Brian Waite
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November 15, 2012

RECEIVED

2:06 pm, Nov 20, 2012

Alameda County
Environmental Health

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

Re: Chevron Facility # 92960

Address: 2416 Grove Way, Castro Valley, CA

I have reviewed the attached report titled *Addendum to Case Closure Request* and dated November 15, 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.

Sincerely,

Brian A. Waite

Digitally signed by Brian A. Waite
DN: cn=Brian A. Waite, o=Chevron Environmental Management Company, ou=Marketing Business Unit, email=BWaite@chevron.com, c=US
Date: 2012.11.15 09:00:08 -08'00'

Brian Waite
Project Manager

Enclosure: Report

CONESTOGA-ROVERS & ASSOCIATES

10969 Trade Center Drive
Rancho Cordova, California 95670
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November 15, 2012 Reference No. 611964D

Mr. Mark Detterman, P.G., C.E.G.
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Addendum to Case Closure Request
Former Chevron Service Station 92960
2416 Grove Way
Castro Valley, California
Case No. RO0000275

Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) is submitting this *Addendum to Case Closure Request* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). CRA previously submitted the August 16, 2010 *Additional Investigation Report and Case Closure Request* (Case Closure Request) (Attachment A), in which case closure was requested based on low-risk conditions. To date, a response to this request has not been received from ACEH.

The purpose of this addendum is to present the results of our evaluation of current site conditions to the general and media-specific closure criteria included in the recently adopted *Low-Threat Underground Storage Tank Case Closure Policy* (the "policy"). The site meets the stated closure criteria; therefore, we are requesting ACEH concur that the site meets low-threat case closure criteria and grant case closure. A summary of the policy, an evaluation of the site conditions to the policy case closure criteria, and our conclusions and recommendations are presented below.

PURPOSE OF THE LOW THREAT UNDERGROUND STORAGE TANK CASE CLOSURE POLICY

On August 17, 2012, the State Water Resources Control Board (SWRCB) adopted the policy via Resolution 2012-0016. The intent of the policy is to increase cleanup process efficiency at petroleum release sites. A benefit of improved efficiency is the preservation of limited resources for mitigation of releases posing the greatest threat to human and environmental health. Per the policy, sites that meet the specified general and media-specific criteria pose a low threat to human health, safety, or the environment and are appropriate for case closure

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pursuant to Health and Safety Code section 25296.10. The policy further states that those sites that meet the criteria for low-threat closure do not require further corrective action and shall be issued a uniform closure letter. The general and media-specific criteria are described below.

GENERAL CRITERIA

The eight general criteria that must be satisfied by all candidate sites, and the site-specific evaluation for each of these criteria, are presented below.

a. The unauthorized release is located within the service area of a public water system.

Satisfied: Water for the site and surrounding vicinity is provided by the East Bay Municipal Utility District (EBMUD) from distant surface water sources.

b. The unauthorized release consists only of petroleum.

Satisfied: The unauthorized release at the site has been characterized as a release of petroleum-based products (gasoline and related constituents).

c. The unauthorized ("primary") release from the UST system has been stopped.

Satisfied: Petroleum storage and handling facilities that were the source of the release (fuel dispensers, product piping, and USTs) were removed from the site in 1986.

d. Free product has been removed to the maximum extent practicable.

Satisfied: Light non-aqueous phase liquid (LNAPL) was initially observed in well C-1 in 1989. In 1990, interim recovery of LNAPL from C-1 was initiated via bailing and pumping on a monthly basis. In 1993, a groundwater extraction (GWE) well (EW-1) and system were installed and began operation. The system operated through 1996 and removed approximately 1,200,000 gallons of groundwater/LNAPL. LNAPL was also removed from C-1 or EW-1 using a passive skimmer during this time (approximately 5 gallons). No LNAPL was observed in EW-1 from 1995 through 1996, or in C-1 from 1995 through 1998 when this well was destroyed. No LNAPL has been observed in well C-8 installed adjacent to C-1.

e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed.

Satisfied: Previous reports and information included herein contain all elements of a conceptual site model.

f. Secondary source has been removed to the extent practicable.

Satisfied: The former gasoline UST area was excavated to approximately 23 feet below grade (fbg) in 1986. Declining concentrations in groundwater indicate the lack of any significant residual secondary source material.

g. Soil and groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code section 25296.15.

Satisfied: Soil and groundwater samples have been analyzed for MTBE, and reported in accordance with Health and Safety Code section 25296.15.

h. Nuisance as defined by Water Code section 13050 does not exist at the site.

Satisfied: Conditions defined as a "nuisance" in Water Code section 13050 do not exist at the site.

MEDIA-SPECIFIC CRITERIA

Impacts to human health and the environment can occur due to releases from USTs through contact with contaminated media (groundwater, surface water, soil, and soil vapor) via various exposure pathways. In the policy, the most common exposure scenarios have been combined into three media-specific criteria:

1. Groundwater
2. Vapor Intrusion to Indoor Air
3. Direct Contact and Outdoor Air Exposure

Candidate sites must satisfy all three of these criteria, described further below.

Groundwater

It is a fundamental tenet of the policy that if the closure criteria described in the policy are satisfied at an unauthorized petroleum release site, attaining background water quality is not feasible, and applicable water quality objectives (WQOs) will be attained through natural attenuation within a reasonable amount of time, prior to the expected need for use of any affected groundwater. If a site has groundwater with a designated beneficial use that is affected by an unauthorized release, to satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds WQOs must be stable or decreasing in areal extent, and meet

all of the additional characteristics of one of the five classes of sites listed in the policy as follows:

1. a. The contaminant plume that exceeds WQOs is less than 100 feet in length.
   b. There is no free product.
   c. The nearest existing water supply well or surface water body is greater than 250 feet from the defined plume boundary.
2. a. The contaminant plume that exceeds WQOs is less than 250 feet in length.
   b. There is no free product.
   c. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.
   d. The dissolved concentration of benzene is less than 3,000 micrograms per liter (µg/L) and the dissolved concentration of MTBE is less than 1,000 µg/L.
3. a. The contaminant plume that exceeds WQOs is less than 250 feet in length.
   b. Free product may be present below the site but does not extend off-site.
   c. The plume has been stable or decreasing for a minimum of 5 years.
   d. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.
   e. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition of closure.
4. a. The contaminant plume that exceeds WQOs is less than 1,000 feet in length.
   b. There is no free product.
   c. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.
   d. The dissolved concentration of benzene is less than 1,000 µg/L and the dissolved concentration of MTBE is less than 1,000 µg/L.
5. a. The regulatory agency determines, based on an analysis of site specific conditions, that under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and WQOs will be achieved within a reasonable time frame.

Satisfied: The site satisfies the characteristics of Class 1 listed above. The petroleum hydrocarbon plume that exceeds WQOs (Environmental Screening Levels [ESLs] established by the San Francisco Bay Regional Water Quality Control Board [RWQCB]) is less than 100 feet in length, there is no LNAPL, and previous well surveys have not identified any water supply wells within 250 feet of the defined plume boundary.

Petroleum Vapor Intrusion to Indoor Air

The low-threat vapor intrusion criteria described below apply to sites where the release originated and impacted or potentially impacted adjacent parcels when: (1) existing buildings are occupied or may be reasonably expected to be occupied in the future, or (2) buildings for human occupancy are reasonably expected to be constructed in the future.

Petroleum release sites will satisfy the media-specific screening criteria for petroleum vapor intrusion if:

a. Site-specific conditions at the release site satisfy all of the characteristics and criteria of scenarios 1 through 3 as applicable, or all of the characteristics and criteria of scenario 4 as applicable; or,
b. A site-specific risk assessment for vapor intrusion is conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency; or,
c. The regulatory agency determines there is no significant risk of adversely affecting human health through the use of institutional or engineering controls.

Scenarios 1-4 of criteria (a) (existing building or future construction) are described below.

Scenario 1: Unweathered* LNAPL in Groundwater

- Depth to groundwater with unweathered* LNAPL is ≥30 feet below building foundation.
- Total TPH (TPHg + TPHd) in soil within 30 feet below building foundation is <100 milligrams per kilogram (mg/kg).

Scenario 2: Unweathered* LNAPL in Soil

- Unweathered* LNAPL in soil is ≥30 feet from building foundation in all directions, and depth to groundwater is >30 feet below building foundation.
- Total TPH in soil within 30 feet of building foundation in all directions is <100 mg/kg.

Scenario 3A: No LNAPL, dissolved phase benzene in groundwater

- Depth to groundwater is ≥5 feet below building foundation.
- Dissolved benzene in groundwater is <100 µg/L.
- Total TPH in soil within 5 feet below building foundation is <100 mg/kg.
- Oxygen (O_2) concentration in soil within 5 feet below building foundation is <4%, or no O_2 data.

Scenario 3B: No LNAPL, dissolved phase benzene in groundwater

- Depth to groundwater is ≥10 feet below building foundation.
- Dissolved benzene in groundwater is ≥100 µg/L and <1,000 µg/L.
- Total TPH in soil within 10 feet below building foundation is <100 mg/kg.
- O_2 concentration in soil within 10 feet below building foundation is <4%, or no O_2 data.

Scenario 3C: No LNAPL, dissolved phase benzene in groundwater

- Depth to groundwater is ≥5 feet below building foundation.
- Dissolved benzene in groundwater is <1,000 µg/L.
- Total TPH in soil within 5 feet below building foundation is <100 mg/kg.
- O_2 concentration in soil within 5 below building foundation is ≥4%.

Scenario 4A: Direct soil gas measurements at least 5 feet below grade or foundation at sites without bioattenuation zone**

	Benzene µg/m³	*Ethylbenzene µg/m³*	*Naphthalene µg/m³*
Residential	<85	<1,100	<93
Commercial	<280	<3,600	<310

µg/m³ – micrograms per cubic meter

Scenario 4B: Direct soil gas measurements at least 5 feet below grade or foundation at sites with bioattenuation zone**

	Benzene µg/m³	*Ethylbenzene µg/m³*	*Naphthalene µg/m³*
Residential	<85,000	<1,100,000	<93,000
Commercial	<280,000	<3,600,000	<310,000

*Unweathered LNAPL is comparable to recently dispensed fuel where product has not been subjected to significant volatilization or solubilization.
**Bioattentuation zone = total TPH <100 mg/kg in upper 5' of soil, and ≥4% oxygen in soil at 5' sample depth; a 1,000-fold bioattenuation of petroleum vapors is assumed for the zone.

Petroleum release sites shall satisfy the media-specific criteria for petroleum vapor intrusion to indoor air and be considered low-threat for the vapor intrusion to indoor air pathway if any of the above criteria are met.

Satisfied: Soil gas sampling was performed in 2004; however, the samples were collected at depths shallower than 5 fbg and therefore the results cannot be used per the policy. However,

the site satisfies scenario 3A of criteria (a) above in that the benzene concentration in groundwater is less than 100 µg/L (7 µg/L in C-8 in March 2012), there is at least a 5-foot bioattenuation zone (depth to water typically 15 fbg), and total petroleum hydrocarbon (TPH) concentrations in shallow soil in the plume area are less than 100 mg/kg.

