEWED BY	T. Hariu, PG #5907	DEPTH TO WATER (Static)	NA
REMARKS	Utility cleared to 8 fbg by hand auger		



WELL LOG (PID) I:\CHEVRON\3119-1\311965 9-3600 OAKLAND\311965-BORING LOGS\311965-B-9 THROUGH B-12.GPJ DEFAULT.GDT 5/29/12

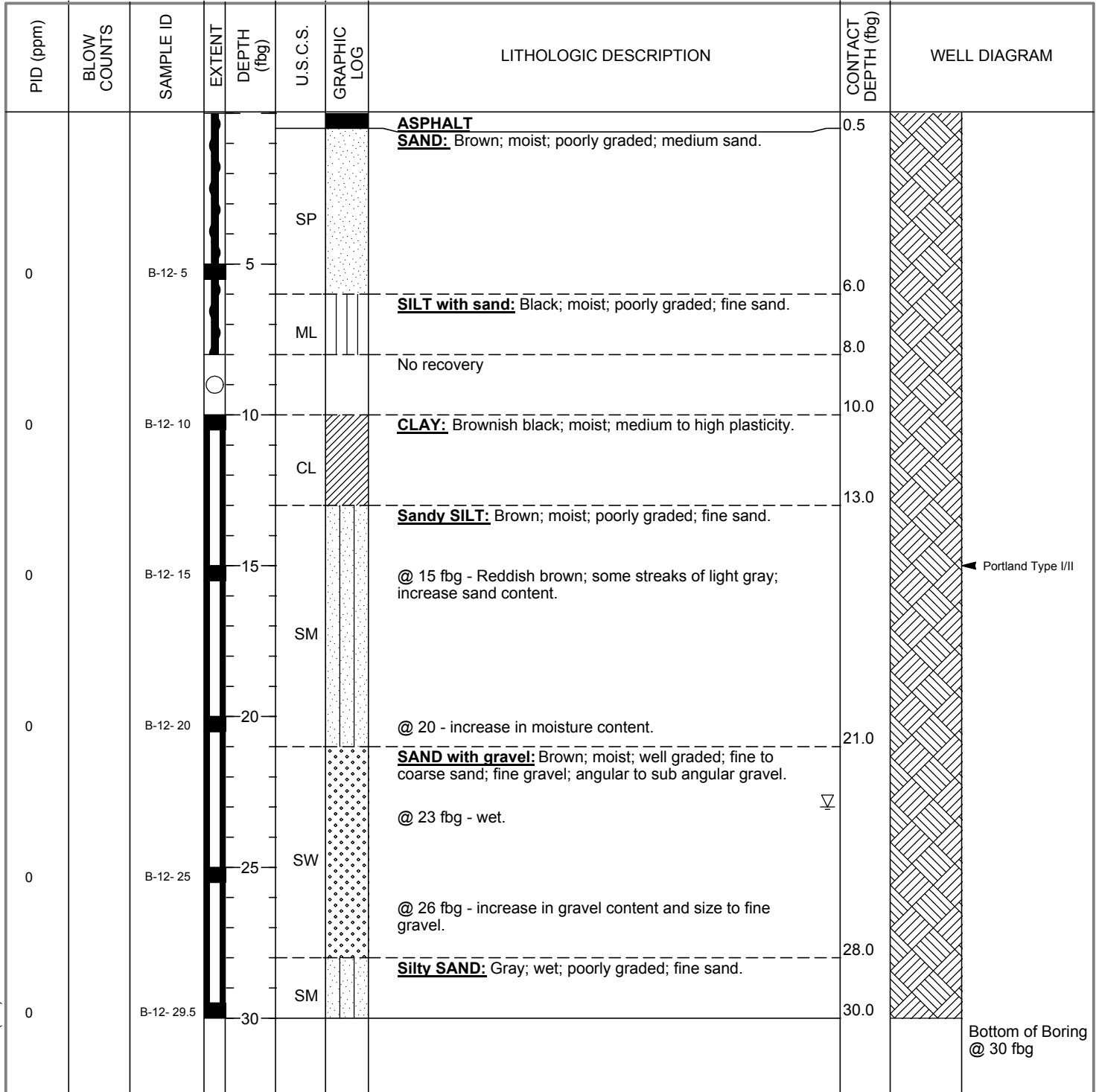


Conestoga Rovers & Associates Inc.
 5900 Hollis Street, Suite A
 Emeryville, CA 94608
 Telephone: 510-420-0700
 Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	B-12
JOB/SITE NAME	93600	DRILLING STARTED	13-Apr-12
LOCATION	2200 Telegraph Avenue, Oakland, CA	DRILLING COMPLETED	13-Apr-12
PROJECT NUMBER	311965	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling, C-57 #485165	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Direct push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2-inches	SCREENED INTERVALS	NA
LOGGED BY	A. McDonell	DEPTH TO WATER (First Encountered)	23.00 fbg
REVIEWED BY	T. Hariu, PG #5907	DEPTH TO WATER (Static)	NA
REMARKS	Utility cleared to 8 fbg by hand auger		