Direct Contact and Outdoor Air Exposure

The policy describes conditions where direct contact with contaminated soil or inhalation of contaminants volatized to outdoor air poses a low threat to human health. Release sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if they meet any one of the following:

a. Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in the table below for the specified depth below ground surface. The limits from 0 to 5 fbg protect from ingestion, dermal contact, and outdoor inhalation of volatile and particulate emissions. The 5 to 10 fbg limits protect from inhalation of volatile emissions only; the ingestion and dermal contact pathways are not considered significant. In addition, if exposure to construction workers or utility trench workers is reasonably anticipated, the concentration limits for Utility Worker shall also be satisfied.

	Residential		*Commercial/Industrial*		*Utility Worker*
Constituent	*0–5 fbg (mg/kg)*	*Volatilization to outdoor air (5–10 fbg) (mg/kg)*	*0–5 fbg (mg/kg)*	*Volatilization to outdoor air (5–10 fbg) (mg/kg)*	*0–10 fbg (mg/kg)*
Benzene	1.9	2.8	8.2	12	14
Ethylbenzene	21	32	89	134	314
Naphthalene	9.7	9.7	45	45	219
PAH*	0.063	NA	0.68	NA	4.5

* Based on the seven carcinogenic polycyclic aromatic hydrocarbons (PAHs) as benzo(a)pyrene toxicity equivalent [BaPe]. The PAH screening level is only applicable where soil is affected by either waste oil and/or Bunker C fuel.
NA = not applicable

b. Maximum concentrations of petroleum constituents in soil are less than levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health.

c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health.

Satisfied: The site meets the characteristics of criteria (a) above in that the maximum detected concentrations of benzene and ethylbenzene in soil samples collected in the 0 to 5 fbg and 5 to 10 fbg intervals do not exceed the most conservative limits (residential). No motor oil was detected in the two soil samples collected beneath the used-oil UST; therefore, soil does not appear impacted by waste oil and the PAH screening levels, including naphthalene, are not applicable.

CONCLUSIONS AND RECOMMENDATIONS

Based on the information presented in this and previous reports, site conditions meet the general and media-specific criteria of a low-threat UST release case established in the policy, and therefore pose a low threat to human health, safety, and the environment. A completed SWRCB low-threat checklist is included as Attachment B. The site satisfies the case closure requirements of Health and Safety Code section 25296.10, and case closure is consistent with Resolution 92-49 that requires cleanup goals be met within a reasonable time frame. Therefore, on behalf of Chevron, CRA respectfully requests ACEH grant case closure.

As the impacted groundwater poses no significant threat to human health or the environment, effective immediately, Chevron shall cease groundwater monitoring and sampling activities pending a response and further direction from ACEH.

We appreciate your assistance on this project and look forward to your reply. Please contact James Kiernan at (916) 889-8917 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

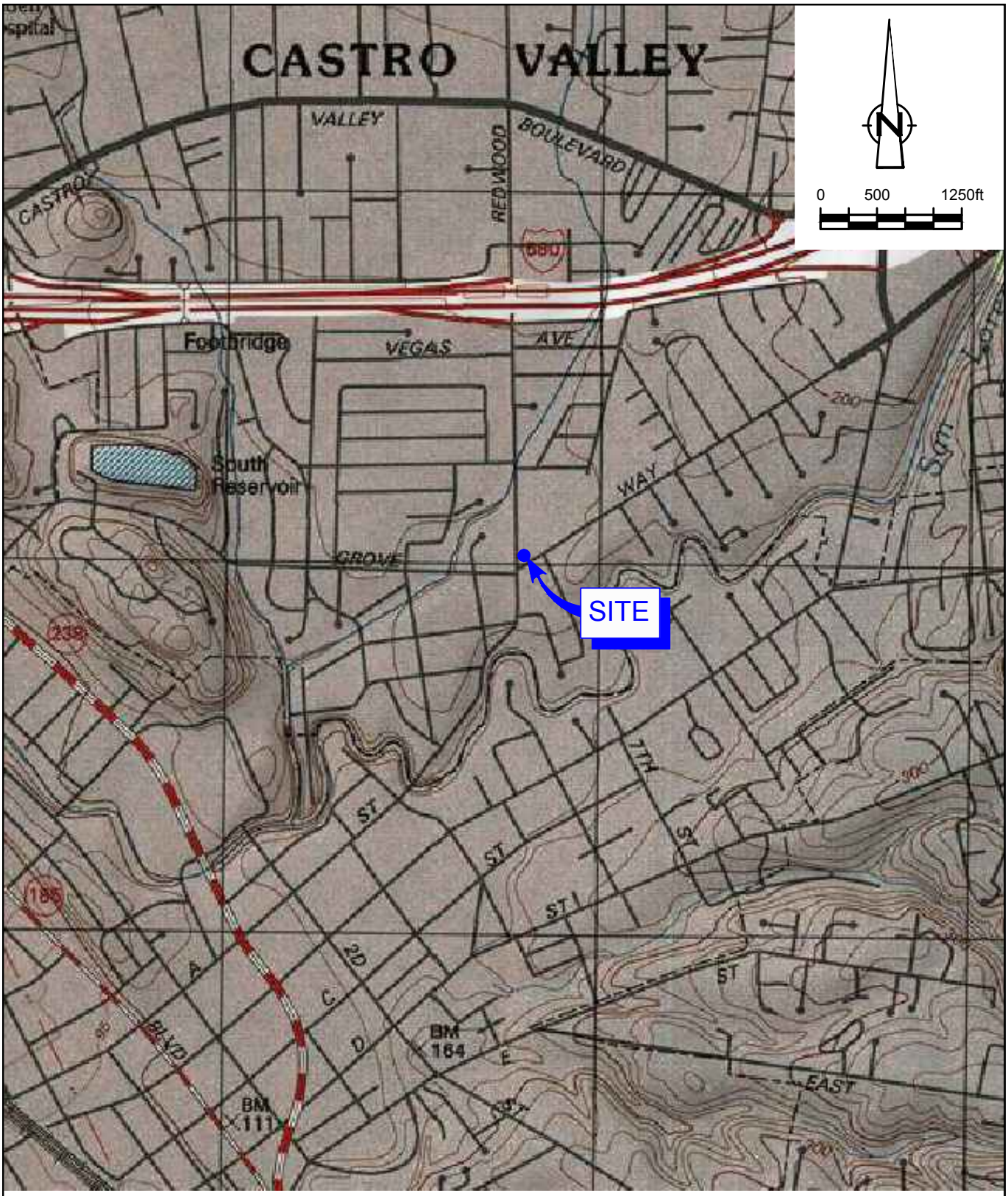
Benjamin R. Summersett James P. Kiernan, P.E.

BS/de/13
Encl.

Figure 1	Vicinity Map
Figure 2	Site Plan
Attachment A	August 16, 2010 *Additional Investigation Report and Case Closure Request*
Attachment B	Low-Threat Checklist

cc: Mr. Brian Waite, Chevron *(electronic copy)*
Mr. Phil Conley, First Presbyterian Church of Hayward

FIGURES



SOURCE: TOPO! MAPS.

figure 1

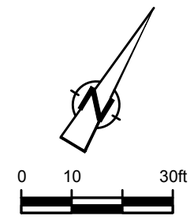
VICINITY MAP
FORMER CHEVRON SERVICE STATION 92960
2416 GROVE WAY
Castro Valley, California

611964D-00(013)GN-WA001 OCT 29/2012

HISTORICAL GROUNDWATER
FLOW DIRECTION

LEGEND

- EXPLORATORY BORING LOCATION
- SOIL VAPOR SAMPLE LOCATION
- MONITORING WELL LOCATION
- ABANDONED WELL LOCATION
- WELL LOCATION PAVED OVER



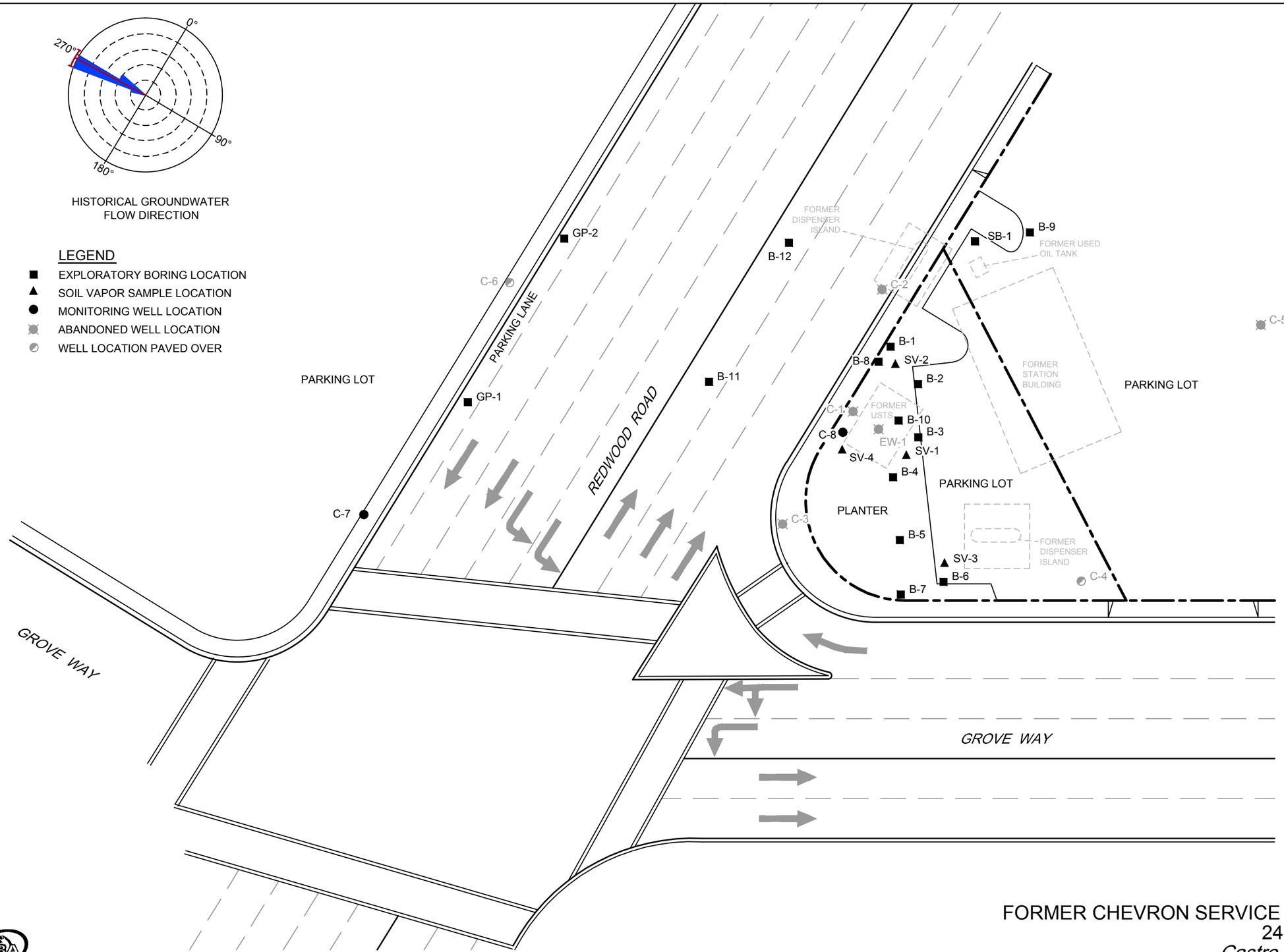


figure 2

SITE PLAN
FORMER CHEVRON SERVICE STATION 92960
2416 GROVE WAY
Castro Valley, California

ATTACHMENT A

AUGUST 16, 2010 ADDITIONAL INVESTIGATION REPORT AND CASE CLOSURE REQUEST

Stacie H. Frerichs
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9655
Fax (925) 842-8370

August 16, 2010
(date)

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

Re: Chevron Facility #_9-2960_____

Address: 2416 Grove Way, Castro Valley, California_____

I have reviewed the attached report titled *Additional Investigation Report and Case Closure Request* _____ and dated August 16, 2010.

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.

Sincerely,

SH Frerichs

Stacie H. Frerichs
Project Manager

Enclosure: Report

CONESTOGA-ROVERS
& ASSOCIATES

10969 Trade Center Drive, Suite 106, Rancho Cordova, CA 95670
Telephone: 916-889-8900 Facsimile: 916-889-8999
www.CRAworld.com

August 16, 2010

Reference No. 611964

Mr. Mark Detterman P.G., C.E.G.
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Additional Investigation Report and
Case Closure Request
Former Chevron Station 9-2960
2416 Grove Way
Castro Valley, California
LOP Case RO0000275

Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) has prepared this *Additional Investigation Report and Case Closure Request* on behalf of Chevron Environmental Management Company (Chevron) presenting the results of the recent investigation at the site referenced above. In a letter dated October 23, 2008 (Attachment A), Alameda County Environmental Health (ACEH) requested additional investigation at the site to further evaluate the lateral and vertical extent of impacted groundwater downgradient of the site. To accomplish these objectives, two additional exploratory borings (GP-1 and GP-2) were drilled downgradient of the site. The work was performed in general accordance with CRA's *Work Plan for Additional Subsurface Investigation* (work plan) dated January 21, 2009. Presented below are the site description and background, details and results of the investigation, and our conclusions and recommendations.

SITE DESCRIPTION AND BACKGROUND

The site is located at the northeast corner of the intersection of Grove Way and Redwood Road in Castro Valley, California (Figure 1), and is currently a portion of a Trader Joe's grocery store parking lot and landscaped area. The site was occupied by a Chevron service station from at least 1965 through 1986 when the station was demolished. Former station facilities included a station building, two 7,500-gallon and one 2,000-gallon gasoline underground storage tanks (USTs), a 550-gallon used-oil UST, two dispenser islands, and associated piping (Figure 2). Following station demolition, the site remained a vacant lot; by 2000, the existing parking lot and landscaping had been constructed. The site is located in a mixed commercial and residential area. Surrounding properties are commercial, with residential further to the west and northwest.

Environmental work at the site has been ongoing since 1986. Prior to the current investigation, monitoring wells C-1 through C-8 have been installed, borings B-1 through B-12 and SB-1 have been drilled, and a soil vapor survey has been performed. An extraction well (EW-1) was also installed

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and a groundwater and soil vapor extraction system operated at the site. A summary of previous environmental investigation and remediation work at the site is included as Attachment B. The approximate well and boring locations are shown on Figure 2.

On June 30, 2005, Cambria Environmental Technology, Inc. (now CRA) submitted a *Closure Request* based on low-risk conditions as specified by the Regional Water Quality Control Board (RWQCB). However, in a subsequent meeting, ACEH requested additional investigation prior to consideration of case closure; including further investigation downgradient of the site. Therefore, in 2007, downgradient borings B-11 and B-12 were drilled in Redwood Road. Elevated concentrations of total petroleum hydrocarbons as gasoline (TPHg) (67,000 micrograms per liter [µg/L]) and benzene, toluene, ethylbenzene, and xylenes (BTEX) (benzene at 6,600 µg/L) were detected in the groundwater sample collected at approximately 17 feet below grade (fbg) from boring B-11; lower concentrations of TPHg (4,200 µg/L) and BTEX (benzene at 100 µg/L) were detected in the sample collected at 28 fbg. Petroleum hydrocarbons were not detected in the groundwater sample collected at approximately 32 fbg from boring B-12.

Based on these results, in the October 23, 2008 letter ACEH requested further evaluation of the downgradient extent of impacted groundwater. The downgradient extent appeared to already have been adequately defined as TPHg and BTEX were not detected in well C-6 (located directly downgradient of B-11) prior to it being paved over in 2000 with the exception of low concentrations during one anomalous event. However, CRA subsequently prepared and submitted the January 21, 2009 work plan that proposed drilling one boring between wells C-6 and C-7 and attempting to locate paved-over well C-6 for redevelopment and collection of a groundwater sample. If C-6 could not be located, an additional boring would be drilled in the vicinity to evaluate current groundwater quality in this area. An attempt to locate C-6 in 2009 using geophysical methods was unsuccessful; hence the second boring would be drilled.

INVESTIGATION ACTIVITIES

Exploratory borings GP-1 and GP-2 were drilled offsite across Redwood Road to further evaluate the extent of impacted groundwater downgradient of the site. Boring GP-1 was located between well C-7 and former well C-6, and boring GP-2 was located in the area of former well C-6. The approximate boring locations are shown on Figure 2. The details of the investigation are presented in the following sections. Fieldwork was performed on June 2, 2010 by CRA Staff Scientist Chris Benedict under the supervision of James Kiernan, P.E.

Drilling Activities
Prior to drilling, CRA obtained Permit No. 2010-0288 from Alameda County Public Works Agency for the borings. A copy of the permit is included as Attachment C. Drilling activities were performed by PeneCore Drilling (C-57 License 906899) of Woodland, California, under the supervision of CRA.

The upper 5 feet of each boring was first cleared for underground utilities using a hand-auger. Following utility clearance, the borings were advanced to the total depth using truck-mounted direct-push equipment. Dual-tube technology (outer casing that remains in place during drilling) was utilized to minimize the risk of cross-contamination. Borings GP-1 and GP-2 were advanced to total depths of approximately 34 and 35 fbg, respectively.

Soil samples were generally obtained continuously from the borings for logging and observation purposes. Below 5 fbg, the soil samples were collected using a macro-core sampler containing a 5-foot acetate liner hydraulically driven into undisturbed soil at the bottom of the borehole at each interval. The soil encountered in the borings was logged in accordance with American Society for Testing and Materials (ASTM) D-2488 protocols, and consisted of clay and silt with varying amounts of sand and gravel to approximately 15 fbg; below 15 fbg layers of silty sand and gravel were also observed. Copies of the boring logs are included in Attachment C. Soil samples were screened in the field for the presence of organic vapors using a photo-ionization detector (PID) and visually observed for any evidence of petroleum hydrocarbon impact. The PID measurements are also presented on the boring logs. CRA's standard field procedures are included as Attachment D.

Groundwater was first encountered in the borings at approximately 20 fbg within a layer of silty sand with gravel to silty gravel with sand; deeper groundwater was encountered in the borings at approximately 34 fbg within a deeper water-bearing layer of silty sand with gravel.

Soil Sampling and Laboratory Analysis
Soil samples were collected and retained for laboratory analysis from the borings at approximate depths of 5, 10, 15, and 20 fbg. The samples at 5 fbg were collected using the hand-auger; the samples below 5 fbg were cut from the acetate liner. The soil samples were capped with Teflon tape and plastic end caps, labeled, placed in an ice-chilled cooler, and transported under chain-of-custody to Lancaster Laboratories, Inc. (Lancaster) in Lancaster, Pennsylvania, for analysis. The soil samples were analyzed for the following constituents:

- TPHg by EPA Method 8015B.
- BTEX and the five fuel oxygenates (methyl tertiary butyl ether [MTBE], di-isopropyl ether [DIPE], ethyl tertiary butyl ether [ETBE], tertiary amyl methyl ether [TAME], and tertiary butyl alcohol [TBA]) by EPA Method 8260B.

Groundwater Sampling and Laboratory Analysis
Depth-discrete groundwater samples were collected at approximate depths of 20 fbg and 35 fbg from boring GP-1, and approximate depths of 20 fbg and 34 fbg from boring GP-2. The groundwater samples were collected by removing the drill rods, setting temporary slotted PVC casing in the borehole, and slightly retracting the outer casing to allow for the infiltration of groundwater. The samples were then collected by lowering a disposable Teflon bailer down the PVC casing to the screen zone. To further minimize the risk of cross-contamination, the borehole was dewatered using tubing equipped with a check valve after the collection of the shallow groundwater samples and prior to further drilling. The groundwater samples were collected in the appropriate laboratory-supplied containers, placed in an ice-chilled cooler, and transported under chain-of-custody to Lancaster for analysis. The groundwater samples were analyzed for the same constituents as the soil samples.

Investigation-Derived Waste
Soil cuttings and decontamination rinsate generated during drilling activities were temporarily stored in a 55-gallon drum. The drum was removed from the site on the day of the drilling by Integrated Wastestream Management (IWM) of San Jose, California, profiled, and transported to a permitted facility for disposal.

SOIL SAMPLE ANALYTICAL RESULTS

No TPHg, BTEX, or fuel oxygenates were detected in any of the soil samples. The soil sample analytical results are presented in Table 1. A copy of the laboratory report and chain-of-custody documentation is included as Attachment E.

GROUNDWATER SAMPLE ANALYTICAL RESULTS

No TPHg, BTEX, or fuel oxygenates were detected in the groundwater samples with the exception of TPHg at 89 µg/L in the sample collected at 20 fbg from boring GP-2. The groundwater sample analytical results are presented in Table 2. A copy of the laboratory report and chain-of-custody documentation is included as Attachment E.

CONCLUSIONS AND RECOMMENDATIONS

CRA advanced offsite exploratory borings GP-1 and GP-2 during this investigation to further evaluate the downgradient extent of impacted groundwater. Petroleum hydrocarbons were not detected in the soil samples collected from the borings, and generally were not detected in the groundwater samples collected from borings GP-1 (20 and 35 fbg) and GP-2 (20 and 34 fbg) with the exception of a low concentration of TPHg (89 µg/L) in the sample collected at 20 fbg from GP-2.

CONESTOGA-ROVERS
& ASSOCIATES

August 16, 2010 Reference No. 611964

Based on the analytical results, the downgradient extent of impacted groundwater has been adequately defined.