WELL LOG (PID) I:\CHEVRON\3119-311965 9-3600 OAKLAND\311965-BORING LOGS\311965-B-9 THROUGH B-12.GPJ DEFAULT.GDT 5/29/12



Bottom of Boring @ 30 fbg

APPENDIX E

SOIL LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

April 26, 2012

Project: 93600

Submittal Date: 04/14/2012
Group Number: 1302261
PO Number: 0015074399
Release Number: PATTEN
State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
B-9-S-5-120412 Grab Soil	6616826
B-9-S-10-120412 Grab Soil	6616827
B-9-S-15-120412 Grab Soil	6616828
B-9-S-20-120412 Grab Soil	6616829
B-9-S-25-120412 Grab Soil	6616830
B-9-S-29.5-120412 Grab Soil	6616831
B-10-S-5-120412 Grab Soil	6616832
B-10-S-10-120412 Grab Soil	6616833
B-10-S-15-120412 Grab Soil	6616834
B-10-S-20-120412 Grab Soil	6616835
B-10-S-25-120412 Grab Soil	6616836
B-10-S-29.5-120412 Grab Soil	6616837
B-11-S-5-120412 Grab Soil	6616838
B-11-S-10-120412 Grab Soil	6616839
B-11-S-15-120412 Grab Soil	6616840
B-11-S-20-120412 Grab Soil	6616841
B-11-S-25-120412 Grab Soil	6616842
B-11-S-29.5-120412 Grab Soil	6616843
B-12-S-5-120413 Grab Soil	6616844
B-12-S-10-120413 Grab Soil	6616845
B-12-S-15-120413 Grab Soil	6616846
B-12-S-20-120413 Grab Soil	6616847
B-12-S-25-120413 Grab Soil	6616848
B-12-S-29.5-120413 Grab Soil	6616849

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO
ELECTRONIC COPY TO
ELECTRONIC COPY TO

Chevron
CRA

Attn: CRA EDD

Attn: Nathan Lee

Respectfully Submitted,



Natalie R. Luciano
Specialist

(717) 556-7258

Sample Description: B-9-S-5-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # SW 6616826
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 08:00 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

00905

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.56

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/16/2012 23:59	Andrea E Lando	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:29	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:25	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 19:51	Marie D John	24.56
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:26	Scott W Freisher	n.a.

Sample Description: B-9-S-10-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # SW 6616827
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 08:30 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

00910

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.03
10237	Benzene	71-43-2	0.002	0.0005	0.005	1.03
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.03
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.03
10237	Ethylbenzene	100-41-4	0.39	0.050	0.25	50.4
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	0.051	0.001	0.005	1.03
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	15	1.0	1.0	26.18

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 04:49	Andrea E Lando	1.03
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	R121121AA	04/21/2012 14:30	Kerri E Legerlotz	50.4
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:30	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 07:58	Marie D John	26.18
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:30	Scott W Freisher	n.a.

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

Sample Description: B-9-S-15-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # SW 6616828
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 09:10 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

00915

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.06
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.06
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.11	1.06
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.06
10237	Ethylbenzene	100-41-4	0.002	0.001	0.005	1.06
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.06
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.06
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.06
10237	Xylene (Total)	1330-20-7	0.007	0.001	0.005	1.06
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.56

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 02:35	Andrea E Lando	1.06
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:37	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 20:29	Marie D John	24.56
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:35	Scott W Freisher	n.a.

Sample Description: B-9-S-20-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # SW 6616829
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 09:40 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

00920

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.98
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.98
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.098	0.98
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.98
10237	Ethylbenzene	100-41-4	0.003	0.001	0.005	0.98
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.0007	0.0005	0.005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.98
10237	Xylene (Total)	1330-20-7	0.007	0.001	0.005	0.98
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.49

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 02:57	Andrea E Lando	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:41	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 21:07	Marie D John	24.49
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:41	Scott W Freisher	n.a.

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

Sample Description: B-9-S-25-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # SW 6616830
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 10:03 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

00925

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.99
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.99
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.099	0.99
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.75

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 03:20	Andrea E Lando	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:47	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 21:45	Marie D John	24.75
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:48	Scott W Freisher	n.a.

Sample Description: B-9-S-29.5-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # SW 6616831
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 09:55 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

00929

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	23.83

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 00:21	Andrea E Lando	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:51	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 22:23	Marie D John	23.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:50	Scott W Freisher	n.a.

Sample Description: B-10-S-5-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # SW 6616832
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 11:05 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01005

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.56

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 00:43	Andrea E Lando	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:55	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 23:01	Marie D John	25.56
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:54	Scott W Freisher	n.a.

Sample Description: B-10-S-10-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # SW 6616833
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 11:20 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.03
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.03
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.03
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.03
10237	Ethylbenzene	100-41-4	0.001	0.001	0.005	1.03
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.001	0.0005	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.03
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	4.9	1	1	24.37

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 04:04	Andrea E Lando	1.03
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:58	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/17/2012 23:39	Marie D John	24.37
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 19:58	Scott W Freisher	n.a.