Based on the results of this investigation, the historical groundwater monitoring results, and the site conditions, the site meets the RWQCB criteria for a low-risk groundwater case. The information requested by ACEH prior to consideration of case closure has been provided. Therefore, CRA, on behalf of Chevron, respectfully requests case closure for the site.

We appreciate your assistance on this project and look forward to your reply. If you have any questions or need any additional information, please contact Mr. James Kiernan at (916) 889-8917.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Christopher J. Benedict

James P. Kiernan, P.E. C68498

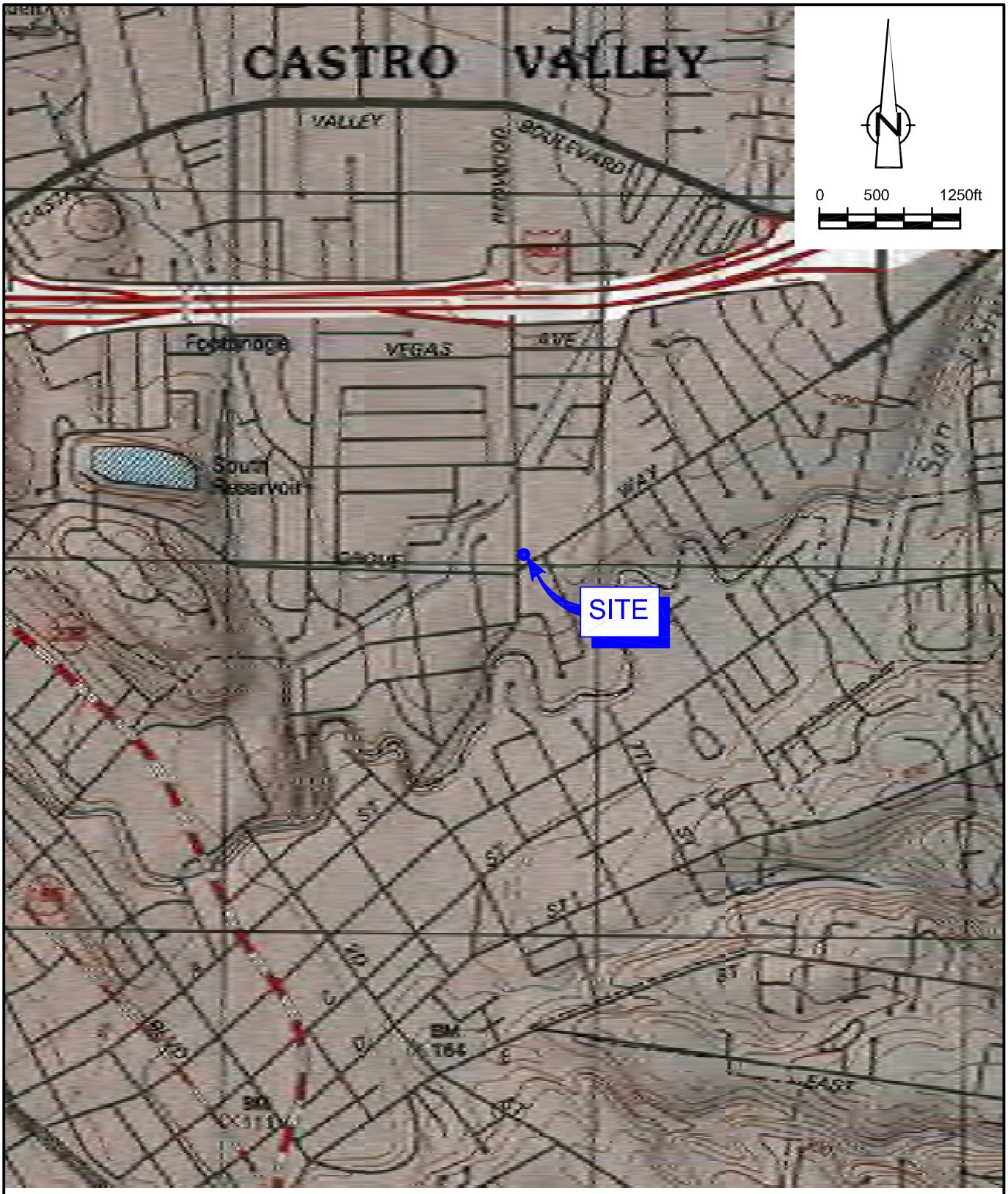
REGISTERED PROFESSIONAL ENGINEER
JAMES P. KIERNAN
No. 68498
Exp. 9/30/11
CIVIL
STATE OF CALIFORNIA
8/17/10

CB/jt/9
Encl.

Figure 1	Vicinity Map
Figure 2	Site Plan
Table 1	Soil Sample Analytical Results
Table 2	Groundwater Sample Analytical Results
Attachment A	ACEH Letter Dated October 23, 2008
Attachment B	Summary of Previous Environmental Investigation and Remediation
Attachment C	Drilling Permit and Boring Logs
Attachment D	Standard Field Procedures
Attachment E	Laboratory Reports

cc: Ms. Stacie Frerichs, Chevron (*electronic copy*)
Mr. Phil Conley, First Presbyterian Church

FIGURES



SOURCE: TOPO! MAPS.

figure 1

VICINITY MAP
FORMER CHEVRON SERVICE STATION 9-2960
2416 GROVE WAY
Castro Valley, California

611964-299(009)GN-WA001 JUN 17/2010

HISTORICAL GROUNDWATER
FLOW DIRECTION

LEGEND

- EXPLORATORY BORING LOCATION
- SOIL VAPOR SAMPLE LOCATION
- MONITORING WELL LOCATION
- ABANDONED WELL LOCATION
- WELL LOCATION PAVED OVER

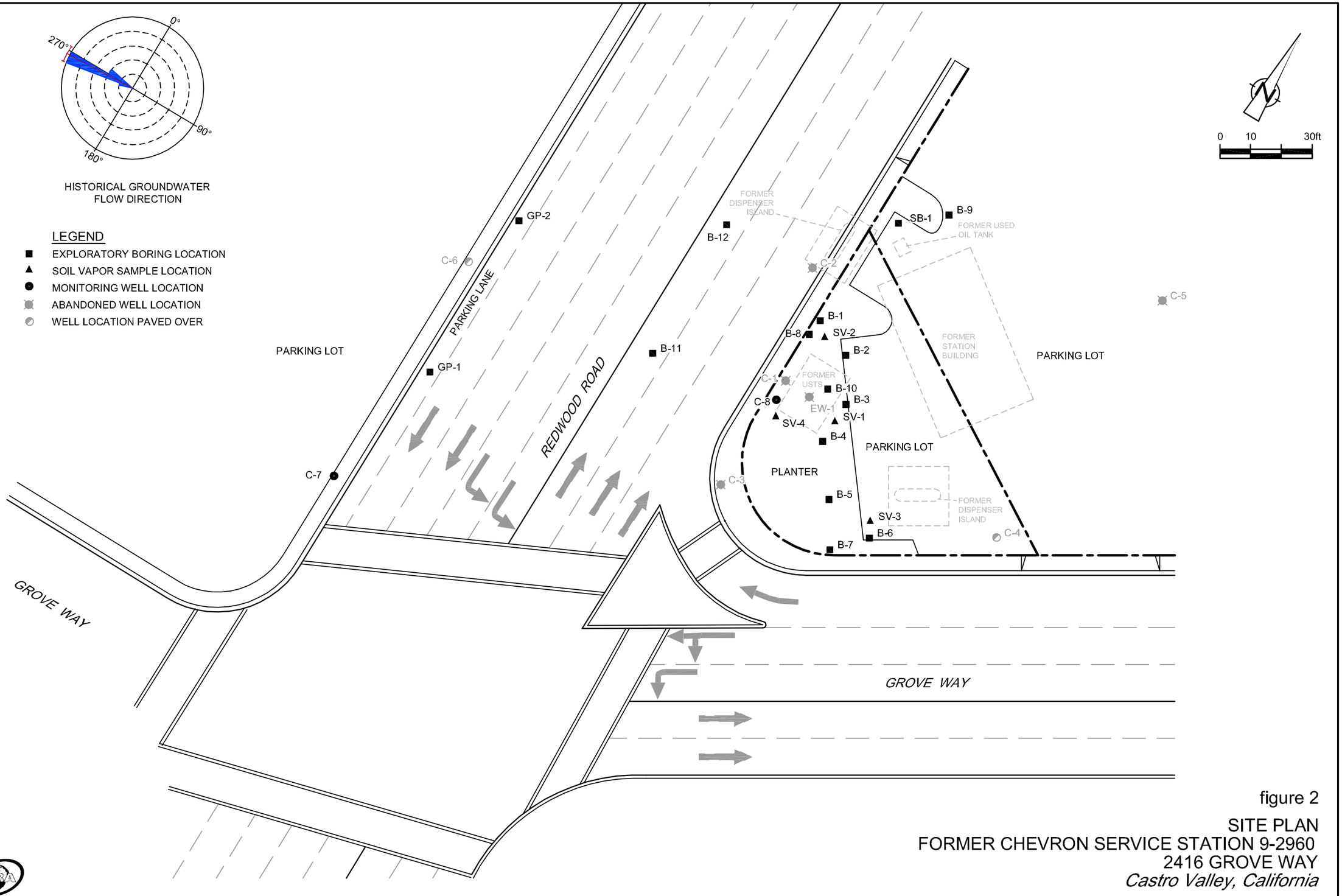


figure 2

SITE PLAN
FORMER CHEVRON SERVICE STATION 9-2960
2416 GROVE WAY
Castro Valley, California

611964-299(009)GN-WA002 AUG 11/2010

TABLES

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS
FORMER CHEVRON STATION 9-2960
2416 GROVE WAY
CASTRO VALLEY, CALIFORNIA

Boring ID	*Sample Depth (fbg)*	*Sample Date*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*TAME*	*TBA*	*ETBE*	*DIPE*
			← Concentrations reported in milligrams per kilogram (mg/kg) →									
GP-1	5	6/2/10	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.019	<0.001	<0.001
	10	6/2/10	<1	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.019	<0.0009	<0.0009
	15	6/2/10	<0.9	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.019	<0.0009	<0.0009
	20	6/2/10	<1	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.019	<0.0009	<0.0009
GP-2	5	6/2/10	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.019	<0.001	<0.001
	10	6/2/10	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.019	<0.001	<0.001
	15	6/2/10	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.019	<0.001	<0.001
	20	6/2/10	<1	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.019	<0.0009	<0.0009

Abbreviations/Notes:
fbg = feet below grade
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015
Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B
MTBE = Methyl tertiary butyl ether by EPA Method 8260B
TAME = Tertiary amyl methyl ether by EPA Method 8260B
TBA = Tertiary butyl alcohol by EPA Method 8260B
ETBE = Ethyl tertiary butyl ether by EPA Method 8260B
DIPE = Di-isopropyl ether by EPA Method 8260B
<x = Not detected at or above stated laboratory reporting limit

TABLE 2

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FORMER CHEVRON STATION 9-8341
3530 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Boring ID	*Sample Depth (fbg)*	*Sample Date*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*TAME*	*TBA*	*ETBE*	*DIPE*
			← Concentrations reported in micrograms per liter (µg/L) →									
GP-1	20	6/2/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5
	35	6/2/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5
GP-2	20	6/2/10	89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5
	34	6/2/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5

Abbreviations/Notes:
fbg = feet below grade
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015
Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B
MTBE = Methyl tertiary butyl ether by EPA Method 8260B
TAME = Tertiary amyl methyl ether by EPA Method 8260B
TBA = Tertiary butyl alcohol by EPA Method 8260B
ETBE = Ethyl tertiary butyl ether by EPA Method 8260B
DIPE = Di-isopropyl ether by EPA Method 8260B
<x = Not detected at or above stated laboratory reporting limit

ATTACHMENT A

ACEH LETTER DATED OCTOBER 23, 2008

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

CRA
NOV 0 3 2008
Received
JK

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

October 23, 2008

Mr. Ian Robb
Chevron Environmental Management
6001 Bollinger Canyon Rd K2256
PO Box 6012
San Ramon, CA 94583-2324

Ms Debby Scott
First Presbyterian Church of Hayward
2490 Grove Way
Castro Valley, CA 94546-7106

Subject: Fuel Leak Case No. RO0000275 (Global ID # T0600100318), Chevron #9-2960, 2416 Grove Way, Castro Valley, 94546

Dear: Mr. Robb and Ms. Scott

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site and the document entitled "Subsurface Investigation Report," received June 29, 2007 and prepared by Conestoga Rovers Associates (CRA). Three soil borings were installed during the investigation and soil sampling detected residual contamination at concentrations of up to 1.3 ppm TPHg and 0.011 ppm benzene. However, up to 67,000 µg/L TPHg, 6,600 µg/L benzene and 460 µg/L TBA were detected in groundwater downgradient of your site. Results from the investigation indicate that the vertical and lateral extent of contamination downgradient of your site is undefined. Therefore we request prepare a scope of work to evaluate the extent of contamination downgradeint of your site.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below.

TECHNICAL COMMENTS

1. **Downgradient Site Characterization**. Recent site characterization activities, including the installation of 2 soil borings located downgradient of the site detected elevated levels of dissolved phase contamination in two distinct water bearing zones. The concentrations of up to 67,000 µg/L TPHg, 6,600 µg/L benzene and 460 µg/L TBA were detected in the upper water bearing zone at 17 feet bgs, while 4,200 µg/L TPHg, 100 µg/L benzene and 15 µg/L TBA were detected in the lower water bearing zone at 28 feet bgs in soil boring B-11. Analytical data collected during the investigation indicate that the vertical and horizontal extent of the dissolved phase plume is currently undefined downgradient of your site. Therefore we request that you propose a scope of work to address the above-mentioned concerns and submit a work plan according to the schedule outlined below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Steven Plunkett), according to the following schedule:

- **January 21, 2009** – Work Plan

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

ELECTRONIC SUBMITTAL OF REPORTS

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

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

If you have any questions, please call me at (510) 383-1761 or send me an electronic mail message at steven.plunkett@acgov.org.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

Donna Drogos, PE
Supervising Hazardous Materials Specialist

cc: Laura Genin
CRA
5900 Hollis Street, Suite A
Emeryville, CA 94608

Donna Drogos, ACEH,Steven Plunkett ACEH, File

ATTACHMENT B

SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATION AND REMEDIATION

SUMMARY OF ENVIRONMENTAL INVESTIGATION AND REMEDIATION
FORMER CHEVRON STATION 9-2960

1986 Underground Storage Tank Removal

According to EA Engineering, Science, and Technology, Inc. (EA) all aboveground and underground structures, including underground storage tanks (USTs) and associated piping were removed from the site in June 1986; including one 550-gallon used-oil UST, and two 7,500-gallon and one 2,000-gallon gasoline USTs. Blaine Tech Services (Blaine Tech) collected soil samples from the gasoline and used-oil UST excavations. Concentrations of total petroleum hydrocarbons as gasoline (TPHg) ranged from 490 milligrams per kilogram (mg/kg) in soil sample 106 at 18 feet below grade (fbg), to 5,200 mg/kg in soil sample 1 at 18 fbg. Waste oil was not detected in the two samples collected from the used-oil UST excavation. Details were summarized in Blaine Tech's *Field Sampling* report dated July 10, 1986 and EA's *Report of Investigation and Risk Assessment,* dated November 11, 1987.

1986 Well Installation

In October 1986, EMCON Associates (EMCON) installed monitoring wells C-1 through C-4. The initial groundwater samples collected from the wells contained TPHg and benzene at concentrations ranging from 570 (C-4) to 37,000 micrograms per liter (µg/L) (C-1) and 3 (C-4) to 6,400 µg/L (C-1), respectively. No soil samples were collected for laboratory analysis from the well borings. The details of the investigation were summarized in EMCON's *Memorandum,* dated November 4, 1986.

1990 Well Installation

In August 1990, GeoStrategies, Inc. (GSI) installed offsite wells C-5, C-6, and C-7 to further evaluate the extent of hydrocarbons in groundwater. Soil samples were collected from boring C-5 at 9 fbg, boring C-6 at 15 and 20.5 fbg, and boring C-7 at 14.5 fbg and analyzed for TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX), which were not detected. The initial groundwater samples collected from the wells did not contain TPHg or BTEX. It was also reported that 100 gallons of groundwater (2 gallons of light non-aqueous phase liquid [LNAPL]) was removed from well C-1 in October 1990. The details of the investigation were summarized in GSI's *Well Installation Report,* dated November 15, 1990.

1991 Soil Vapor Extraction (SVE) Pilot Test

In December 1991, Weiss Associates (WA) conducted a SVE pilot test at the site. Extraction was performed from wells C-1 through C-3. Five vacuum influence monitoring probes (VP-1 through VP-5) were installed to evaluate the radius of influence (ROI). The test was conducted over two days. The hydrocarbon concentrations detected in the extracted vapor ranged from 17,000 to 110,000 parts per million by volume (ppmv) and the removal rates ranged from 70 to 945 pounds of TPHg per day. Based on the results of the test, it was concluded that SVE should be effective at the site. Further details of the pilot test were presented in WA's January 15, 1992 *Soil Vapor Extraction Test Report*.

1993 Groundwater Extraction (GWE) and SVE System

WA installed extraction well EW-1, and began GWE in October 1993. Treated groundwater was discharged under permit to the sanitary sewer. The SVE system was connected to well C-1 and began operation in June 1994. Extracted vapor was treated using a thermal oxidation unit prior to discharge to the atmosphere. The system operated through 1996 and removed approximately 1,200,000 gallons of groundwater and 9,000 pounds of hydrocarbons (including LNAPL removal with a passive skimmer placed in well C-1 or EW-1). In 1997, the system was shut down and removed with the approval of Alameda County Environmental Health (ACEH). Further details were presented in WA's *Discharge Compliance Report: August-October 1996*, dated January 28, 1997.

1997 Subsurface Investigation

In February 1997, Gettler-Ryan Inc. (G-R) advanced borings B-1 through B-6 to evaluate soil quality near the former product piping and dispenser island areas. Borings B-1 though B-4 were advanced to a total depth of 16.5 fbg; borings B-5 and B-6 were advanced to 19.5 fbg. A total of 22 soil samples were collected at various depths (ranging from 2.5 to 18.6 fbg) from the borings and analyzed for TPHg and BTEX. TPHg was detected in nine of the samples at concentrations ranging from 2 (B-2 at 11 fbg) to 2,300 mg/kg (B-1 at 16 fbg). Benzene was detected in five of the samples at concentrations ranging from 0.0062 (B-3 at 15.5 fbg) to 13 mg/kg (B-1 at 16 fbg). Low concentrations of toluene, ethylbenzene, and xylenes (up to 160 mg/kg) were also detected in several of the samples. Based on the results of the investigation, it was concluded that soil beneath the former dispenser islands had been impacted; the majority of the impacted soil appeared to be present between 2.5 and 5.5 fbg. Soil beneath the former piping did not appear to be impacted. Soil between 16 and 19 fbg (capillary fringe zone) also appeared to be impacted. The details of the investigation were presented in G-R's *Limited Subsurface Environmental Investigation Near the Former Product Piping and Dispenser Islands at Former Chevron Service Station #9-2960,* dated February 21, 1997.

1997 Well Abandonment and Destruction

In April 1997, G-R destroyed offsite well C-5 to facilitate planned construction activities in this area. Wells C-1, C-2, C-3 and EW-1 were destroyed in September 1998, prior to the Redwood Road widening project. The wells were destroyed by overdrilling. Wells C-4 and C-6 were paved over during the road widening project. Numerous attempts to recover the wells were made by G-R but the wells were not located. The details of the work were summarized in G-R's *Well Abandonment at Former Chevron Service Station #9-2960,* dated May 29, 1997 and *Well Destruction Report,* dated October 16, 1998.

2002 Exploratory Borings and Monitoring Well Installation

In February 2002, Delta Environmental Consultants, Inc. (Delta) installed onsite monitoring well C-8 and advanced borings B-7 through B-9 to evaluate remaining impacts in soil and groundwater near the former USTs and dispenser islands, and to define the lateral extent of impacted groundwater upgradient of well C-2. Well C-8 was installed to 25 fbg and borings B-7 through B-9 were drilled to depths of 20 to 25 fbg. A total of 11 soil samples were collected at various depths (ranging from 6 to 15 fbg) from the exploratory and well borings and analyzed for TPHg, BTEX, and methyl tertiary butyl ether (MTBE). TPHg was only detected in the soil

samples collected at 10 fbg from boring B-8 (24 mg/kg) and 14.5 fbg from boring C-8 (4.3 mg/kg). BTEX and MTBE generally were not detected in the soil samples with the exception of xylenes at 66 mg/kg in the sample collected at 10 fbg from boring B-8. Grab-groundwater samples were also collected from borings B-7, B-8, and B-9 and analyzed for TPHg, BTEX, and fuel oxygenates. An elevated concentration of TPHg (8,600 µg/L) was detected in the sample collected from boring B-8; lower concentrations of BTEX (benzene at 25 µg/L) were also detected. Only low concentrations of TPHg (260 µg/L) and BTEX (benzene at 0.73 µg/L) were detected in the sample collected from boring B-8. TPHg and BTEX were not detected in the sample collected from boring B-9. The initial groundwater sample collected from well C-8 contained elevated concentrations of TPHg (11,000 µg/L) and benzene (380 µg/L). Fuel oxygenates were not detected in any of the groundwater samples. Based on the results of the investigation, it was concluded that the dissolved hydrocarbon plume was delineated and appeared to be stable. This work was detailed in Delta's May 30, 2002 *Monitoring Well Installation and Soil Boring Report.*

2004 Exploratory Boring and Soil Vapor Point Installation

In April 2004, Cambria Environmental Technology, Inc. (Cambria [now CRA]) advanced boring SB-1 to 22 fbg and installed four shallow (less than 5 fbg) temporary soil vapor points (SV-1 through SV-4) to evaluate soil vapor quality and to further define the methyl tertiary butyl ether (MTBE) plume. Soil samples were collected from boring SB-1 at approximate depths of 10, 18, and 22 fbg and analyzed for TPHg, BTEX, fuel oxygenates, 1,2-dichloroethane (1,2-DCA), and ethylene dibromide (EDB), which were not detected in the soil samples with the exception of TPHg at 3.6 mg/kg in the sample collected at 18 fbg. A grab-groundwater sample was also collected from boring SB-1 and analyzed for the same constituents; only low concentrations of TPHg (180 µg/L), benzene (0.5 µg/L), and ethylbenzene (0.9 µg/L) were detected. Soil vapor samples were collected from the vapor points and analyzed for BTEX, oxygen, and carbon dioxide. Benzene was detected in samples SV-2 and SV-3 at concentrations of 100 micrograms per cubic meter (µg/m^3) and 9.7 µg/m^3, respectively. Low concentrations of toluene (up to 16 µg/m^3), ethylbenzene (5.1 µg/m^3), and xylenes (up to 7.4 µg/m^3) were detected in samples SV-1 through SV-3. BTEX were not detected in sample SV-4; however, the reporting limits were elevated. Based on the results of the investigation, it was concluded that as the site was used for commercial purposes, no further work was necessary. The details of the investigation were summarized in Cambria's *Subsurface Investigation Report,* dated July 29, 2004.