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

Sample Description: B-10-S-15-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # SW 6616834
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 11:34 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01015

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.99
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.99
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.099	0.99
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.99
10237	Ethylbenzene	100-41-4	0.047	0.001	0.005	0.99
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	0.062	0.001	0.005	0.99
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	2.9	0.9	0.9	23.26

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 04:26	Andrea E Lando	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:30	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:04	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 00:17	Marie D John	23.26
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:06	Scott W Freisher	n.a.

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

Sample Description: B-10-S-20-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # SW 6616835
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 12:08 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01020

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.04
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.04
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.04
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	23.06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 01:05	Andrea E Lando	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:10	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 00:55	Marie D John	23.06
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:09	Scott W Freisher	n.a.

Sample Description: B-10-S-25-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # SW 6616836
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 12:16 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01025

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.64

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 01:28	Andrea E Lando	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:19	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 02:11	Marie D John	25.64
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:17	Scott W Freisher	n.a.

Sample Description: B-10-S-29.5-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # SW 6616837
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 12:18 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01029

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	23.81

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 01:50	Andrea E Lando	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:26	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 02:54	Marie D John	23.81
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:26	Scott W Freisher	n.a.

Sample Description: B-11-S-5-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # SW 6616838
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 13:40 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01105

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.0009	0.005	0.93
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.93
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.093	0.93
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.0009	0.005	0.93
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.93
10237	di-Isopropyl ether	108-20-3	N.D.	0.0009	0.005	0.93
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.93
10237	Toluene	108-88-3	N.D.	0.0009	0.005	0.93
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.005	0.93
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.96

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 02:13	Andrea E Lando	0.93
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:29	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 03:32	Marie D John	25.96
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:29	Scott W Freisher	n.a.

Sample Description: B-11-S-10-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # SW 6616839
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 13:50 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01110

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.05
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.05
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.11	1.05
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.05
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.05
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.05
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.05
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.05
10237	Xylene (Total)	1330-20-7	0.001	0.001	0.005	1.05
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	3.2	1.0	1.0	26.01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121071AA	04/17/2012 03:42	Andrea E Lando	1.05
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:40	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 04:10	Marie D John	26.01
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:40	Scott W Freisher	n.a.

Sample Description: B-11-S-15-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # SW 6616840
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 14:05 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.48

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/17/2012 22:22	Andrea E Lando	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:44	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 04:48	Marie D John	25.48
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:44	Scott W Freisher	n.a.

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

Sample Description: B-11-S-20-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # SW 6616841
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 14:25 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01120

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1
10237	Benzene	71-43-2	0.0006	0.0005	0.005	1
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1
10237	Ethylbenzene	100-41-4	0.011	0.001	0.005	1
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	0.011	0.001	0.005	1
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	22.96

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/17/2012 22:45	Andrea E Lando	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:50	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 05:26	Marie D John	22.96
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:48	Scott W Freisher	n.a.

Sample Description: B-11-S-25-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # SW 6616842
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 14:55 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01125

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.95
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.95
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.095	0.95
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.95
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.95
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	23.3

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/17/2012 23:07	Andrea E Lando	0.95
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:55	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 06:04	Marie D John	23.3
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 20:56	Scott W Freisher	n.a.

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

Sample Description: B-11-S-29.5-120412 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # SW 6616843
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/12/2012 15:00 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01129

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.05
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.05
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.11	1.05
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.05
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.05
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.05
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.05
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.05
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.05
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	23.9

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/17/2012 23:29	Andrea E Lando	1.05
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:31	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:02	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 06:42	Marie D John	23.9
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:03	Scott W Freisher	n.a.

Sample Description: B-12-S-5-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616844
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 07:40 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01205

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.04
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.04
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.04
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	23.5

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/17/2012 23:51	Andrea E Lando	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:10	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12108A16A	04/18/2012 07:20	Marie D John	23.5
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:08	Scott W Freisher	n.a.

Sample Description: B-12-S-10-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616845
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 07:50 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01210

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.97
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.97
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.097	0.97
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.97
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.97
GC Volatiles SW-846 8015B modified						
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.69

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/18/2012 00:14	Andrea E Lando	0.97
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	3	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	4	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	5	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	6	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:43	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 21:45	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	3	201210527379	04/14/2012 21:43	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	4	201210527379	04/14/2012 21:44	Scott W Freisher	n.a.

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

Sample Description: B-12-S-10-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616845
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 07:50 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01210

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12109B16A	04/19/2012 17:15	Laura M Krieger	25.69
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:49	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 21:50	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	3	201210527379	04/14/2012 21:53	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	4	201210527379	04/14/2012 21:53	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	5	201210527379	04/14/2012 21:51	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	6	201210527379	04/14/2012 21:54	Scott W Freisher	n.a.

Sample Description: B-12-S-15-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616846
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 08:00 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01215

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.04
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.04
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.04
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.2

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/18/2012 01:20	Andrea E Lando	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:00	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12109B16A	04/19/2012 20:28	Laura M Krieger	24.2
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 21:59	Scott W Freisher	n.a.

Sample Description: B-12-S-20-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616847
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 08:20 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01220

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.96
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.96
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.096	0.96
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.96
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	23.83

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/18/2012 01:42	Andrea E Lando	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:05	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12109B16A	04/19/2012 21:06	Laura M Krieger	23.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:06	Scott W Freisher	n.a.