2007 Subsurface Investigation

In March 2007, Cambria advanced onsite boring B-10 and offsite borings B-11 and B-12 to further evaluate the lateral and vertical extent of hydrocarbons in soil and groundwater. Boring B-10 was located in the area of the former gasoline USTs, and borings B-11 and B-12 were located in Redwood Road. A total of 15 soil samples were collected at various depths (ranging from 5 to 28 fbg) from the borings and analyzed for TPHg, BTEX, fuel oxygenates, 1,2-DCA, and EDB. TPHg was only detected in the sample collected at 20 fbg from boring B-10 (1.3 mg/kg). Low concentrations of BTEX (up to 0.013 mg/kg) were detected in three of the samples. Fuel oxygenates, 1,2-DCA, and EDB generally were not detected in the samples with the exception of MTBE at 0.0008 mg/kg in the sample collected at 20 fbg from boring B-12, and tertiary butyl

alcohol (TBA) (up to 0.068 mg/kg) in the samples collected at 15 fbg and 20 fbg from boring B-11.

Groundwater samples were also collected from borings B-10 (20 and 28 fbg), B-11 (17 and 28 fbg), and B-12 (32 fbg) and analyzed for the same constituents. TPHg was detected in groundwater at concentrations of 35,000 µg/L (B-10 at 20 fbg), 1,700 µg/L (B-10 at 28 fbg), 67,000 µg/L (B-11 at 17 fbg) and 4,200 µg/L (B-11 at 28 fbg). Benzene was detected at concentrations of 1,500 µg/L (B-10 at 20 fbg), 23 µg/L (B-10 at 28 fbg), 6,600 µg/L (B-11 at 17 fbg), and 100 µg/L (B-11 at 28 fbg). TPHg and BTEX were not detected in the groundwater sample collected from boring B-12. The remaining analytes generally were not detected in the groundwater samples with the exception of TBA at 130 µg/L (B-10 at 20 fbg), 3 µg/L (B-10 at 28 fbg), 460 µg/L (B-11 at 17 fbg) and 15 µg/L (B-11 at 28 fbg). The details were summarized in CRA's *Subsurface Investigation Report,* dated June 27, 2007.

ATTACHMENT C

DRILLING PERMIT AND BORING LOGS

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: 04/27/2010 By jamesy

Permit Numbers: W2010-0288
Permits Valid from 06/02/2010 to 06/03/2010

Application Id: 1272064233180 **City of Project Site:** Castro Valley
Site Location: 2416 Grove Way, Castro Valley, CA
Project Start Date: 06/02/2010 **Completion Date:** 06/03/2010
Assigned Inspector: Contact John Shouldice at (510) 670-5424 or johns@acpwa.org

Applicant: Conestoga-Rovers and Associates - Chris Benedict
10969 Trade Center Dr. Ste 107, Rancho Cordova, CA 95670 **Phone:** 916-889-8900
Property Owner: First Presbyterian Church of Hayward
2490 Grove Way, Castro Valley, CA 94546 **Phone:** --
Client: ** same as Property Owner **

Total Due: $265.00
Receipt Number: WR2010-0135 **Total Amount Paid:** $265.00
Payer Name : Conestoga-Rovers & Paid By: CHECK **PAID IN FULL**
Associates

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 2 Boreholes
Driller: Penecore - Lic #: 906899 - Method: other **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0288	04/27/2010	08/31/2010	2	3.00 in.	35.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact John Shouldice for an inspection time at 510-670-5424 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.

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

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

10969 Trade Center Drive Suite 107
Rancho Cordova, CA 95670
Telephone: (916) 889-8900
Fax: (916) 889-8999

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	GP-1
JOB/SITE NAME	9-2960	**DRILLING STARTED**	02-Jun-10
LOCATION	2416 Grove Way, Castro Valley	**DRILLING COMPLETED**	02-Jun-10
PROJECT NUMBER	611964	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	PeneCore Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Direct push - continuous core	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	C. Benedict	**DEPTH TO WATER (First Encountered)**	20.0 fbg (02-Jun-10) ▽
REVIEWED BY	J. Kiernan, PE# C68498	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Cleared by hand-auger to 5 fbg.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							10" Asphalt.		Concrete
					GW		**Aggregate base:** Grey; moist; 1/4-3/4" gravel.	1.0	
					CH		**CLAY with sand:** Brown; moist; high estimated plasticity; fine to medium sand.	3.0	
0		GP-1- 5		5					
							Sandy SILT with gravel: Brown; moist; medium estimated plasticity.	6.0	
0.2		GP-1- 10		10	ML				
								14.5	
0.3		GP-1- 15		15	CL		**CLAY with sand:** Brown; moist; medium estimated plasticity.		
								18.0	Portland Type I/II
0.2		GP-1- 20		20	SM		**Silty SAND with gravel:** Brown; moist; fine to medium sand; 1/4-3/4" gravel; increase in gravel with depth.		
							Wet. ▽		
								22.0	
				25			Hydropunch to 34 feet.		
				30					

Continued Next Page

WELL LOG (PID) I:\CHEVRON\6119--\611964~1\611964~3\B-10, B-11, B-12, GP-1, GP-2.GPJ DEFAULT.GDT 7/19/10

10969 Trade Center Drive Suite 107
Rancho Cordova, CA 95670
Telephone: (916) 889-8900
Fax: (916) 889-8999

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	GP-1
JOB/SITE NAME	9-2960	**DRILLING STARTED**	02-Jun-10
LOCATION	2416 Grove Way, Castro Valley	**DRILLING COMPLETED**	02-Jun-10

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
								34.0	Bottom of Boring @ 34 fbg

WELL LOG (PID) I:\CHEVRON\6119--1611964~1\1611964~3\B-10, B-11, B-12, GP-1, GP-2.GPJ DEFAULT.GDT 7/19/10

10969 Trade Center Drive Suite 107
Rancho Cordova, CA 95670
Telephone: (916) 889-8900
Fax: (916) 889-8999

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	GP-2
JOB/SITE NAME	9-2960	**DRILLING STARTED**	02-Jun-10
LOCATION	2416 Grove Way, Castro Valley	**DRILLING COMPLETED**	02-Jun-10
PROJECT NUMBER	611964	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	PeneCore Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Direct push - continuous core	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	C. Benedict	**DEPTH TO WATER (First Encountered)**	20.0 fbg (02-Jun-10) ▽
REVIEWED BY	J. Kiernan, PE# C68498	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Cleared by hand-auger to 5 fbg.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							7" Asphalt.	0.8	Concrete
					GW		**Aggregate base.**	2.0	
							CLAY with sand: Brown; moist; high estimated plasticity; fine to medium sand.		
0		GP-2- 5		5					
					CH				
0.3		GP-2- 10		10					
								13.5	
					SM		**Silty SAND with gravel:** Brown; moist; fine to medium sand; 1/4-3/4" gravel.	15.5	
1.0		GP-2- 15		15	CH		**CLAY with sand:** Brown; moist; high estimated plasticity.	16.5	
					SM		**Silty SAND with gravel:** Brown; moist; fine to medium sand; 1/4-3/4" gravel.	17.0	
					CH		**CLAY with sand:** Brown; moist; high estimated plasticity; fine to medium sand.		Portland Type I/II
								19.0	
0.7		GP-2- 20		20	GM		**Silty GRAVEL with sand:** Brown; moist; 1/4-3/4" gravel; fine to medium sand. ▽ Wet.	21.0	
							Soil not logged from 21-30 fbg.		
				25					
				30				30.0	

WELL LOG (PID) I:\CHEVRON\6119--\611964~1\611964~3\B-10, B-11, B-12, GP-1, GP-2.GPJ DEFAULT.GDT 7/19/10

Continued Next Page

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Rancho Cordova, CA 95670
Telephone: (916) 889-8900
Fax: (916) 889-8999

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	GP-2
JOB/SITE NAME	9-2960	**DRILLING STARTED**	02-Jun-10
LOCATION	2416 Grove Way, Castro Valley	**DRILLING COMPLETED**	02-Jun-10

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					CH		**CLAY:** Grey; moist; high estimated plasticity.	31.0	
					SM		**Silty SAND with gravel:** Grey; wet.		
				35				35.0	Bottom of Boring @ 35 fbg

WELL LOG (PID) I:\CHEVRON\6119-\611964-1\611964-3\B-10, B-11, B-12, GP-1, GP-2.GPJ DEFAULT.GDT 7/19/10

ATTACHMENT D

STANDARD FIELD PROCEDURES

CRA

STANDARD FIELD PROCEDURES FOR GEOPROBE® SOIL AND GROUNDWATER SAMPLING

This document describes Conestoga-Rovers & Associates standard field methods for GeoProbe® soil and ground water sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor odor or staining, estimate ground water depth and quality and to submit samples for chemical analysis.

Soil Classification/Logging

All soil samples are classified according to the Unified Soil Classification System by a trained geologist or engineer working under the supervision of a California Professional Geologist (PG) or a Certified Engineering Geologist (CEG). The following soil properties are noted for each soil sample:

- Principal and secondary grain size category (i.e., sand, silt, clay or gravel)
- Approximate percentage of each grain size category,
- Color,
- Approximate water or separate-phase hydrocarbon saturation percentage,
- Observed odor and/or discoloration,
- Other significant observations (i.e., cementation, presence of marker horizons, mineralogy), and
- Estimated permeability.

Soil Sampling

GeoProbe® soil samples are collected from borings driven using hydraulic push technologies. A minimum of one and one half ft of the soil column is collected for every five ft of drilled depth. Additional soil samples can be collected near the water table and at lithologic changes. Samples are collected using samplers lined with polyethylene or brass tubes driven into undisturbed sediments at the bottom of the borehole. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Drilling and sampling equipment is steam-cleaned or washed prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Storage, Handling and Transport

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon® tape and plastic end caps. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

After a soil sample has been collected, soil from the remaining tubing is placed inside a sealed plastic bag and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable GasTech® or photoionization detector measures volatile hydrocarbon vapor concentrations in the bag's headspace, extracting the vapor through a slit in the plastic bag. The measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

Grab Ground Water Sampling

Ground water samples are collected from the open borehole using bailers, advancing disposable Tygon® tubing into the borehole and extracting ground water using a diaphragm pump, or using a hydro-punch style sampler with a bailer or tubing. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4° C, and transported under chain-of-custody to the laboratory.

Discrete Depth Soil and Ground Water Sampling

Soil and groundwater samples are collected for lithologic and chemical analysis using a direct driven, dual tube soil coring system. A hydraulic hammer drives sampling rods into the ground to collect continuous soil cores. Two nested sampling rods are driven at the same time: a larger diameter outer rod to act as a temporary drive casing and a smaller inner rod to retrieve soil cores. As the rods are advanced the soil is driven into a sample barrel that is attached to the end of the inner rod. The outer rod ensures that the sample is collected from the desired interval by preventing sloughing of the overlying material. After reaching the desired depth the inner rods are removed from the boring and the sleeves containing the soil sample are removed from the inner sample barrel. Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon® tape and plastic end caps. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

When collecting groundwater samples, the sample barrel and inner rods are removed from the boring once the targeted water bearing zone has been reached. The drive casing is pulled up from 0.5 to 5 feet to allow groundwater to enter the borehole. Small diameter well casing and screen is then installed in the borehole to facilitate sample collection. The drive casing is then pulled up sufficiently to expose the desired length of screen and samples are collected using a bailer, peristaltic, bladder or inertial pump. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4° C, and transported under chain-of-custody to the laboratory.

Duplicates and Blanks

Blind duplicate water samples are usually collected only for monitoring well sampling programs, at a rate of one blind sample for every 10 wells sampled. Laboratory-supplied trip blanks accompany samples collected for all sampling programs to check for cross-contamination caused by sample handling and transport. These trip blanks are analyzed if the internal laboratory quality assurance/quality control (QA/QC) blanks contain the suspected field contaminants. An equipment blank may also be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

ATTACHMENT E

LABORATORY ANALYTICAL REPORT

Lancaster Laboratories
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

June 16, 2010

Project: 92960

Submittal Date: 06/04/2010
Group Number: 1197336
PO Number: 92960
Release Number: MTI
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
GP-2-S-5-100602 Grab Soil	5997637
GP-2-S-10-100602 Grab Soil	5997638
GP-2-S-15-100602 Grab Soil	5997639
GP-2-S-20-100602 Grab Soil	5997640
GP-2-W-20-100602 Grab Water	5997641
GP-2-W-34-100602 Grab Water	5997642
GP-1-S-5-100602 Grab Soil	5997643
GP-1-S-10-100602 Grab Soil	5997644
GP-1-S-15-100602 Grab Soil	5997645
GP-1-S-20-100602 Grab Soil	5997646
GP-1-W-20-100602 Grab Water	5997647
GP-1-W-35-100602 Grab Water	5997648

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

ELECTRONIC COPY TO	Chevron c/o CRA	Attn: CRA EDD
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: James Kiernan

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Angela M Miller at (717) 656-2300 Ext. 1903

Respectfully Submitted,

Valerie L. Tomayko
Group Leader

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **GP-2-S-5-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-2

LLI Sample # SW 5997637
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 10:35 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS2-5

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.97
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.97
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.097	0.97
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.97
10950	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.97
10950	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.97
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.97
10950	Toluene	108-88-3	N.D.	0.001	0.005	0.97
10950	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.97
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	24.22

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:16	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:17	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 20:21	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B101601AA	06/09/2010 19:18	Emily R Styer	0.97
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 20:22	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/09/2010 09:09	Marie D John	24.22

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

Lancaster Laboratories

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Analysis Report

Sample Description: **GP-2-S-10-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-2

LLI Sample # SW 5997638
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 10:50 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS210

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.96
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.96
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.096	0.96
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.96
10950	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10950	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.96
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.96
10950	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10950	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	24.08

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:17	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:17	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 20:28	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 14:55	Holly Berry	0.96
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 20:30	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/08/2010 15:10	Marie D John	24.08

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

Lancaster Laboratories

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Analysis Report

Sample Description: **GP-2-S-15-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-2

LLI Sample # SW 5997639
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 10:55 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS215

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.97
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.97
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.097	0.97
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.97
10950	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.97
10950	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.97
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.97
10950	Toluene	108-88-3	N.D.	0.001	0.005	0.97
10950	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.97
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	24.39

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:17	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:17	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 20:35	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 13:25	Holly Berry	0.97
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 20:36	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/08/2010 15:47	Marie D John	24.39

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

Lancaster Laboratories

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Analysis Report

Sample Description: GP-2-S-20-100602 Grab Soil
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-2

LLI Sample # SW 5997640
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 11:15 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS220

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.0009	0.005	0.93
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.93
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.093	0.93
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.0009	0.005	0.93
10950	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.93
10950	di-Isopropyl ether	108-20-3	N.D.	0.0009	0.005	0.93
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.93
10950	Toluene	108-88-3	N.D.	0.0009	0.005	0.93
10950	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	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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:17	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 20:42	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 11:33	Holly Berry	0.93
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 20:44	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/08/2010 16:24	Marie D John	23.83

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

Lancaster Laboratories

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Analysis Report

Sample Description: **GP-2-W-20-100602 Grab Water**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-2

LLI Sample # WW 5997641
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 11:40 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GW220

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	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**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	89	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
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101581AA	06/07/2010 16:24	Ginelle L Feister	1
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	Z101581AA	06/07/2010 16:24	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	10158D20A	06/08/2010 15:09	Martha L Seidel	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10158D20A	06/08/2010 15:09	Martha L Seidel	1

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

Lancaster Laboratories

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Analysis Report

Sample Description: **GP-2-W-34-100602 Grab Water**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-2

LLI Sample # WW 5997642
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 12:15 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GW234

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	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**		**ug/l**	**ug/l**	**ug/l**	
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
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101581AA	06/07/2010 16:50	Ginelle L Feister	1
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	Z101581AA	06/07/2010 16:50	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	10158D20A	06/08/2010 15:31	Martha L Seidel	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10158D20A	06/08/2010 15:31	Martha L Seidel	1

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

Lancaster Laboratories

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Analysis Report

Sample Description: **GP-1-S-5-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-1

LLI Sample # SW 5997643
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 13:05 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS1-5

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.97
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.97
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.097	0.97
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.97
10950	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.97
10950	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.97
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.97
10950	Toluene	108-88-3	N.D.	0.001	0.005	0.97
10950	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.97
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	24.15

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 20:49	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 11:55	Holly Berry	0.97
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 20:50	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/08/2010 17:01	Marie D John	24.15

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

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Analysis Report

Sample Description: **GP-1-S-10-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-1

LLI Sample # SW 5997644
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 13:15 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS110

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.0009	0.005	0.95
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.95
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.095	0.95
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.0009	0.005	0.95
10950	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.95
10950	di-Isopropyl ether	108-20-3	N.D.	0.0009	0.005	0.95
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.95
10950	Toluene	108-88-3	N.D.	0.0009	0.005	0.95
10950	Xylene (Total)	1330-20-7	N.D.	0.0009	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.	1	1	24.58

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 20:56	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 12:17	Holly Berry	0.95
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 20:57	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/08/2010 17:38	Marie D John	24.58

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

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Analysis Report

Sample Description: **GP-1-S-15-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-1

LLI Sample # SW 5997645
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 13:20 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS115

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.0009	0.005	0.95
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.95
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.095	0.95
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.0009	0.005	0.95
10950	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.95
10950	di-Isopropyl ether	108-20-3	N.D.	0.0009	0.005	0.95
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.95
10950	Toluene	108-88-3	N.D.	0.0009	0.005	0.95
10950	Xylene (Total)	1330-20-7	N.D.	0.0009	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	23.52

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:02	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 12:40	Holly Berry	0.95
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 21:04	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10155A33B	06/08/2010 18:15	Marie D John	23.52

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

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Analysis Report

Sample Description: **GP-1-S-20-100602 Grab Soil**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-1

LLI Sample # SW 5997646
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 13:25 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GS120

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**	
10950	t-Amyl methyl ether	994-05-8	N.D.	0.0009	0.005	0.93
10950	Benzene	71-43-2	N.D.	0.0005	0.005	0.93
10950	t-Butyl alcohol	75-65-0	N.D.	0.019	0.093	0.93
10950	Ethyl t-butyl ether	637-92-3	N.D.	0.0009	0.005	0.93
10950	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.93
10950	di-Isopropyl ether	108-20-3	N.D.	0.0009	0.005	0.93
10950	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.93
10950	Toluene	108-88-3	N.D.	0.0009	0.005	0.93
10950	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	1	24.53

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
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	201015821348	06/07/2010 21:18	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	201015821348	06/07/2010 21:10	Lois E Hiltz	n.a.
10950	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	A101591AA	06/08/2010 13:02	Holly Berry	0.93
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201015821348	06/07/2010 21:12	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	10166A33A	06/15/2010 11:54	Elizabeth J Marin	24.53

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

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Analysis Report

Sample Description: **GP-1-W-20-100602 Grab Water**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-1

LLI Sample # WW 5997647
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 13:50 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GW120

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	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**		**ug/l**	**ug/l**	**ug/l**	
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
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101581AA	06/07/2010 17:15	Ginelle L Feister	1
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	Z101581AA	06/07/2010 17:15	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	10158D20A	06/08/2010 15:53	Martha L Seidel	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10158D20A	06/08/2010 15:53	Martha L Seidel	1

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

Lancaster Laboratories

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Analysis Report

Sample Description: **GP-1-W-35-100602 Grab Water**
Facility# 92960 MTI# 611964 CRAW
2416 Grove Way-Castro Valley T0600100318 GP-1

LLI Sample # WW 5997648
LLI Group # 1197336
Account # 11997

Project Name: 92960

Collected: 06/02/2010 14:35 by CB

Submitted: 06/04/2010 09:10
Reported: 06/16/2010 11:21
Discard: 07/17/2010

Chevron c/o CRA
Suite 107
10969 Trade Center Drive
Rancho Cordova CA 95670

GW135

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	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

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

GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 7.