Sample Description: B-12-S-25-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616848
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 08:30 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01225

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.98
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.98
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.098	0.98
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.98
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.98
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.98
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.98
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	23.04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/18/2012 02:05	Andrea E Lando	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:32	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:09	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12109B16A	04/19/2012 21:44	Laura M Krieger	23.04
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:08	Scott W Freisher	n.a.

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

Sample Description: B-12-S-29.5-120413 Grab Soil
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # SW 6616849
LLI Group # 1302261
Account # 10880

Project Name: 93600

Collected: 04/13/2012 08:45 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/26/2012 17:41

01229

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			mg/kg	mg/kg	mg/kg	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles SW-846 8015B modified			mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 5 Oxygenates Soil	SW-846 8260B	1	B121081AA	04/18/2012 02:27	Andrea E Lando	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:33	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201210527379	04/14/2012 22:33	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:23	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12109B16A	04/19/2012 22:22	Laura M Krieger	24.04
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201210527379	04/14/2012 22:24	Scott W Freisher	n.a.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 04/26/12 at 05:41 PM

Group Number: 1302261

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

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>
Batch number: B121071AA	Sample number(s): 6616826-6616839								
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	89	93	56-137	5	30
Benzene	N.D.	0.0005	0.005	mg/kg	87	93	80-120	6	30
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	85	91	60-149	7	30
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	91	97	70-122	6	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	85	88	80-120	3	30
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	93	99	73-121	6	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	91	96	74-121	6	30
Toluene	N.D.	0.001	0.005	mg/kg	83	88	80-120	6	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	82	85	80-120	4	30
Batch number: B121081AA	Sample number(s): 6616840-6616849								
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	89	86	56-137	4	30
Benzene	N.D.	0.0005	0.005	mg/kg	86	87	80-120	2	30
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	100	101	60-149	0	30
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	91	89	70-122	2	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	90	91	80-120	1	30
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	93	94	73-121	1	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	89	85	74-121	5	30
Toluene	N.D.	0.001	0.005	mg/kg	87	88	80-120	1	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	87	87	80-120	0	30
Batch number: R121121AA	Sample number(s): 6616827								
Ethylbenzene	N.D.	0.050	0.25	mg/kg	103	104	80-120	1	30
Batch number: 12108A16A	Sample number(s): 6616826-6616844								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	94	94	67-119	0	30
Batch number: 12109B16A	Sample number(s): 6616845-6616849								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	101		67-119		

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: B121081AA	Sample number(s): 6616840-6616849 UNSPK: 6616845								
t-Amyl methyl ether	84	88	59-123	14	30				
Benzene	84	84	55-143	10	30				
t-Butyl alcohol	115	106	47-153	1	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: ChevronTexaco
Reported: 04/26/12 at 05:41 PM

Group Number: 1302261

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>
Ethyl t-butyl ether	90	94	58-124	13	30				
Ethylbenzene	70	65	44-141	3	30				
di-Isopropyl ether	92	98	59-133	15	30				
Methyl Tertiary Butyl Ether	86	89	55-129	13	30				
Toluene	78	76	50-146	7	30				
Xylene (Total)	66	63	44-136	4	30				

Batch number: R121121AA Sample number(s): 6616827 UNSPK: P616491
Ethylbenzene 91 44-141

Batch number: 12109B16A Sample number(s): 6616845-6616849 UNSPK: 6616845
TPH-GRO N. CA soil C6-C12 101 98 39-118 3 30

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: 8260 Ext. Soil Master w/GRO

Batch number: B121071AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6616826	105	97	101	97
6616827	101	94	105	101
6616828	105	98	102	100
6616829	103	96	101	99
6616830	106	94	103	97
6616831	107	95	101	96
6616832	107	103	101	100
6616833	102	94	104	101
6616834	100	93	101	102
6616835	106	95	103	97
6616836	106	94	104	98
6616837	106	97	102	95
6616838	106	104	101	98
6616839	102	95	101	96
Blank	104	100	95	102
LCS	104	104	98	105
LCSD	105	98	98	104

Limits: 50-141 54-135 52-141 50-131

Analysis Name: 8260 Ext. Soil Master w/GRO

Batch number: B121081AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6616840	106	103	99	99
6616841	103	96	103	99
6616842	105	105	102	99
6616843	102	98	103	95

*- 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: ChevronTexaco
Reported: 04/26/12 at 05:41 PM

Group Number: 1302261

Surrogate Quality Control

6616844	106	102	101	98
6616845	105	100	101	99
6616846	102	96	103	99
6616847	104	97	105	95
6616848	105	95	103	93
6616849	108	98	102	96
Blank	102	102	100	99
LCS	102	101	102	104
LCSD	102	94	103	103
MS	106	104	105	104
MSD	104	98	104	103

Limits: 50-141 54-135 52-141 50-131

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: R121121AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

Blank	79	83	85	84
LCS	77	80	81	82
LCSD	82	86	82	84
MS	62	65	63	62

Limits: 50-141 54-135 52-141 50-131

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 12108A16A

Trifluorotoluene-F

6616826	85
6616827	86
6616828	84
6616829	83
6616830	88
6616831	92
6616832	87
6616833	78
6616834	84
6616835	88
6616836	87
6616837	63
6616838	89
6616839	83
6616840	90
6616841	86
6616842	91
6616843	92
6616844	80
Blank	92
LCS	85
LCSD	86

Limits: 61-122

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 12109B16A

Trifluorotoluene-F

*- 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: ChevronTexaco
Reported: 04/26/12 at 05:41 PM

Group Number: 1302261

Surrogate Quality Control

6616845	83
6616846	83
6616847	86
6616848	86
6616849	88
Blank	90
LCS	95
MS	88
MSD	86

Limits: 61-122

*- 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.

Chevron California Refining Analysis Request/Chain of Custody



246143

Acct. #: 10880

For Lancaster Laboratories use only

Sample #: 06016826-49

SCR#: _____

041312-06 P.60FG

G#13002601

Facility #: 9-3600 (CRA 311965)
 Site Address: 2200 TELEGRAPH AVE, OAKLAND, CA
 Chevron PM: MARK HORNE Lead Consultant: CRA
 Consultant/Office: CRA / EMERYVILLE
 Consultant Prj. Mgr.: NATHAN LEE
 Consultant Phone #: 510-420-0700 Fax #: 510 420 9170
 Sampler: Sequoia Patterson
 Service Order #: _____ Non SAR: _____

Analyses Requested									
Preservation Codes									
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTEX + MTBE 8260	<input checked="" type="checkbox"/> 8021								
TPH 8015 MOD	GRO								
TPH 8015 MOD DRO	<input type="checkbox"/> Silica Gel Cleanup								
8260 full scan									
Oxygenates									
Lead 7420	<input type="checkbox"/> 7421								
DIPE, ETBE, TAME, TBA 8260									

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ O = Other

J value reporting needed
 Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
 Confirm highest hit by 8260
 Confirm all hits by 8260
 Run ___ oxy's on highest hit
 Run ___ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260	TPH 8015 MOD	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421
B-9	S		5	2012-4-12	0800		X		1	X	X					
B-9	S		10		0830		X		1	X	X					
B-9	S		15		0910		X		1	X	X					
B-9	S		20		0940		X		1	X	X					
B-9	S		25		1003		X		1	X	X					
B-9	S		29.5		0955		X		1	X	X					
B-9-w	W															
B-10	S		5		1105		X		1	X	X					
B-10	S		10		1120		X		1	X	X					
B-10	S		15		1134		X		1	X	X					
B-10	S		20		1208		X		1	X	X					
B-10	S		25		1216		X		1	X	X					
B-10	S		29.5		1218		X		1	X	X					

Comments / Remarks
 Please email Results and EDF To nlee@craworld.com

Turnaround Time Requested (TAT) (please circle)

STD. TAT 72 hour 48 hour
 24 hour 4 day 5 day

Relinquished by: [Signature] Date: 4-12-12 Time: 1630

Relinquished by: [Signature] Date: 13 APR 12 Time: 1546

Received by: Secure location CRA Date: 4-12-12 Time: 1630

Received by: [Signature] Date: 13 APR 12 Time: 1546

Data Package Options (please circle if required)

QC Summary Type I - Full
 Type VI (Raw Data) Coelt Deliverable not needed
 WIP (RWQCB)
 Disk

Relinquished by: [Signature] Date: 13 APR 12 Time: 1630

Relinquished by Commercial Carrier:
 UPS FedEx Other _____

Temperature Upon Receipt: 82-3 °C

Received by: FEDEX

Received by: [Signature] Date: 4/12/12 Time: 1600

Custody Seals Intact? Yes No

Chevron California Region Analysis Request/Chain of Custody



246141

For Lancaster Laboratories use only
 Acct. #: 10880 Sample #: 6616826-49 SCR#: _____

041312-066 P.30FG

C# 1302261

Facility #: 9-3600 (CRA 311965)
 Site Address: 2200 TELEGRAPH AVE, OAKLAND, CA
 Chevron PM: MARK HORNE Lead Consultant: CRA
 Consultant/Office: CRA / EMERYVILLE
 Consultant Prj. Mgr.: NATHAN LEE
 Consultant Phone #: 510-420-0700 Fax #: 510-420-9170
 Sampler: SEQUOIA PATTERSON
 Service Order #: _____ Non SAR:

Analyses Requested

Preservation Codes									
BTEX + MTBE	8260	<input checked="" type="checkbox"/> 8021	TPH 8015 MOD	GRO	<input type="checkbox"/> Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420	<input type="checkbox"/> 7421
<u>DIPE, ETBE, TAME, TBA</u>									
<u>8266</u>									

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ O = Other

J value reporting needed
 Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
 Confirm highest hit by 8260
 Confirm all hits by 8260
 Run ___ oxy's on highest hit
 Run ___ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE	8260	<input checked="" type="checkbox"/> 8021	TPH 8015 MOD	GRO	<input type="checkbox"/> Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420	<input type="checkbox"/> 7421	
B-11	S		5	2012-4-12	1340		X		1	X	X									
B-11	S		10	↓	1350		X		1	X	X									
B-11	S		15	↓	1405		X		1	X	Y									
B-11	S		20	↓	1425		X		1	X	X									
B-11	S		25	↓	1455		X		1	X	X									
B-11	S		29.5	↓	1500		X		1	X	X									

Comments / Remarks
 Please email results and EDP to nlee@craworld.com

Turnaround Time Requested (TAT) (please circle)

STD. TAT 24 hour 72 hour 48 hour
 4 day 5 day

Relinquished by: <u>[Signature]</u>	Date: <u>4-12-12</u>	Time: <u>1630</u>	Received by: <u>Secure Location</u>	Date: <u>4-12-12</u>	Time: <u>1630</u>
Relinquished by: <u>[Signature]</u>	Date: <u>13 APR 12</u>	Time: <u>1546</u>	Received by: <u>C. Sulzer</u>	Date: <u>13 APR 12</u>	Time: <u>1546</u>

Data Package Options (please circle if required)

QC Summary Type I - Full
 Type VI (Raw Data) Coelt Deliverable not needed
 WIP (RWQCB)
 Disk

Relinquished by: <u>C. Sulzer</u>	Date: <u>13 APR 12</u>	Time: <u>1638</u>	Received by: <u>FEDEX</u>	Date: _____	Time: _____
Relinquished by Commercial Carrier: <u>UPS</u>	FedEx	Other: _____	Received by: <u>[Signature]</u>	Date: <u>4/12/12</u>	Time: <u>1638</u>
Temperature Upon Receipt: <u>16.23</u> °C	Custody Seals Intact: <u>Yes</u> No				

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	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. All other results are reported on an as-received basis.		

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>$ 25%	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

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.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

APPENDIX F

GRAB-GROUNDWATER LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

April 30, 2012

Project: 93600

Submittal Date: 04/14/2012
Group Number: 1302260
PO Number: 0015074399
Release Number: PATTEN
State of Sample Origin: CAClient Sample DescriptionB-9-W-13-120412 Grab Water
B-9-W-20-120412 Grab Water
B-9-W-30-120412 Grab Water
B-10-W-18-120412 Grab Water
B-10-W-29.5-120412 Grab Water
B-11-W-23-120412 Grab Water
B-11-W-29.5-120412 Grab Water
B-12-W-23-120413 Grab Water
B-12-W-30-120413 Grab WaterLancaster Labs (LLI) #6616817
6616818
6616819
6616820
6616821
6616822
6616823
6616824
6616825

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Chevron
COPY TO
ELECTRONIC CRA
COPY TO

Attn: CRA EDD

Attn: Nathan Lee

Respectfully Submitted,



Natalie R. Luciano
Specialist

(717) 556-7258

Sample Description: B-9-W-13-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # WW 6616817
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 09:00 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310

Submitted: 04/14/2012 10:00

San Ramon CA 94583

Reported: 04/30/2012 10:53

T0913

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	43	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	130	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	1,800	50	100	1

General Sample Comments

State of California Lab Certification No. 2501

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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 21:42	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 21:42	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	2	12108A07A	04/18/2012 15:42	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 15:42	Marie D John	1

Sample Description: B-9-W-20-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # WW 6616818
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 09:24 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T0920

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	51	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	5	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	150	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	1,400	50	100	1

General Sample Comments

State of California Lab Certification No. 2501
 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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 22:06	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 22:06	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	2	12108A07A	04/18/2012 16:08	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 16:08	Marie D John	1

Sample Description: B-9-W-30-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-9

LLI Sample # WW 6616819
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 10:15 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T0930

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	13	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	1	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	40	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	320	50	100	1

General Sample Comments

State of California Lab Certification No. 2501
 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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 19:43	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 19:43	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 16:35	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 16:35	Marie D John	1

Sample Description: B-10-W-18-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # WW 6616820
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 11:45 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T1018

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	0.7	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	5	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	0.8	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

General Sample Comments

State of California Lab Certification No. 2501
 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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 20:07	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 20:07	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 17:00	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 17:00	Marie D John	1

Sample Description: B-10-W-29.5-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-10

LLI Sample # WW 6616821
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 12:30 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T1029

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	ug/l	
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	1	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	1	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	2	0.5	1	1
GC Volatiles SW-846 8015B			ug/l	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	64	50	100	1

General Sample Comments

State of California Lab Certification No. 2501
 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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 20:31	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 20:31	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 17:45	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 17:45	Marie D John	1

Sample Description: B-11-W-23-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # WW 6616822
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 14:35 by SP

ChevronTexaco

Submitted: 04/14/2012 10:00

6001 Bollinger Canyon Rd L4310

Reported: 04/30/2012 10:53

San Ramon CA 94583

T1123

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

General Sample Comments

State of California Lab Certification No. 2501

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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 20:55	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 20:55	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 18:10	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 18:10	Marie D John	1

Sample Description: B-11-W-29.5-120412 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-11

LLI Sample # WW 6616823
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/12/2012 15:10 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T1129

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	10	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	8	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	220	50	100	1

General Sample Comments

State of California Lab Certification No. 2501
 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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	Z121101AA	04/19/2012 21:19	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z121101AA	04/19/2012 21:19	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 18:36	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 18:36	Marie D John	1

Sample Description: B-12-W-23-120413 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # WW 6616824
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/13/2012 08:40 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T1223

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

General Sample Comments

State of California Lab Certification No. 2501

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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	F121114AA	04/21/2012 02:52	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F121114AA	04/21/2012 02:52	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 19:01	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 19:01	Marie D John	1

Sample Description: B-12-W-30-120413 Grab Water
Facility# 93600 CRAW
2200 Telegraph-Oakland T0600161613 B-12

LLI Sample # WW 6616825
LLI Group # 1302260
Account # 10880

Project Name: 93600

Collected: 04/13/2012 09:00 by SP

ChevronTexaco

6001 Bollinger Canyon Rd L4310
 San Ramon CA 94583

Submitted: 04/14/2012 10:00

Reported: 04/30/2012 10:53

T1230

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles SW-846 8015B						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

General Sample Comments

State of California Lab Certification No. 2501
 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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates Water	SW-846 8260B	1	F121154AA	04/25/2012 00:14	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F121154AA	04/25/2012 00:14	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12108A07A	04/18/2012 19:26	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12108A07A	04/18/2012 19:26	Marie D John	1

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

Quality Control Summary

Client Name: ChevronTexaco
Reported: 04/30/12 at 10:53 AM

Group Number: 1302260

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

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>
Batch number: F121114AA Sample number(s): 6616824									
t-Amyl methyl ether	N.D.	0.5	1	ug/l	86		66-120		
Benzene	N.D.	0.5	1	ug/l	91		77-121		
t-Butyl alcohol	N.D.	2.	5	ug/l	93		68-125		
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	88		66-120		
Ethylbenzene	N.D.	0.5	1	ug/l	88		79-120		
di-Isopropyl ether	N.D.	0.5	1	ug/l	89		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	86		68-121		
Toluene	N.D.	0.5	1	ug/l	90		79-120		
Xylene (Total)	N.D.	0.5	1	ug/l	90		77-120		
Batch number: F121154AA Sample number(s): 6616825									
t-Amyl methyl ether	N.D.	0.5	1	ug/l	78		66-120		
Benzene	N.D.	0.5	1	ug/l	91		77-121		
t-Butyl alcohol	N.D.	2.	5	ug/l	92		68-125		
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	85		66-120		
Ethylbenzene	N.D.	0.5	1	ug/l	86		79-120		
di-Isopropyl ether	N.D.	0.5	1	ug/l	87		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	81		68-121		
Toluene	N.D.	0.5	1	ug/l	91		79-120		
Xylene (Total)	N.D.	0.5	1	ug/l	89		77-120		
Batch number: Z121101AA Sample number(s): 6616817-6616823									
t-Amyl methyl ether	N.D.	0.5	1	ug/l	83		66-120		
Benzene	N.D.	0.5	1	ug/l	92		77-121		
t-Butyl alcohol	N.D.	2.	5	ug/l	99		68-125		
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	83		66-120		
Ethylbenzene	N.D.	0.5	1	ug/l	99		79-120		
di-Isopropyl ether	N.D.	0.5	1	ug/l	83		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	88		68-121		
Toluene	N.D.	0.5	1	ug/l	102		79-120		
Xylene (Total)	N.D.	0.5	1	ug/l	102		77-120		
Batch number: 12108A07A Sample number(s): 6616817-6616825									
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	109	109	75-135	0	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

MS	MSD	MS/MSD	RPD	BKG	DUP	DUP	Dup RPD
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*- 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: ChevronTexaco
Reported: 04/30/12 at 10:53 AM

Group Number: 1302260

<u>Analysis Name</u>	<u>%REC</u>	<u>%REC</u>	<u>Limits</u>	<u>RPD</u>	<u>MAX</u>	<u>Conc</u>	<u>Conc</u>	<u>RPD</u>	<u>Max</u>
Batch number: F121114AA	Sample number(s): 6616824 UNSPK: P620342								
t-Amyl methyl ether	86	84	65-117	2			30		
Benzene	97	95	72-134	2			30		
t-Butyl alcohol	97	95	67-119	2			30		
Ethyl t-butyl ether	93	92	74-122	1			30		
Ethylbenzene	95	93	71-134	2			30		
di-Isopropyl ether	91	91	70-129	0			30		
Methyl Tertiary Butyl Ether	94	90	72-126	2			30		
Toluene	101	100	80-125	1			30		
Xylene (Total)	97	96	79-125	1			30		
Batch number: F121154AA	Sample number(s): 6616825 UNSPK: P617202								
t-Amyl methyl ether	88	94	65-117	7			30		
Benzene	97	101	72-134	4			30		
t-Butyl alcohol	91	94	67-119	3			30		
Ethyl t-butyl ether	90	93	74-122	3			30		
Ethylbenzene	94	105	71-134	11			30		
di-Isopropyl ether	94	98	70-129	5			30		
Methyl Tertiary Butyl Ether	86	89	72-126	3			30		
Toluene	87	85	80-125	3			30		
Xylene (Total)	90	94	79-125	4			30		
Batch number: Z121101AA	Sample number(s): 6616817-6616823 UNSPK: P614567								
t-Amyl methyl ether	84	80	65-117	4			30		
Benzene	102	98	72-134	4			30		
t-Butyl alcohol	96	92	67-119	4			30		
Ethyl t-butyl ether	85	83	74-122	2			30		
Ethylbenzene	105	102	71-134	3			30		
di-Isopropyl ether	86	84	70-129	3			30		
Methyl Tertiary Butyl Ether	90	87	72-126	3			30		
Toluene	110	105	80-125	5			30		
Xylene (Total)	104	102	79-125	2			30		

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: UST VOCs by 8260B - Water
Batch number: F121114AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6616824	96	102	97	89
Blank	95	100	97	88
LCS	95	104	97	95
MS	93	101	97	95
MSD	93	102	97	95
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: F121154AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6616825	98	102	97	88

*- 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: ChevronTexaco
Reported: 04/30/12 at 10:53 AM

Group Number: 1302260

Surrogate Quality Control

Blank	98	104	97	87
LCS	94	98	97	95
MS	92	99	94	103
MSD	93	97	90	100

Limits: 80-116 77-113 80-113 78-113

Analysis Name: UST VOCs by 8260B - Water

Batch number: Z121101AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

6616817	95	93	106	96
6616818	97	93	106	97
6616819	97	94	105	96
6616820	99	97	104	93
6616821	99	97	104	93
6616822	100	96	104	93
6616823	100	93	106	96
Blank	101	100	104	92
LCS	99	95	101	98
MS	100	98	103	99
MSD	99	96	104	99

Limits: 80-116 77-113 80-113 78-113

Analysis Name: TPH-GRO N. CA water C6-C12

Batch number: 12108A07A

Trifluorotoluene-F

6616817	72
6616818	71
6616819	68
6616820	69
6616821	68
6616822	68
6616823	69
6616824	70
6616825	66
Blank	69
LCS	79
LCSD	80

Limits: 63-135

*- 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.

Chevron California Region Analysis Request/Chain of Custody



Acct. #: 10880 For Lancaster Laboratories use only
 Sample #: 6616817-25

246142

SCR#: _____

041312-06 P.YOFG

G# 1302260

Facility #: 9-3600 CRA 311965
 Site Address: 2200 TELEGRAPH AVE, OAKLAND, CA
 Chevron PM: MARK HORNE Lead Consultant: CRA
 Consultant/Office: CRA / EMERYVILLE
 Consultant Prj. Mgr.: NATHAN LEE
 Consultant Phone #: 510 420 0700 Fax #: 510 420 9170
 Sampler: SEQUOIA PATTERSON
 Service Order #: _____ Non SAR:

Analyses Requested

Preservation Codes									
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTEX + MTBE 8260 <input checked="" type="checkbox"/> 8021 <input type="checkbox"/> TPH 8015 MOD GRO <input type="checkbox"/> Silica Gel Cleanup <input type="checkbox"/> TPH 8015 MOD DRO <input type="checkbox"/> 8260 full scan <input type="checkbox"/> Oxygenates <input type="checkbox"/> Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> <u>DIPE, ETBE, TAME, TBA</u> <u>8260</u>									

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ O = Other

J value reporting needed
 Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
 Confirm highest hit by 8260
 Confirm all hits by 8260
 Run ___ oxy's on highest hit
 Run ___ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421	DIPE, ETBE, TAME, TBA
B-9-W	W		13	2012-4-12	0900		X		7	X	X						X
B-9-W	W		20	↓	0924		X		7	X	X						X
B-9-W	W		30	↓	1015		X		7	X	X						X
B-10-W	W		18	↓	1145		X		7	X	X						X
B-10-W	W		29.5	↓	1230		X		7	X	X						X
B-11-W	W		23	↓	1435		X		7	X	X						X
B-11-W B-11-W	W		29.5	↓	1510		X		7	X	X						X

Comments / Remarks
 Please email results and EDF to nlee@crawworld.com

Turnaround Time Requested (TAT) (please circle)

STD. TAT 72 hour 48 hour
 24 hour 4 day 5 day

Relinquished by: [Signature] Date: 4-12-12 Time: 1630

Relinquished by: [Signature] Date: 13 APR 12 Time: 1546

Received by: Secure Location CRA Date: 4-12-12 Time: 1630

Received by: a. Solger Date: 13 APR 12 Time: 1546

Data Package Options (please circle if required)

QC Summary Type I - Full
 Type VI (Raw Data) Coelt Deliverable not needed
 WIP (RWQCB)
 Disk

Relinquished by: [Signature] Date: 13 APR 12 Time: 1630

Relinquished by Commercial Carrier:
 UPS FedEx Other _____

Temperature Upon Receipt: 18.23 °C

Received by: FEDEX Date: _____ Time: _____

Received by: [Signature] Date: April Time: 1000

Custody Seals Intact? Yes No

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	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. All other results are reported on an as-received basis.		

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>$ 25%	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

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.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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