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
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D101601AA	06/09/2010 14:59	Daniel H Heller	1
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	D101601AA	06/09/2010 14:59	Daniel H Heller	1
01146	GC VOA Water Prep	SW-846 5030B	1	10158D20A	06/08/2010 16:15	Martha L Seidel	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10158D20A	06/08/2010 16:15	Martha L Seidel	1

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

Quality Control Summary

Client Name: Chevron c/o CRA
Group Number: 1197336
Reported: 06/16/10 at 11:21 AM

Matrix QC may not be reported if 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.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A101591AA	Sample number(s): 5997638-5997640,5997643-5997646								
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	88	88	69-124	0	30
Benzene	N.D.	0.0005	0.005	mg/kg	103	103	80-120	0	30
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	93	95	71-122	2	30
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	85	87	70-122	2	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	99	100	80-120	1	30
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	86	87	73-121	1	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	90	91	74-121	2	30
Toluene	N.D.	0.001	0.005	mg/kg	98	98	80-120	0	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	96	97	80-120	0	30
Batch number: B101601AA	Sample number(s): 5997637								
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	98	94	69-124	4	30
Benzene	N.D.	0.0005	0.005	mg/kg	108	104	80-120	4	30
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	105	104	71-122	1	30
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	99	97	70-122	2	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	109	105	80-120	3	30
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	110	108	73-121	1	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	93	88	74-121	5	30
Toluene	N.D.	0.001	0.005	mg/kg	108	106	80-120	2	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	108	104	80-120	4	30
Batch number: D101601AA	Sample number(s): 5997648								
t-Amyl methyl ether	N.D.	0.5	1	ug/l	101		77-120		
Benzene	N.D.	0.5	1	ug/l	84		79-120		
t-Butyl alcohol	N.D.	2.	5	ug/l	86		73-120		
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	93		76-120		
Ethylbenzene	N.D.	0.5	1	ug/l	93		79-120		
di-Isopropyl ether	N.D.	0.5	1	ug/l	81		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	96		76-120		
Toluene	N.D.	0.5	1	ug/l	92		79-120		
Xylene (Total)	N.D.	0.5	1	ug/l	98		80-120		
Batch number: Z101581AA	Sample number(s): 5997641-5997642,5997647								
t-Amyl methyl ether	N.D.	0.5	1	ug/l	90		77-120		
Benzene	N.D.	0.5	1	ug/l	91		79-120		
t-Butyl alcohol	N.D.	2.	5	ug/l	92		73-120		
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	87		76-120		
Ethylbenzene	N.D.	0.5	1	ug/l	94		79-120		
di-Isopropyl ether	N.D.	0.5	1	ug/l	85		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	92		76-120		
Toluene	N.D.	0.5	1	ug/l	93		79-120		
Xylene (Total)	N.D.	0.5	1	ug/l	95		80-120		
Batch number: 10155A33B	Sample number(s): 5997637-5997640,5997643-5997645								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	87	92	67-119	5	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: Chevron c/o CRA Group Number: 1197336
Reported: 06/16/10 at 11:21 AM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10158D20A	Sample number(s): 5997641-5997642,5997647-5997648								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	100	118	75-135	17	30
Batch number: 10166A33A	Sample number(s): 5997646								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	90	94	67-119	4	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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: A101591AA	Sample number(s): 5997638-5997640,5997643-5997646 UNSPK: P997520								
t-Amyl methyl ether	85		59-123						
Benzene	108		55-143						
t-Butyl alcohol	112		47-153						
Ethyl t-butyl ether	85		58-124						
Ethylbenzene	101		44-141						
di-Isopropyl ether	90		59-133						
Methyl Tertiary Butyl Ether	86		55-129						
Toluene	106		50-146						
Xylene (Total)	97		44-136						
Batch number: B101601AA	Sample number(s): 5997637 UNSPK: P998251								
t-Amyl methyl ether	89		59-123						
Benzene	108		55-143						
t-Butyl alcohol	109		47-153						
Ethyl t-butyl ether	97		58-124						
Ethylbenzene	103		44-141						
di-Isopropyl ether	110		59-133						
Methyl Tertiary Butyl Ether	84		55-129						
Toluene	107		50-146						
Xylene (Total)	100		44-136						
Batch number: D101601AA	Sample number(s): 5997648 UNSPK: P999123								
t-Amyl methyl ether	100	103	75-122	3	30				
Benzene	89	87	80-126	2	30				
t-Butyl alcohol	80	88	67-119	9	30				
Ethyl t-butyl ether	93	94	74-122	0	30				
Ethylbenzene	95	99	71-134	4	30				
di-Isopropyl ether	82	82	70-129	0	30				
Methyl Tertiary Butyl Ether	96	97	72-126	1	30				
Toluene	92	95	80-125	2	30				
Xylene (Total)	99	101	79-125	2	30				
Batch number: Z101581AA	Sample number(s): 5997641-5997642,5997647 UNSPK: P997860								
t-Amyl methyl ether	91	92	75-122	1	30				
Benzene	95	94	80-126	1	30				
t-Butyl alcohol	90	91	67-119	1	30				
Ethyl t-butyl ether	89	88	74-122	1	30				
Ethylbenzene	100	97	71-134	2	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: Chevron c/o CRA Group Number: 1197336
Reported: 06/16/10 at 11:21 AM

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
di-Isopropyl ether	87	86	70-129	1	30				
Methyl Tertiary Butyl Ether	93	92	72-126	2	30				
Toluene	98	97	80-125	1	30				
Xylene (Total)	100	98	79-125	2	30				
Batch number: 10158D20A	Sample number(s): 5997641-5997642,5997647-5997648 UNSPK: 5997641								
TPH-GRO N. CA water C6-C12	110		63-154						

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: VOCs by 8260B - Solid
Batch number: A101591AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5997638	95	98	101	90
5997639	98	99	101	89
5997640	98	100	101	89
5997643	98	101	100	89
5997644	98	100	102	89
5997645	97	100	101	90
5997646	97	98	102	89
Blank	99	104	100	90
LCS	99	107	100	96
LCSD	99	103	100	97
MS	98	98	112	83
Limits:	71-114	70-109	70-123	70-111

Analysis Name: VOCs by 8260B - Solid
Batch number: B101601AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5997637	100	100	102	92
Blank	100	101	101	92
LCS	98	106	104	102
LCSD	97	102	105	102
MS	97	100	107	99
Limits:	71-114	70-109	70-123	70-111

Analysis Name: UST VOCs by 8260B - Water
Batch number: D101601AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5997648	110	103	102	101
Blank	110	99	103	101
LCS	108	100	103	103

*- 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: Chevron c/o CRA Group Number: 1197336
Reported: 06/16/10 at 11:21 AM

Surrogate Quality Control

MS	111	106	101	103
MSD	108	104	103	105
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: Z101581AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5997641	97	96	100	96
5997642	97	95	99	95
5997647	97	96	99	95
Blank	97	96	100	95
LCS	98	97	99	94
MS	97	97	99	96
MSD	97	97	99	95
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 10155A33B

	Trifluorotoluene-F
5997637	86
5997638	78
5997639	83
5997640	82
5997643	86
5997644	80
5997645	79
Blank	92
LCS	75
LCSD	85
Limits:	61-122

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 10158D20A

	Trifluorotoluene-F
5997641	90
5997642	91
5997647	90
5997648	91
Blank	89
LCS	109
LCSD	111
MS	107
Limits:	63-135

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 10166A33A

	Trifluorotoluene-F
5997646	74
Blank	86
LCS	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: Chevron c/o CRA
Group Number: 1197336
Reported: 06/16/10 at 11:21 AM

Surrogate Quality Control

LCSD	84
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 Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

060310-16 1142

For Lancaster Laboratories use only
Acct. #: 11991 Sample #: 5997637-48 SCR#: 248589

611964
MT: ~~611611~~

C# 1197336

Analyses Requested

Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

Facility #: Former Chevron 9-2960
Site Address: 2416 GROVEWAY, CASTRO VALLEY
Chevron PM: SPEER Lead Consultant: CRA
Consultant/Office: RANCHO CORDOVA, CA
Consultant Prj. Mgr.: JAMES KIERNAN
Consultant Phone #: 916 858 5900 Fax #: 916 858 5999
Sampler: CHRIS BENEDICT
Service Order #: ☐ Non SAR:

☐ 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 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates ___	Lead 7420 ☐ 7421 ☐	TBA, DIPE, TAME, ETBE 8260					
GP-2-5	SOIL			10 6 2	1035		X		1	X	X					X					
GP-2-10					1050		X		1	X	X					X					
GP-2-15					1055		X		1	X	X					X					
GP-2-20					1115		X		1	X	X					X					
GP-2-20	WATER				1140		X		6	X	X					X					
GP-2-34					1215		X		6	X	X					X					
GP-1-5	SOIL				1305		X		1	X	X					X					
GP-1-10					1315		X		1	X	X					X					
GP-1-15					1320		X		1	X	X					X					
GP-1-20					1325		X		1	X	X					X					
GP-1-20	WATER				1350		X		6	X	X					X					
GP-1-35					1435		X		6	X	X					X					

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
STD. TAT 72 hour 48 hour
24 hour 4 day 5 day

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:	Date	Time	Received by:	Date	Time
1		6/3/10	1430		6/3/10	1434
2		6/3/10	1630	FedEx		
3						

Relinquished by Commercial Carrier:
UPS ~~FedEx~~ Other ____
Temperature Upon Receipt 0.6 C°

Received by:
Custody Seals Intact? Yes No

Date 6/4/10 Time 940

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)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

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

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.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

Analytical test results 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.

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ATTACHMENT B

LOW-THREAT CHECKLIST

Site Name: Chevron #9-2960
Site Address: 2416 Grove Way, Castro Valley

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.[1]

General Criteria General criteria that must be satisfied by all candidate sites:	
Is the unauthorized release located within the service area of a public water system?	☒Yes ☐ No
Does the unauthorized release consist only of petroleum?	☒ Yes ☐ No
Has the unauthorized ("primary") release from the UST system been stopped?	☒ Yes ☐ No
Has free product been removed to the maximum extent practicable?	☒ Yes ☐ No ☐ NA
Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?	☒ Yes ☐ No
Has secondary source been removed to the extent practicable?	☒ Yes ☐ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?	☒ Yes ☐ No
Does nuisance as defined by Water Code section 13050 exist at the site?	☐ Yes ☒ No
Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
Media-Specific Criteria Candidate sites must satisfy all three of these media-specific criteria: **1. Groundwater:** To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:	
Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?	☒ Yes ☐ No ☐ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: ☒ **1** ☐ **2** ☐ **3** ☐ **4** ☐ **5**	☒ Yes ☐ No ☐ NA

[1] Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?	☐ Yes ☐ No ☒ NA
2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies. **Is the site an active commercial petroleum fueling facility?** Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk. **a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4?** If YES, check applicable scenarios: ☐ **1** ☐ **2** ☒ **3** ☐ **4** **b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?**	☐ Yes ☒ No ☒Yes ☐ No ☐ NA ☐ Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA
3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c). **a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?** **b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?**	☒ Yes ☐ No ☐ NA ☐ Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA