Chevron Environmental Dana Thurman Management Company Project Manager 6001 Bollinger Canyon Rd, K2236 P.O. Box 6012 San Ramon, CA 94583-2324 Tel 925-842-9559

Fax 925-842-8370

July 12, 2005

Closure Request

(date)

### ChevronTexaco

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

Carrieda County 9-6607 Chevron Service Station # Re: 2340 Otis Drive, Alameda, Califorma Address: Subsurface Investigation Report and I have reviewed the attached report titled and dated July 12, 2005

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 Cambria Environmental Technology, Inc., 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.

Dana Thurman Project Manager

Enclosure: Report

July 12, 2005

Mr. Barney Chan Alameda County Environmental Health Services Agency (ACHCSA) Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Subsurface Investigation Report and Closure Request Rc:

Former Chevron Service Station # 9-6607 2340 Otis Drive Alameda, California

RO#335

Dear Mr. Chan:

On behalf of Chevron Environmental Management Company (Chevron), Cambria Environmental Technology, Inc. (Cambria) submits this investigation report describing activities performed at the site referenced above. The boring and groundwater sampling was conducted in accordance with our April 18. 2005 Regulatory Response and Investigation Workplan. Summarized below are the site background, a discussion of subsurface investigation activities and results, and our conclusions and recommendations.

#### SITE BACKGROUND

The site is located at the western corner of Otis Drive and Park Street in Alameda, California (Figure 1). Chevron operated a service station on-site from the mid-1970s through August 2004. In September 2004, the station was demolished and all underground storage tanks (USTs) and station facilities were removed from the site. Currently the site is vacant, with a plan to redevelop it as a parking lot for a proposed new retail facility on the adjacent parcel. Surrounding site use is mixed commercial and residential. The site is located in the Alameda Bay Plain Basin and the regional lithology consists of miscellaneous Bay Mud or Merritt Sand. Prior to the early 1960s, this portion of Alameda was beneath the San Francisco Bay. The area was artificially filled using locally derived dredge material at that time.

#### Previous Investigations

February 1991, UST and Product Line Removal, Over-excavation and Replacement: In February 1991, three fiberglass gasoline USTs and one fiberglass used-oil UST were removed from the site. Depth to water was encountered at 6 to 7 feet below grade (fbg). Eight soil samples and two water samples (one from each UST excavation) were collected. The only hydrocarbon concentrations reported in any of the soil samples was 3,200 milligrams per kilogram (mg/kg) total oil and grease

Cambria Environmental Technology, Inc.

4111 Citrus Avenue Suite 12 Rocklin, CA 95677 Tel (916) 630-1855 fax (916) 630-1856

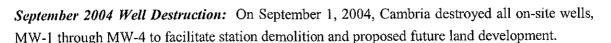
(TOG) in sample #7 from the used-oil UST excavation. Total petroleum hydrocarbons as gasoline (TPHg) was reported in the water samples at 48,000 and 3,000 micrograms per liter (µg/L) in the gasoline UST and used-oil UST pits, respectively. Additional soil was subsequently over-excavated and removed from the gasoline UST pit. Confirmation soil samples #1 through #6 were collected after over-excavation to confirm the impacted soil had been removed. No significant concentrations of hydrocarbons were reported in these confirmation samples. Additional soil was also removed from the used-oil UST pit. The excavation was widened by approximately 3 feet to remove impacted soil. Confirmation soil sample #1, collected after additional over-excavation, contained one order of magnitude less TOG than in sample #7. No other hydrocarbons were reported. Product lines were removed and soil samples #2 through #15 were collected from the product line trenches and beneath former dispensers. A maximum concentration of 36 mg/kg benzene was reported beneath the dispenser islands. TPHg was reported at a maximum concentration of 5,700 mg/kg in sample #13. In March 1991, further over-excavation was conducted in the product line trenches and the used-oil UST pit. Over-excavation near the former used-oil UST was limited due to the concern for the structural integrity of the building. After all over-excavation activities were completed, the highest concentration of TPHg remaining in the soil was 150 mg/kg in product trenches, 2.6 mg/kg in the gasoline UST pit, and 150 mg/kg in the used-oil UST pit. A concentration of 16,000 mg/kg TOG remained in the used-oil UST pit, in confirmation sample #10 at 6 fbg.

August 1991, Well Installation: In August 1991, Geraghty & Miller, Inc. installed monitoring wells MW-1 through MW-4 on the site. These monitoring wells were monitored and sampled on a quarterly basis.

September 2004 UST and Dispenser Island Removal and Over-excavation: Three 12,000-gallon gasoline double-walled fiberglass USTs connected to three dispenser islands by underground piping were removed. One 1,000-gallon fiberglass used-oil UST was also removed and no leaks or cracks were observed in any of the tanks. Soil samples and two groundwater samples were collected from the UST pit, dispenser islands, and used-oil UST pit. Confirmation soil samples were collected following over-excavation of the dispenser island area, the used-oil UST area, and the former hydraulic hoist. Hoist #3 indicated elevated concentrations of TOG at 12,000 mg/kg, and the area was further over-excavated. The highest concentration of TPHg in soil was 1,500 mg/kg, in soil sample I1-D2 (Island 1, Dispenser 2), and decreased to 6.4 mg/kg after over-excavation. The highest concentration of TPHg reported after over-excavation was 160 mg/kg in sample I3-D1. Concentrations of TPHg decreased significantly after over-excavation activities were complete. The highest concentration of Total petroleum hydrocarbons as diesel (TPHd) was 3,100 mg/kg from the used-oil UST pit at 5 fbg. After over-excavation, no TPHd was reported above the 1 mg/kg detection limit at 6 fbg. The highest concentration of TPHd reported after over-excavation soil samples was 6.6 mg/kg in a sample collected at 7 fbg, adjacent to the former location of hydraulic hoist #1. The highest concentrations of



TOG were 25,000 mg/kg in a sample collected from the used-oil UST pit at 5 fbg and 12,000 mg/kg in a sample collected beneath hoist #3. After over-excavation of the used-oil UST pit, at depths of 6 and 7 fbg, soil reported <50 mg/kg of TOG. Samples collected after over-excavation of the area beneath hoist #3 contained TOG at 61 and <50 mg/kg at 11 and 11.5 fbg, respectively. The highest concentrations of benzene, toluene, ethylbenzene, or xylenes (BTEX) were 0.74 mg/kg benzene in dispenser island sample I3-D1, 1.3 mg/kg toluene in the sample collected from the used-oil UST pt, 10 mg/kg ethylbenzene in dispenser island sample I1-D2, and 38 mg/kg xylene, also from dispenser island sample I1-D2. These concentrations were prior to over-excavation. After over-excavation, confirmation soil samples indicated a marked decrease in BTEX concentrations. The highest concentrations of BTEX in confirmation samples were 0.065 mg/kg benzene in dispenser island sample I2-D2, 0.98 mg/kg toluene in dispenser island sample I3-D1, 2.7 mg/kg ethylbenzene and 9.4 mg/kg xylenes, both from dispenser island sample I3-D1. The maximum TPHg and benzene in grab water samples were 14,000 and 160  $\mu$ g/L, respectively. No methyl tert-butyl ether (MTBE) was reported. The groundwater sample collected after pumping reported 11,000  $\mu$ g/L TPHg and 87  $\mu$ g/L benzene.



September 2004 Subsurface Investigation: A subsurface investigation was conducted concurrently with well destruction activities on September 1 and 2, 2004. The investigation was conducted to further delineate the lateral and vertical extent of hydrocarbons in soil and groundwater beneath the site. Cambria advanced seven soil borings at locations across the site using Geoprobe® technology. Borings B1, B2, B4 and B5 were advanced to depths of 11 fbg. Boring B7 was advanced to a depth of 15.5 fbg. Borings B3 and B6 were advanced to depths of 20 fbg. Soil samples were collected from all borings at five-foot intervals using a direct push sampler lined with a polyurethane sleeve. Grabgroundwater samples were also collected from each boring at depths of 8 and 11 fbg. Groundwater samples were collected from 8 fbg and 11 fbg. No TPHg or BTEX was reported in any of the soil samples collected from borings B1, B2, B3, B4, B6 or B7. TPHg was reported at concentrations of 13 and 11 mg/kg at 5 and 10 fbg, respectively, in boring B5 only. The only benzene reported was also from boring B5, at a concentration of 0.0008 mg/kg at 10 fbg. Concentrations of methyl tert-butyl ether (MTBE) were reported in most of the soil samples collected, with the highest concentration of 0.24 mg/kg occurring in sample B6 at 20 fbg. MTBE was not reported in shallow (5 fbg) samples collected from borings B1, B4, B5, B6 and B7. TPHg or BTEX were not reported in grabgroundwater samples collected from up-gradient borings B1 and B4. The highest concentration of TPHg reported was 1,700 μg/L from boring B2 at 8 fbg. Benzene in groundwater was reported in only two samples, with the highest concentration of 160 µg/L from boring B2 at 8 fbg. Concentrations of MTBE ranged from non-detect to 680 µg/L in a grab-groundwater sample from boring B2 at 8 fbg.



TPHd in groundwater was reported at  $8,200 \mu g/L$  from the used-oil UST pit. Analytic results for nearly all water samples were noted as containing greater than 1 % volume sediment, suggesting sample results may be skewed due to hydrocarbons sorbed to sediment particles. Additionally, residual hydrocarbons were removed from the subsurface by over-excavation of approximately 600 cubic yards of soil during facility demolition.

Groundwater Depth and Flow Direction: Measured depth to groundwater typically occurred from approximately 2.5 to 5.5 fbg at this site and fluctuated about 2 feet annually. Because of the proximity of the San Francisco Bay and highly permeable fill soils, a tidal influence is possible in groundwater beneath the site. Groundwater generally flows towards the south to southwest at an approximate gradient of 0.003.



#### INVESTIGATION RESULTS

Cambria completed a subsurface investigation to evaluate residual benzene concentrations in the vicinity of former samples #5 and #6 (1991 product line over-excavation; Attachment D) and to evaluate the lateral extent of TPHd in groundwater in the vicinity of the former used-oil UST excavation. To meet this objective, Cambria advanced four soil borings (Figure 2).

Analytical results of the soil and grab-groundwater samples are summarized in Table 1 and Table 2, respectively. The soil boring permit and boring logs are presented as Attachment A. The analytical report of soil and water samples is presented as Attachment B.

#### Soil Borings

**Permit:** Alameda County permit #W2005-0610.

Drilling Date: June 16, 2005.

Drilling Company: Vironex Environmental Field Services of San Leandro, CA (C-57)

#705927).

Sampling Personnel: Senior Staff Geologists Daniel Glaze and Nina Knirel conducted all

fieldwork under the supervision of California Professional Geologist

David W. Herzog P.G.#7211.

Number of Borings: Four borings, completed as GP-1, GP-2, GP-3 and GP-4 (Figure 2).

**Drilling:** The first 8 feet of each boring were cleared using a hand auger to

ensure no subsurface utilities would be encountered. Below 8 feet, GP-1 and GP-2 were advanced to approximately 10 fbg using a hand auger. GP-3 and GP-4 were advanced to approximately 14 fbg

using hydraulic push technology.

Soil Sampling: Soil samples were collected at 6, 8, and 10 fbg from borings GP-1

and GP-2 using a hand auger. Cambria's standard field procedure is

included in Attachment C.

Soil Screening: Soil samples were screened for hydrocarbons using a photo-

ionization detector (PID).

Grab-Groundwater

Samples:

Grab-groundwater samples were collected below 10 fbg in GP-3

and GP-4 using hydropunch technology.

Encountered Lithology and Groundwater:

Native lithology encountered consisted of sand overlaying some silty clay to approximately 10 fbg, the maximum logged depth during this investigation. Groundwater was encountered at approximately 5 fbg in all borings.

Lab Analyses: Table 1 lists the soil sample results. The soil samples were

analyzed for:

• BTEX and MTBE by EPA Method 8260B, and

Total organic carbon (TOC) by modified EPA Method 5310B.

Table 2 lists the grab-groundwater sample results. All grab-groundwater samples were analyzed for:

• TPHd by modified EPA Method 8015.

Soil Disposal: Soil cuttings were stored on-site. The cuttings were removed by

Integrated Waste Management and transported to Republic Services

Vasco Road Landfill in Livermore, California.

#### BENZENE EXTENT IN SOIL

No benzene was reported in soil from GP-2 (Table 1). Maximum benzene, toluene, ethylbenzene, and xylenes concentrations are reported at 0.19, 1.1, 3, and 16 mg/kg, respectively in GP-1 at 8 fbg. Benzene decreases in GP-1 to below the laboratory detection limit at 10 fbg. These results indicate the benzene concentrations of concern (Samples #5 and #6 from the 1991 product line over-excavation) appear to be naturally attenuating. Laboratory analytical data for soil is summarized in Table 1.

#### LATERAL EXTENT OF TPHd IN GROUNDWATER

TPHd concentrations were reported at 1,000 and 2,100  $\mu$ g/L from GP-3 and GP-4, respectively. These concentrations are less than the TPHd concentration (8,200  $\mu$ g/L) reported from the used-oil UST pit in 2004, suggesting a naturally attenuating TPHd plume in groundwater in the vicinity of the former used-oil UST. Laboratory analytical data for groundwater is summarized in Table 2.

#### **RISK BASED ASSESSMENT**



To complete a Tier 1 risk assessment, soil and grab-groundwater results are compared to the San Francisco Bay Regional Water Quality Control Board's environmental screening levels (ESL). The table below depicts this comparison for constituents of concern: maximum benzene in soil and TPHd in groundwater from each boring for shallow soil where groundwater is not a potential source of drinking water<sup>1</sup>.

Sample ID	Benzene (mg/kg)	Benzene Commercial Land Use ESL (mg/kg)	TPHd (µg/L)	TPH (middle distillates) ESL (µg/L)
GP-1	0.19	0.38	***	
GP-3			1,000	640
GP-4			2,100	640

The maximum benzene concentration reported in soil does not exceed the commercial land use ESL; therefore, benzene does not appear to pose a significant risk to human health or future commercial site use.

Although grab-groundwater TPHd concentrations exceed the groundwater ESL, concentrations have significantly declined in one year since the removal of the used-oil source during the over-excavation activities in 2004. Although TPHd is reported in groundwater, these are grab samples and the concentrations may be elevated to some extent compared to static groundwater conditions. Also, because TPHd has a low mobility it is likely the dissolved mass is limited in extent and do not pose a significant risk to nearby San Francisco Bay or any other nearby receptor.

<sup>&</sup>lt;sup>1</sup> SF Bay Regional Water Quality Control Board's Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater, Volume 1, Summary Tier 1 Lookup Tables, Table B, Interim Final February 2005.

#### CLOSING

The sources of hydrocarbon impact have been removed during facility demolition and over-excavation and future site use is planned commercial (Safeway parking lot). Historical groundwater monitoring at the site indicated decreasing trends of hydrocarbons in former on-site monitoring wells. Based on the results of this investigation, benzene does not appear to pose a significant risk to future site use. TPHd impact, although exceeding the ESL concentration, is likely limited in extent and appears to be naturally attenuating following the removal of the source area. Therefore, Cambria recommends this case be closed and no further action issued by the ACEHSA for the subject site.



We appreciate this opportunity to work with you on this project. Please contact Sara Giorgi at (916) 630-1855 ext. 103 if you have any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc.

Sara Giorgi

Senior Staff Scientist

David W. Herzog, P.G.#7211 Senior Project Geologist

Figures:

1 - Vicinity Map

2 – Soil Boring Locations

Tables:

1 - Soil Sample Analytical Results

2 – Grab-Groundwater Analytical Results

Attachments: A – Soil Boring Permits and Boring Logs

B – Laboratory Analytical Reports for Soil and Grab-Groundwater Samples

No. 7211

C – Standard Procedures for Geoprobe® and Hand Auger Sampling

D - Historical Soil Results

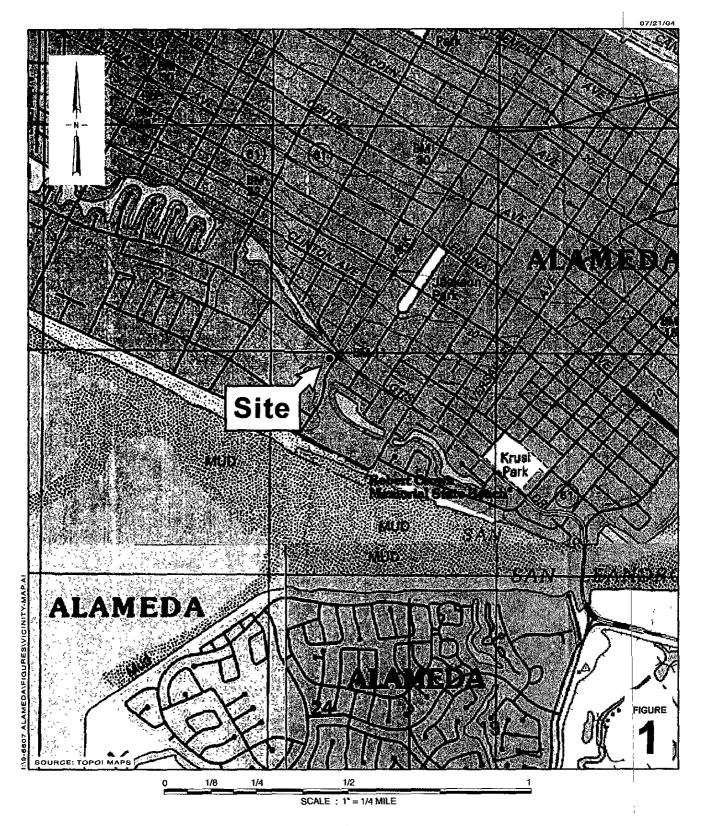
cc:

Mr. Dana Thurman, Chevron Environmental Management Company, P.O. Box 6012, K2236 San Ramon, CA 94583-0804

Mr. Charles Almestad, Kleinfelder, 1970 Broadway, Suite 710, Oakland, CA 94612

Mr. Michael P. Corbitt, Harsch Investment Properties, 523 South Shore Center West, Alameda, CA 94501

Cambria File Copy



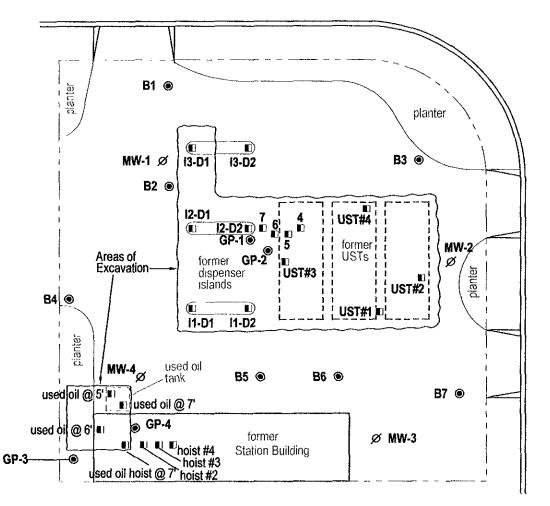
**Chevron Service Station 9-6607** 



Vicinity Map

2340 Otis Drive Alameda, California

CAMBRIA



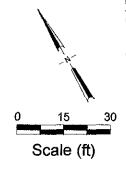
**EXPLANATION** 

MW-1 Ø Destroyed monitoring well location

B4 

Soil boring location

11-D1 Soil sample location



FIGURE

06/20/05

2

Former Chevron Service Station 9-6607



Soil Boring Locations

2340 Otis Drive Alameda, California

CAMBRIA

RAS-6807/FIGURES/2005/1005/PROP. BOR.DWG

Table 1
Soil Sample Analytical Results

Former Chevron Station 9-6607, 2340 Otis Drive, Alameda, CA

Sample	Sample	Sample	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TOC	
ID	Depth (fbg)	Date	milligrams per kilogram mg/kg = parts per million						
GP-1	6	6/16/2005	0.001	<0.001	0.013	0.07	0.001	784	
	8	6/16/2005	0.19	1.1	3	16	0.005	1,050	
	10	6/16/2005	< 0.063	0.25	0.59	3.4	< 0.063	992	
GP-2	6	6/16/2005	<0.0005	< 0.001	< 0.001	0.005	< 0.0005	1,110	
	8	6/16/2005	< 0.063	< 0.13	5.8	27	< 0.063	2,890	
	10	6/16/2005	< 0.0005	0.001	0.032	0.32	< 0.0005	3,600	

#### Abbreviations/Notes:

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Methyl tert-butyl ether (MTBE) by EPA Method 8260B

Total Organic Carbon (TOC) Solids by EPA Method SM20 5310B modified

< x =Not detected above method detection limit

## Table 2 Grab-Groundwater Analytical Results

Former Chevron Station 9-6607, 2340 Otis Drive, Alameda, CA

Sample ID	Sample Date	TPHd (μg/L)
GP-3	6/16/2005	1,000
GP-4	6/16/2005	2,100

#### Abbreviations/Notes:

Total petroleum hydrocarbons as diesel (TPHd) by CALUFT-DRO/EPA Method 8015B Modified

< x =Not detected above method detection limit

 $\mu g/L = micrograms per liter$ 

# ATTACHMENT A Soil Boring Permits 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: 05/27/2005 By jamesy

Permits Issued:

W2005-0610

Permits Valid from 06/16/2005 to 06/17/2005

Application Id: Site Location:

1117218926471 2340 Otis Drive 06/16/2005

City of Project Site: Alameda Completion Date:06/17/2005

**Project Start Date:** 

Applicant:

Client:

Cambria Environmental - Dan Glaze

5900 Hollis Street, Site A, Emeryville, CA 94608

Phone: 510-376-0657

**Property Owner:** 

Chevron Products Chevron Products

Phone: --

6001 Bollinger Canyon Rd, San Ramon, CA 94583 same as Property Owner \*

**Total Due:** 

\$200.00

Total Amount Paid:

\$200.00

Paid By: CHECK

PAID IN FULL

#### **Works Requesting Permits:**

Borehole(s) for Investigation-Contamination Study - 4 Boreholes

Driller: Vironex - Lic #: 705927 - Method: other

Work Total: \$200.00

#### **Specifications**

**Expire Dt** Permit Issued Dt Hole Diam Max Depth Number **Boreholes** W2005-05/27/2005 09/14/2005 2.00 in. 10.00 ft

0610

#### **Specific Work Permit Conditions**

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

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 Calirans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

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.

Applicant shall contact George Bolton for a inspection time at 510-670-5594 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.



### BORING/WELL LOG

PAGE 1 OF 1

Cambria Environmental Technology, Inc. 2680 Bishop Drive, Suite 290 San Ramon, CA 94583 Telephone: (925) 275-3200 Fax: (925) 275-3204

REMAR	ON CT NUMB C METH G METH D BY TED BY KS	25 EER 6:  V OD H TER 3:  D	340 1H- iron and	1970 ex -auger aze	. Alar			DRILLING COMPLETED 16-Jun-05	n-05) <u> </u>		
PID (ppm)	BLOW	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG		DLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WE	ELL DIAGRAM
WELL LOG (PID) R 19-6607-1/2005IN-1/9-6607 LOGS GP1-4.GPJ DEFAULT.GDT 7/11/06  L 6 6  L 76 6		GP1 @ 6' GP1 @ 10'		5			@5' gravel is wet.	angular fill 1-1.25" in diameter.  y; saturated; loose; 100% sand; eability.	6.0		Bottom of Boring @ 10 ft



# Cambria Environmental Technology, Inc. 2680 Bishop Drive, Suite 290 San Ramon, CA 94583 Telephone: (925) 275-3200 Fax: (925) 275-3204

### **BORING/WELL LOG**

PAGE 1 OF 1

DRILLER VironeX  DRILLING METHOD Hand-auger  BORING DIAMETER 3"  LOGGED BY D. Glaze  REVIEWED BY  REMARKS								DRILLING STARTED 16-Jun-05  DRILLING COMPLETED 16-Jun-05  WELL DEVELOPMENT DATE (YIELD) NA  GROUND SURFACE ELEVATION Not Surveyed  TOP OF CASING ELEVATION Not Surveyed  SCREENED INTERVAL NA  DEPTH TO WATER (First Encountered) 5.0 ft (16-Jun-05)				
PID (ppm)	BLOW	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LìTHC	DLOGIC DESCRIPTION	<b>X</b>	CONTACT DEPTH (ft bgs)	WEL	L DIAGRAM
23.7 123 87.2 87.2		GP2 @ 6' GP2@ 8' GP20 10'		5 —			@5' gravel is wet.	angular fill 1-1.25" in diame	<b>¥</b>	6.0		■ Portland I/II  Bottom of Boring @ 10 ft



#### Cambria Environmental Technology, Inc. 2680 Bishop Drive, Suite 290 San Ramon, CA 94583 Telephone: (925) 275-3200 Fax: (925) 275-3204

### **BORING/WELL LOG**

CLIENT NAME	Chevron Products Company	BORING/WELL NAME GP3
JOB/SITE NAME	9-6607 Alameda	DRILLING STARTED 16-Jun-05
LOCATION	2340 Otis Dr., Alameda	DRILLING COMPLETED 16-Jun-05
PROJECT NUMBER	61H-1970	WELL DEVELOPMENT DATE (YIELD) NA
DRILLER	Vironex	GROUND SURFACE ELEVATION Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION Not Surveyed
BORING DIAMETER	2"	SCREENED INTERVAL NA
LOGGED BY	D. Glaze	DEPTH TO WATER (First Encountered) 5.0 ft (16-Jun-05)
REVIEWED BY		DEPTH TO WATER (Static) 5.0 ft
REMARKS		

Company   Com	BORING LOGGE	NG METH 3 DIAMET 3D BY VED BY _	OD <u>H</u> TER <u>2"</u> D	ydra ' . Gl	aze			TOP OF CASING ELEVATION Not Sursemed INTERVAL NA  DEPTH TO WATER (First Encountered)  DEPTH TO WATER (Static)	SCREENED INTERVAL NA DEPTH TO WATER (First Encountered) 5.0 ft (16-J			
SAND: Brownish gray; dry; medium stiff; 90% sand, 10% silt; high estimated permeability.  Sand is saturated @ 5'.  GP3 @ 10'  Bottom of Boring @ 14 ft	<u> </u>		SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	W	ELL DIAGRAM	
A L	WELL LOG (PID) R 19-6607-112005IN-119-6807 LOGS GP1-4 GPJ DEFAULT GDT 7/11/05		GP3 @ 10'		  	SP		<b>.</b>			Bottom of Boring @ 14 ft	

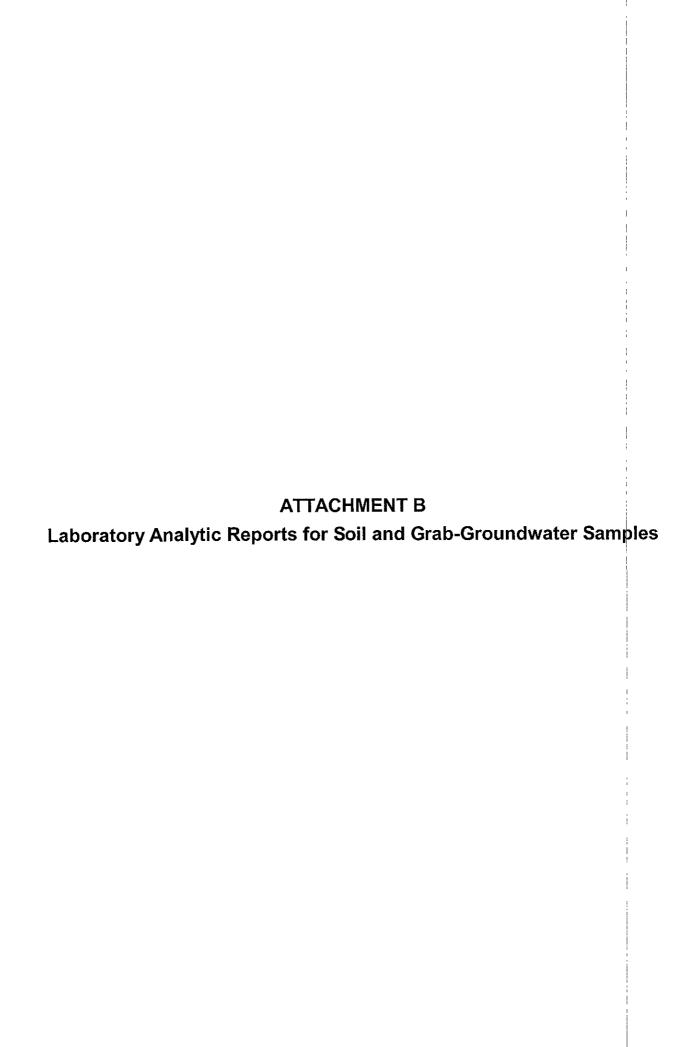


#### Cambria Environmental Technology, Inc. 2680 Bishop Drive, Suite 290 San Ramon, CA 94583 Telephone: (925) 275-3200 Fax: (925) 275-3204

**BORING/WELL LOG** 

PAGE 1 OF 1

LOCATION         2340 Otis Dr., Alameda           PROJECT NUMBER         61H-1970           DRILLER         Vironex           DRILLING METHOD         Hydraulic push           BORING DIAMETER         2"						neda		DRILLING STARTED 16-Jun-05  DRILLING COMPLETED 16-Jun-05  WELL DEVELOPMENT DATE (YIELD) NA  GROUND SURFACE ELEVATION Not Surveyed  TOP OF CASING ELEVATION Not Surveyed  SCREENED INTERVAL NA  DEPTH TO WATER (First Encountered) 5.0 ft (16-				
PID (ppm)	BLOW	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHO	LOGIC DESCRIPTION	engage, bear and an angular an	CONTACT DEPTH (# bgs)	WEI	L DIAGRAM
UG (PID) KIS-BOUT I KOOS OF IS-KET DEFROLLIGO I ITINO		GP4 @ 10'					high estimated perme	nedium stiff; 90% sand, 109 pability.  In gray; saturated; soft; 80% sticity; low estimated perme	•	10.0		■ Portland I/II  Bottom of Boring @ 14 ft





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

#### ANALYTICAL RESULTS

Prepared for:

ChevronTexaco C/O Cambria 4111 Citrus Avenue Suite 12 Rocklin CA 95677 916-630-1855

Prepared by:

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

#### SAMPLE GROUP

The sample group for this submittal is 947948. Samples arrived at the laboratory on Saturday, June 18, 2005. The PO# for this group is 99011184 and the release number is MTI.

Client Description			Lancaster Labs Number
GP-1-S-6-050616	Grab	Soil	4546250
GP-1-S-8-050616	Grab	Soil	4546251
GP-1-S-10-050616	Grab	Soil	4546252
GP-2-S-6-050616	Grab	Soil	4546253
GP-2-S-8-050616	Grab	Soil	4546254
GP-2-S-10-050616	Grab	Soil	4546255
GP-3-W-10-050616	Grab	Water	4546256
GP-4-W-10-050616	Grab	Water	4546257

1 COPY TO	Cambria Environmental	Attn: Jami Shaffer
ELECTRONIC	Cambria Environmental	Attn: Dan Glaze
COPY TO		
ELECTRONIC	Cambria	Attn: Sara Giorgi
COPY TO		



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

Respectfully Submitted,

Robin C. Runkle
Senior Chemist

X/523 Senior Chemist



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Lancaster Laboratories Sample No. SW 4546250

GP-1-S-6-050616 Facility# 96607 Grab

Soil

2340 Otis Dr-Alameda

T0600100316 GP-1

Collected: 06/16/2005 13:50

by DG

Account Number: 10880

Submitted: 06/18/2005 09:50

ChevronTexaco C/O Cambria

Reported: 07/02/2005 at 00:06

4111 Citrus Avenue

Discard: 08/02/2005

Suite 12

CETR

Rocklin CA 95677

GP1-6

				As Received		l I
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02079	TOC Solids/Sludges Combustion	n.a.	784.	82.2	mg/kg	1
07360	BTEX+MTBE by 8260B					 
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.001	0.0005	mg/kg	0.99
05460	Benzene	71-43-2	0.001	0.0005	mg/kg	0 99
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0,99
05474	Ethylbenzene	100-41-4	0.013	0.001	mg/kg	0.99
06301	Xylene (Total)	1330-20-7	0.070	0.001	mg/kg	0.99

State of California Lab Certification No. 2116

Laboratory Chronicle

		20001001	O			
CAT		_		Analysis	· ·	Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02079	TOC Solids/Sludges	SM20 5310B, modified	1	06/28/2005 15:40	Kyle W Eckenroad	1
07360	Combustion BTEX+MTBE by 8260B	SW-846 8260B	1	06/21/2005 18:19	Anita M Dale	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	06/21/2005 15:03	Anita M Dale	n.a.



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Page 1 of 1

Lancaster Laboratories Sample No. SW 4546251

GP-1-S-8-050616

Grab Soil

Facility# 96607

2340 Otis Dr-Alameda

T0600100316 GP-1

Collected:06/16/2005 14:00 by DG

Account Number: 10880

Submitted: 06/18/2005 09:50

ChevronTexaco C/O Cambria 4111 Citrus Avenue

Reported: 07/02/2005 at 00:06

Discard: 08/02/2005

Suite 12 Rocklin CA 95677

GP1-8

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02079	TOC Solids/Sludges Combustion	n.a.	1,050.	239.	mg/kg	1
07360	BTEX+MTBE by 8260B					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.005	0.003	mg/kg	5 ;
05460	Benzene	71-43-2	0.19	0.003	mg/kg	5
05466	Toluene	108-88-3	1.1	0.005	mg/kg	5
05474	Ethylbenzene	100-41-4	3.0	0.13	mg/kg	125.31
06301	Xylene (Total)	1330-20-7	16.	0.13	mg/kg	125.31

CETR

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02079	TOC Solids/Sludges	SM20 5310B, modified	1	06/28/2005 15:48	Kyle W Eckenroad	1
	Combustion					
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	06/21/2005 19:12	Anita M Dale	5
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	06/22/2005 10:10	Stephanie A Selis	125.31
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	06/21/2005 15:04	Anita M Dale	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	06/22/2005 06:48	Stephanie A Selis	n.a.



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Lancaster Laboratories Sample No. SW 4546252

GP-1-S-10-050616

Grab Soil

Facility# 96607

T0600100316 GP-1

2340 Otis Dr-Alameda

Collected: 06/16/2005 14:10

by DG

Account Number: 10880

Submitted: 06/18/2005 09:50

ChevronTexaco C/O Cambria

Reported: 07/02/2005 at 00:06

4111 Citrus Avenue

Discard: 08/02/2005

Suite 12

CETR

Rocklin CA 95677

GP110

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Dstection Limit	Units	Factor
02079	TOC Solids/Sludges Combustion	n.a.	992.	91.2	mg/kg	1
07360	BTEX+MTBE by 8260B					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.063	mg/kg	125
05460	Benzene	71-43-2	N.D.	0.063	mg/kg	125
05466	Toluene	108-88-3	0.25	0.13	mg/kg	125
05474	Ethylbenzene	100-41-4	0.59	0.13	mg/kg	12/5
06301	Xylene (Total)	1330-20-7	3.4	0.13	mg/kg	125
	The GC/MS volatile analysis was	performed acc	ording to the hi	gh level		ļ
	soil method due to the level of	target compou	ınds. Therefore,	the reporting		
	limits were raised.					i

State of California Lab Certification No. 2116

CAT	Analysis					Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02079	TOC Solids/Sludges	SM20 5310B, modified	1	06/28/2005 19:41	Kyle W Eckenroad	1
	Combustion			05/00/0005 10 55	Charles is a Calif	125
07360	BTEX+MTBE by 8260B	SW-846 8260B	T	06/22/2005 10:56	Stephanie A Selis	125
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	06/22/2005 07:47	Stephanie A Selis	n.a.



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#### Lancaster Laboratories Sample No. SW

GP-2-S-6-050616

Grab

Soil

Facility# 96607

T0600100316 GP-2

2340 Otis Dr-Alameda Collected:06/16/2005 15:20

by DG

Account Number: 10880

ChevronTexaco C/O Cambria

Submitted: 06/18/2005 09:50 Reported: 07/02/2005 at 00:06

4111 Citrus Avenue

CETR

Suite 12 Rocklin CA 95677

Discard: 08/02/2005

GP2-6

				As Received		i
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02079	TOC Solids/Sludges Combustion	n.a.	1,110.	87.0	mg/kg	7
07360	BTEX+MTBE by 8260B					! !
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	1
05460	Benzene	71-43-2	$N \cdot D$ .	0.0005	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	0.005	0.001	mg/kg	‡

State of California Lab Certification No. 2116

CAT	Analysis					Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02079	TOC Solids/Sludges	SM20 5310B, modified	1	06/28/2005 19:49	Kyle W Eckenroad	1
07360	Combustion BTEX+MTBE by 8260B	SW-846 8260B	1	06/21/2005 18:46	Anita M Dale	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	06/21/2005 15:06	Anita M Dale	n.a.



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Lancaster Laboratories Sample No. SW 4546254

GP-2-S-8-050616

Grab Soil

Facility# 96607

T0600100316 GP-2

2340 Otis Dr-Alameda T Collected:06/16/2005 15:30

by DG

Submitted: 06/18/2005 09:50 Reported: 07/02/2005 at 00:06

limits were raised.

Account Number: 10880

ChevronTexaco C/O Cambria 4111 Citrus Avenue

Suite 12

CETR

Rocklin CA 95677

Discard: 08/02/2005

GP2-8

CAT			As Received	As Received Method		Dilution	
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor	
02079	TOC Solids/Sludges Combustion	n.a.	2,890.	1,010.	mg/kg	1	
07360	BTEX+MTBE by 8260B					!	
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.063	mg/kg	125.63	
05460	Benzene	71-43-2	N.D.	0.063	mg/kg	125.63	
05466	Toluene	108-88-3	N.D.	0.13	mg/kg	125.63	
05474	Ethylbenzene	100-41-4	5.8	0.13	mg/kg	125.63	
06301	Xvlene (Total)	1330-20-7	27.	0.13	mg/kg	125.63	
	The GC/MS volatile analysis was performed according to the high level						

State of California Lab Certification No. 2116

and the second s	
Tabavatavr	Chroniala
Laboratory	CITTOTITE

CAT	Analysis					Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02079	TOC Solids/Sludges	SM20 5310B, modified	1	06/28/2005 16:17	Kyle W Eckenroad	1
07360	Combustion BTEX+MTBE by 8260B	SW-846 8260B	1	06/22/2005 11:19	Stephanie A Selis	125.63
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	06/22/2005 07:49	Stephanie A Selis	n.a.



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Lancaster Laboratories Sample No. SW 4546255

GP-2-S-10-050616

Grab Soil

Facility# 96607

T0600100316 GP-2

2340 Otis Dr-Alameda Collected: 06/16/2005 15:40

by DG

Account Number: 10880

Submitted: 06/18/2005 09:50 Reported: 07/02/2005 at 00:06

Discard: 08/02/2005

ChevronTexaco C/O Cambria

4111 Citrus Avenue

Suite 12

CETR

Rocklin CA 95677

GP210

				As Received		i.
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02079	TOC Solids/Sludges Combustion	n.a.	3,600.	95.4	mg/kg	1
07360	BTEX+MTBE by 8260B					İ
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1
05466	Toluene	108-88-3	0.001	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	0.032	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	0.32	0.001	mg/kg	1 ¦

State of California Lab Certification No. 2116

Laboratory Chronicle

		HANGIACOI J		*****	· ·	
CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02079	TOC Solids/Sludges	SM20 5310B, modified	1	06/28/2005 19:57	Kyle W Eckenroad	1
07360	Combustion BTEX+MTBE by 8260B	SW-846 8260B	1	06/23/2005 22:33	Anita M Dale	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	06/23/2005 18:42	Anita M Dale	n.a.



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Page I of 1

Lancaster Laboratories Sample No. 4546256

GP-3-W-10-050616

Grab Water

Facility# 96607

T0600100316 GP-3

2340 Otis Dr-Alameda

Collected:06/16/2005 10:50

Account Number: 10880 by DG

CETR

Submitted: 06/18/2005 09:50 Reported: 07/02/2005 at 00:06

Discard: 08/02/2005

ChevronTexaco C/O Cambria 4111 Citrus Avenue

Suite 12

Rocklin CA 95677

**GP310** 

As Received

Dilution As Received Method CAT CAS Number Result Detection Units Factor No. Analysis Name Limit ug/11 02202 TPH-DRO CALUFT(Water) w/Si Gel n.a. 1,000. 120.

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT			1	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02202	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	06/22/2005 20:10	Tracy A Cole	1
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	06/20/2005 18:00	Elia R Botrous	1



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Page 1 of 1

Lancaster Laboratories Sample No. WW 4546257

GP-4-W-10-050616

Grab Water

Facility# 96607

T0600100316 GP-4

2340 Otis Dr-Alameda Collected:06/16/2005 10:50

by DG

Submitted: 06/18/2005 09:50 Reported: 07/02/2005 at 00:06

Discard: 08/02/2005

Special

Account Number: 10880

ChevronTexaco C/O Cambria

4111 Citrus Avenue

Suite 12

Rocklin CA 95677

**GP410** 

As Received

As Received

CETR

Method

Dilution

No. Analysis Name

Result CAS Number

Detection Limit

Units Factor

ug/l

02202

CAT

TPH-DRO CALUFT (Water) w/Si Gel n.a. 2,100. Due to the nature of the sample matrix, a reduced aliquot was used

for analysis. The reporting limits were raised accordingly.

State of California Lab Certification No. 2116

Laboratory Chronicle

Dilution CAT Factor Trial# Date and Time Analyst Method Analysis Name 06/22/2005 20:35 Tracy A Cole 1 02202 TPH-DRO CALUFT(Water) w/Si CALUFT-DRO/8015B, 1 Modified 06/20/2005 18:00 Elia R Botrous Extraction - DRO Water 02135 TPH by CA LUFT 1



Group Number: 947948

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#### Quality Control Summary

Client Name: ChevronTexaco C/O Cambria

Reported: 07/02/05 at 12:06 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 <u>M</u> DL	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 051710005A TPH-DRO CALUFT(Water) w/Si Gel	Sample nu N.D.	umber(s): 29.	4546256-45 ug/l	46257 90	91	64-125	1	20
Batch number: 05175150531B TOC Solids/Sludges Combustion	Sample nu N.D.	umber(s); 60.0	4546250-45 mg/kg	46255 75		56-144		
Batch number: B051721AA Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total) Batch number: B051741AB	Sample no N.D. N.D. N.D. N.D. N.D.	0.5 0.5 1. 1.	4546250-45 ug/kg ug/kg ug/kg ug/kg ug/kg	97 97 87 82 86	46253	75~125 77-119 81-116 82-115 82-117		
Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	N.D. N.D. N.D. N.D. N.D.	0.5 0.5 1. 1.	ug/kg ug/kg ug/kg ug/kg ug/kg	86 93 94 88 91		75-125 77-119 81-116 82-115 82-117		
Batch number: Q051681AB Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	Sample nu N.D. N.D. N.D. N.D. N.D.	imber(s): 63. 63. 130. 130.	4546251-45 ug/kg ug/kg ug/kg ug/kg ug/kg	46252,454 98 98 99 99 99	16254	75-125 77-119 81-116 82-115 82-117		

#### Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD MAX	BKG Conc	DUP <u>Conc</u>	DUP RPD		Dup RPD Max
Batch number: 05175150531B TOC Solids/Sludges Combustion	Sample 83	number	(s): 4546250 71-136	-45462	55	13,700.	12,700.	8 (1)		14
Batch number: B051721AA	Sample	number	(s): 4546250	-45462	51,454	6253			1	
Methyl Tertiary Butyl Ether	91	94	49-140	4	30					
Benzene	99	99	67-123	0	30					
Toluene	90	89	55-125	1	30				i	
Ethylbenzene	82	83	50-127	0	30				i	
Xvlene (Total)	86	87	54-123	1	30				!	

#### \*- Outside of specification

Xylene (Total)

(1) The result for one or both determinations was less than five times the LOQ.

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



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Page 2 of 3

#### Quality Control Summary

Client Name: ChevronTexaco C/O Cambria

Group Number: 947948

78

Reported: 07/02/05 at 12:06 AM

#### Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
Analysis Name	<u>%REC</u>	%REC	<u>Limits</u>	RPD	<u>MAX</u>	Conc	Conc	<u>RPD</u>	<u>Max</u>
Batch number: B051741AB	Sample	number	(s): 4546255						
Methyl Tertiary Butyl Ether	84	80	49-140	6	30				1
Benzene	92	86	67-123	8	30				
Toluene	92	86	55-125	9	30				Į.
Ethylbenzene	87	80	50-127	9	30				
Xylene (Total)	87	80	54-123	10	30				
Batch number: Q051681AB	Sample	number	(s): 4546251	-45462	252,454	6254			: 
Methyl Tertiary Butyl Ether	94	96	49-140	1	30				
Benzene	95	96	67-123	1	30				į
Toluene	96	96	55-125	0	30				
Ethylbenzene	87	89	50-127	1	30				
Xylene (Total)	92	92	54-123	0	30				

#### Surrogate Quality Control

Analysis Name: TPH-DRO CALUFT(Water) w/Si Gel

Batch number: 051710005A Orthoterphenyl

4546256	73
4546257	80
Blank	96
LCS	110
LCSD	111

Limits: 64-125

Analysis Name: BTEX+MTBE by 8260B

Batch number: B051721AA
Dibromofluoromethane

Daten name	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4546250	86	87	82	82
4546251	83	82	88	90
4546253	B6	84	85	80
Blank	91	89	80	74
LCS	88	89	84	83
MS	89	84	86	80
MSD	88	87	85	83
Limits:	70-129	70-121	70-130	70-128

Analysis Name: BTEX+MTBE by 8260B

Batch number: B051741AB 4-Bromofluorobenzene Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4546255 83 88 71 89 82 Blank 83 91 81 LCS 89 MS 89 90 80

90

\*- Outside of specification

MSD

(1) The result for one or both determinations was less than five times the LOQ.

85

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



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#### Quality Control Summary

Client Name: ChevronTexaco C/O Cambria

Group Number: 947948

Reported: 07/02/05 at 12:06 AM

Surrogate Quality Control  $_{70\text{-}121}$   $_{70\text{-}130}$ 70-128 Limits: 70-129

Dacen name	per: Q051681AB Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4546252	94	93	89	90
4546254	96	95	91	93
Blank	101	101	95	94
LCS	107	108	107	117
MS	94	94	93	94
MSD	95	96	95	95
Limits:	70-129	70-121	70-130	70-128

#### \*- Outside of specification

<sup>(1)</sup> The result for one or both determinations was less than five times the LOQ.

<sup>(2)</sup> The background result was more than four times the spike added.

### Chevron California Region Analysis Request/Chain of Custody

Lancaste Where quality	er Labor	<u>atories</u>	6	101=	765	-04			Ac	:ct. #:	1	182	10	_ Sa	F ample	orLa #:_	4//	16	25	985 I	55 on 57	scr#: <i>9//</i>	x 94	<u> 1948.</u>
• Wisequally	S & SOETRUE.					- 1									A	пају	ses	Requ	ested			7 <i>(/ '</i>		
Facility#: 9-166	07 - M	T													F	тезе	rva	ion C	odes			Preserva	tive Code	_
Site Address: 23		_	Alan	reda	CA		· · · · · · · · · · · · · · · · · · ·	_						g.				<u>~</u>	++	-	+	H = HCl N = HNO <sub>3</sub>	T = Thiosa B = NaOH	
Chevron PM: Mar	h Ingli	5	Lead C	onsultan	t Car	abrig-1	47				S			N-8ilica Gel Cleanup				53/0B	+1			3 = H₂SO₄  ☐ J value report	O = Other	
Consultant/Office: _	Cambric	2/200	klin	<u> </u>	_					.	aire	Ē		9				<				☐ Must meet lov	-	on Simits
Consultant Prj. Mgr.:	Bruce	Eppl	es	**	<u> </u>						Containers	<b>⊠</b> 8021 □		8				2				possible for 8		
Consultant Phone #:				Fax#:	716-63	30-185	6				ō	8260	9 <u>8</u> 0	PRO Y				9				8021 MTBE Coi	ılimation	1
Sampler: Dan				_					ŀ		her				_	ates	74.	3			ŀ	Confirm highe	-	50
Service Order #:			□No	SAR:		···				osit	5	E E	5 ₹	15 M(	iscar i	xyger	8	ජී				Confirm all hi	-	
Field		Repeat	Тор				New		Grab	Composite	Total Number of	BTEX + MTBE	TPH 8015 MOD	TPH 8015 MOD	8260 full scan	Oxygenates	ead 74	140		İ		☐ Run ox	=	
Point Name	Matrix Se. 1	Sample No	Depth		ontn Day O6 ib	Collected [:50	Tieli V			1	1,	₿	-	-	80		-	牙			$\dashv$	Comments /	Remarks	
GP- 1-5-8	<u> </u>	1	8	0.5	1 70 10	2:00	1	<u>.&gt;</u> _	1		1	r						T	1	$\dashv$		a mail res	etellu	
GP-1-5-10	7 1 -		10		<del>}</del>	2:10				1					$\Box$							dg breeco	ambeja-	eny.com
GP-2-5-6			6			3:20			П			П										an of side	ambria-	env-co
GP-2-5-8			₿			3:30	<u> </u>		Ш	ļ		Ш	<u> </u>											
GP-2-5-1D	1-4-		10		<b> </b>	3:40				ļ	-	1		_	ļ				-	$\dashv$		4		
GP-3@10	Water	-	10		<del>                                     </del>	10:50	-	-	┞╌┞		2	╄		$\Diamond$	-						$\dashv$	-		
GP-4@10'			10	-		10:50	-	<u> </u>	-		2	├	-		$\vdash$						-			
		*	-		<del></del>	<del> </del>	┢		-		-	┢	-	-					-	$\dashv$	-	1		İ
		<b> </b>							<del>                                     </del>	<del>                                     </del>			-		<del>                                     </del>							7		ŀ
	$\neg   \neg \neg$				<del></del>	<u> </u>	m			1														
														<u>L</u>									<del></del>	
Turnaround Time F	Requeste <del>d</del>	(TAT) (ple	ase circl	e)		Reimquishe	A PA	ļ							Date		Time	Re	Colved L	Z,	/ اسا	Imase	Date 6/7/05	Time /03/0
STD. TAD	72 hour	-	48 hour		ŀ	Relinguishe	by:	7	<del>)                                    </del>				<del></del>	<b>∀</b>	Date	_	Time		ceived		1	-	Date	Time
24 hour	4 day	:	5 day			and		U	n	NO	y	દ		6/	שתו	5/	<u>53</u>	<u>a_</u>	H	-e	d F	<del>-</del>	6/17/05	
Data Package Option	ons (please	circle if rea	uired)			Relinquishe	d by:							┽	Date	┿	Time	- Re	<del>ceived</del>	by:	·		Date	Time
QC Summary	Type I – Fu				}	Relinquishe	d by (	`am-	· ·	al Ca	rrior						-	Pa	ceived	hır	_	7/1	Date	Time
Type VI (Raw Data)	☐ Coelt De	liverable n	ot neede	:d		UPS 2	Fee	=	rereii		<del>rner.</del> ther							Received by: Date (1865)						
WIP (RWQCB)					ŀ	Temperatur			ceint		45	6	C°				_	Cu	storty	Seals	Jetact'	? (ES) No	1''	
Disk						· Sinpolatat														<u>ست</u>				

3460 Rev. 10/04/01



### **Explanation of Symbols and Abbreviations**

Inorganic Qualifiers

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	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)	!	liter(s)
m3	cubic meter(s)	ul	microliter(s)

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- 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 Quanners		morganic Quanners
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
р	Concentration difference between primary and	W	Post digestion spike out of control limits
-	confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995

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

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

Defined in case narrative

Organic Qualifiers

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 C Standard Procedures For Geoprobe® and Hand Auger Sampling

#### STANDARD FIELD PROCEDURES FOR SOIL BORINGS AND GROUTING

This document describes Cambria Environmental Technology's standard field methods for drilling and sampling soil borings. 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:

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

#### Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or hydraulic push technologies. At least one and one half ft of the soil column is collected for every five ft of drilled depth. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments beyond the bottom of the borehole. The vertical location of each soil sample is determined by measuring the distance from the middle of the soil sample tube to the end of the drive rod used to advance the split barrel sampler. All sample depths use the ground surface immediately adjacent to the boring as a datum. The horizontal location of each boring is measured in the field from an onsite permanent reference using a measuring wheel or tape measure.

Drilling and sampling equipment is steam-cleaned 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

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

#### Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch type sampler or are collected from the open borehole using bailers. 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 collected 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 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.

#### Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite on top of and covered by plastic sheeting. At least four individual soil samples are collected from the stockpiles for later compositing at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Ground water removed during sampling and/or rinsate generated during decontamination procedures are stored onsite in sealed 55 gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Disposal of the water is based on the analytic results for the well samples. The water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

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#### STANDARD FIELD PROCEDURES FOR HAND-AUGER SOIL BORINGS

This document describes Cambria Environmental Technology's standard field methods for drilling and sampling soil borings using a hand-auger. 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 product saturation percentage,
- Observed odor and/or discoloration,
- Other significant observations (i.e. cementation, presence of marker horizons, mineralogy), and
- Estimated permeability.

#### Soil Boring and Sampling

Hand-auger borings are typically drilled using a hand-held bucket auger to remove soil to the desired sampling depth. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments beyond the bottom of the augered hole. The vertical location of each soil sample is determined using a tape measure. All sample depths use the ground surface immediately adjacent to the boring as a datum. The horizontal location of each boring is measured in the field from an onsite permanent reference using a measuring wheel or tape measure.

Augering and sampling equipment is steam-cleaned 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

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

#### Grouting

The borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

#### Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite on top of and covered by plastic sheeting. At least four individual soil samples are collected from the stockpiles for later compositing at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Ground water removed during sampling and/or rinsate generated during decontamination procedures are stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Disposal of the water is based on the analytic results for the well samples. The water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

7/12/05

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## ATTACHMENT D Historical Soil Results

Table 1
Historical Soil Results

Former Chevron Station #9-6607, 2340 Otis Drive, Alameda, CA

<del></del>		Former Che							) (777)	
Sample ID	Depth	Date	TPHd	TPHg	Benzene		Ethylbenzene eported in ma		MTBE	TOG
	(fbg)	ESL	500	400	0.38	9.3	32	11	5.6	1,000
Gasoline UST										
AF	6	2/14/1991	-	ND	0.021	ND	ND	0.02	<b>-</b> ,	-
AoP	6	2/14/1991	~	ND	0.19	0.012	ND	0.013	-	-
BF	6	2/14/1991	~	9	0.94	0.18	0.8	0.52	-	-
BoP	6	2/14/1991	-	5.3	0.45	0.075	0.07	0.075	- !	-
CF	6	2/14/1991		42	0.29	0.4		2.3	-	-
CoP	6	2/14/1991	-	7	0.009	0.01	0.021	0.06	- ;	-
									į.	
New Installation										
#1	16	2/15/1991	-	ND	ND	ND	ND	ND		-
#2	16	2/15/1991	-	2.6	0.08	0.013	0.02	0.074	-	-
#3	16	2/15/1991	•	ND	ND	ND	ND	ND	-	-
#4	16	2/15/1991	•	ND	ND	ND	ND	ND	<b>-</b> 'i	-
#5	16	2/15/1991	-	ND	ND	ND	ND	ND	-	-
#6	16	2/15/1991	-	ND	ND	ND	ND	ND	-	-
Head oil Her									!	
Used-oil UST #7*	6	2/14/1991	ND	ND	0.0073	0.04	0.013	0.061	-	3200
#8	6	2/14/1991	ND	ND	0.0073	0.012	ND	0.012	- ;	ND
# <del>  *</del>	6.25	<del>2/22/1991</del>	ND	<del>U</del> A	СИ	ND	ND	ND	-	<del>260</del>
#1	5.5	2/26/1991	ND	ND	ND	ND	ND	ND	- i	ND
#10	6	3/7/1991	-	150	0.2	1.9	1.6	5.7	-	16,000
#11	6	3/7/1991	-	ND	ND	ND	ND	ND	-	ND
Product Line Re	nlaaamant								i	
Product Line Re		2/20/1001		1.2	0.041	0.016	0.025	0.038	_ (	ND
#2	2.5	2/28/1991	-			0.016			_	ND ND
#3	3	2/28/1991	-	ND	ND	ND	ND	ND	i	
#4	2.5	2/28/1991	-	ND	ND	0.008	ND	ND	-	ND
#5*	1-5	<del>2/28/1991</del>	-	<del>310</del>	1.7	1.9	5	13	-	<del>180</del>
# <u>G*</u>	2	<del>2/2</del> 8/1991	-	<del>53</del>	0.11	0.14	0.67	3	-	640
#7	2	2/28/1991	-	ND	ND	0.006	ND	ND	-	ND
#8*	2.5	<del>2/2</del> 8/1991	-	<del>690</del>	<del>0.9</del>	8.3	6.6	<del>62</del>	- !	<del>220</del>
# <del>9*</del>	3	<del>2/2</del> 8/1991	-	4 <del>700</del>	<del>13</del>	<del>27</del>	<del>65</del>	<del>320</del>	-	ND
# <del>10</del> *	<del>2.5</del>	<del>2/28/1991</del>	-	<del>2100</del>	<del>2</del> 3	<del>190</del>	<del>870</del>	<del>430</del>	<b>-</b> ¦	<del>160</del>
# <del>11*</del>	2.5	<del>2/28/1991</del>	-	<del>5200</del>	<del>27</del>	<del>270</del>	1 <del>50</del>	<del>920</del>	- 1	ФИ
#12*	3	<del>2/28/1991</del>	-	<del>240</del>	0.76	<del>7.2</del>	4.4	<del>21</del>	- !	МÐ
# <del>13*</del>	2.5	<del>2/28/1991</del>	-	<del>5700</del>	<del>36</del>	<del>190</del>	<del>9</del> 1	4 <del>30</del>	-	ND
#14	2.5	2/28/1991	-	ND	ND	ND	ND	ND	-	ND
#15*	2.5	<del>2/28/1991</del>	-	660	2.7	<del>20</del>	<del>12</del>	73	<u>-</u> !	<del>80</del>
*Product Line C	)ver-excava	ition							ļ	
#1	9	3/7/1991	-	23	0.16	1.1	0.48	2.5	-	-
#2	7.5	3/7/1991	_	ND	0.024	0.02	0.012	0.051	- :	-
#3	4	3/7/1991	_	150	ND	2.2	1.9	17	- ,	-
#4	4	3/7/1991	-	9	0.068	ND	ND	0.83	- i	-
#5	7	3/7/1991	_	150	1.3	2.5	2.1	7.7	_ {	-
#6	7	3/7/1991	_	9.4	2.4	0.75	0.55	0.7	- !	**
#0 #7	7	3/7/1991	_	5.7	1.7	0.18	0.22	1.1	_	-
		3/7/1991	-	ND	ND	ND	ND	ND	_ !	_
#8 #9	6 7	3/7/1991	-	1.8	0.63	0.03	0.085	0.13	_	_
HY	,	JI 1771	•	1.0	0.03	0.05	4.000	V.13	į	
Well Borings				_					:	
MW-I	3	8/6/1991	-	<1	< 0.005	< 0.005	< 0.005	< 0.005	-	-
MW-1	5	8/6/1991	-	<1	< 0.005	< 0.005	< 0.005	< 0.005	-	-

Table 1
Historical Soil Results

Former Chevron Station #9-6607, 2340 Otis Drive, Alameda, CA

Former Chevron Station #9-6607, 2340 Otis Drive, Alameda, CA										
Sample ID	Depth	Date	TPHd	TPHg	Benzene		Ethylbenzene Xylenes		MTBE	TOG
	(fbg)						reported in ma			
MW-2	2	8/6/1991	-	<1	< 0.005	< 0.005	< 0.005	< 0.005	- !	-
MW-2	5	8/6/1991	-	<1	< 0.005	< 0.005	< 0.005	< 0.005	-	-
V4124 V	2	8/6/1991		<1	< 0.005	< 0.005	< 0.005	< 0.005	į	
MW-3	3 5	8/6/1991 8/6/1991	-	<1 <1	<0.005	< 0.005	< 0.005	< 0.005	-	<u>-</u>
MW-3	3	6/0/1991	-	<b>~</b> 1	~0.003	<b>~0.003</b>	~0.003	~0.003	- 1	-
MW-4	3	8/7/1991	<10	<1	< 0.005	< 0.005	< 0.005	< 0.005	-	_
MW-4	5	8/7/1991	<10	<1	< 0.005	< 0.005	< 0.005	< 0.005	-	-
									İ	
<b>Borings</b>									į	
Bi-S-5	5	9/2/2004	-	<10	< 0.0005	< 0.001	< 0.001	< 0.001	<0.0005	
B1-S-10	10	9/2/2004	-	<1.0	< 0.005	< 0.001	< 0.001	< 0.001	0.057	-
							_			
B2-S-5	5	9/2/2004	-	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	0.015	•
B2-S-10	10	9/2/2004	-	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	0.026	-
		0.12.22.1			.0	40 OO4	40.004	40.004	0.000	
B3-S-5	5	9/2/2004	-	<1.0	<0.0005	< 0.001	<0.001	< 0.001	0.002	-
B3-S-10	10	9/2/2004	-	<1.0	< 0.0005	< 0.001	<0.001	< 0.001	0.003	-
B3-S-16	16	9/2/2004	-	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	0.029	-
B3-S-20	20	9/2/2004	-	<1.0	< 0.0005	< 0 001	< 0 001	< 0.001	0.024	-
	-	0.44.000.4		41.0	40 000E	-0.001	<0.001	<0.001	~0.0004	
B4-S-5	5	9/1/2004	-	<1.0	<0.0005	< 0.001	<0.001	< 0.001	<0.000\$	-
B4-S-10	10	9/1/2004	-	<1.0	<0.0005	<0.001	< 0.001	< 0.001	0.001	-
DC C C		9/1/2004		13	<0.0005	< 0.001	< 0.001	< 0.001	<0.000\$	_
B5-S-5	5		-	13 11	0.0003	< 0.001	< 0.001	< 0.001	0.005	-
B5-S-10	10	9/1/2004	-	11	0.0000	<0.001	<0.001	~0.001	0.003	-
B6-S-5	5	9/1/2004	_	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	-
B6-S-10	10	9/2/2004	_	<1.0	< 0.0005	< 0.001	<0.001	< 0.001	0.002	-
B6-S-16	16	9/2/2004	-	<1.0	< 0.0005	< 0.001	< 0 001	< 0.001	0.14	-
B6-S-20	20	9/2/2004	-	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	0.24	
									!	
B7-S-5	5	9/1/2004	_	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	-
B7-S-10	10	9/1/2004	-	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	0.014	-
B7-S-15.5	15.5	9/1/2004	-	<1.0	< 0.0005	< 0.001	< 0.001	< 0.001	0.052	-
Site Demolition									ĺ	
UST#1	9	9/9/2004	-	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	-
UST#2	9	9/9/2004	-	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	0.011	-
UST#3	9	9/9/2004	-	17	0.02	0.065	0.35	1 0 002	<0.01	-
UST#4	9	9/9/2004	-	<1.0	<0.005	<0.005	< 0.005	0.003 0.036	0.008 < <del>0.01</del>	-
H-D1	4	<del>9/9/2004</del> 9/9/2004	-	<del>290</del> 1,500	< <del>0.01</del> < <del>0.5</del>	<0.01 0 64	<del>0.026</del> <del>10</del>	<del>38</del>	<0.5	
H <del>-D2</del>	4	<del>9/9/2004</del> <del>9/9/2004</del>	<del>-</del> -	1 <del>,500</del>	0.2	0:08	<del>9.6</del>	1-9	<0.05	_
<del>I2-DI</del> <del>I2-D2</del>	4 4	<del>9/9/2004</del> <del>9/9/2004</del>	-	<del>190</del>	< <del>0.1</del>	< <del>0.1</del>	<del>0.11</del>	0.53	<0.1	_
13-D1	4	<del>9/9/2004</del>	-	<del>37</del>	0.74	<0.05	2.3	0.74	<0.05	_
13-D2	4	9/9/2004	_	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	-
used oil @-5	\$	9/9/2004	<del>3,100</del>	420	<1.0	1.3	4-5	<del>19</del>	<1.0	<del>25,000</del>
used oil @ 7	7	9/9/2004	110	2.5	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	880
11-D1@6	6	9/15/2004	-	4.4	< 0.005	0.005	0.049	0.1	0.0097	-
11-D2 @ 6	6	9/15/2004	-	6.4	0.014	0.14	0.067	0.37	<0.005	-
12-D1 @ 6	6	9/15/2004	-	<1.0	0.013	< 0.005	0.01	0.018	<0.005	-
12-D2 @ 6	6	9/15/2004	-	1.3	0.065	< 0.005	0.08	0.13	0.0068	-
13-D1 @ 6	6	9/15/2004	-1.0	160	< 0.2	0.98	2.7	9.4	<0.2	<50
used oil @ 6	6	9/15/2004	<1.0	<1.0	<0.005	<0.005 <0.005	<0.005	<0.005 <0.005	<0.005 <0.005	<50 <50
used oil hoist	7	9/15/2004	6.6	<1.0	< 0.005	<u.vu></u.vu>	< 0.005	~0.003	~0.003	~20

Table 1
Historical Soil Results

Former Chevron Station #9-6607, 2340 Otis Drive, Alameda, CA

Depth	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TOG
(fbg)		(concentrations reported in mg/kg)							
7	9/15/2004	-	-	< 0.005	< 0.005	< 0.005	<0.005	<0.005	120
7	9/15/2004	-	<del>23</del>	0.007	0.027	0.1	0.071	<0.005	12,000
7	9/15/2004		-	< 0.005	<0 005	< 0.005	< 0.005	<0.005	250
11	9/27/2004	-	<1.0	< 0.005	< 0.005	< 0 005	< 0.005	- ;	61
11.5	9/27/2004	-	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	<b>-</b>	<50
	(fbg) 7 7 7 7	(fbg)  7 9/15/2004  7 9/15/2004  7 9/15/2004  11 9/27/2004	(fbg)  7 9/15/2004 -  7 9/15/2004 -  7 9/15/2004 -  11 9/27/2004 -	(fbg)  7 9/15/2004	(fbg)         (con           7         9/15/2004         -         -         <0.005	(fbg)         (concentrations)           7         9/15/2004         -         -         <0.005	(fbg)         (concentrations reported in mg           7         9/15/2004         -         -         <0.005	(fbg)         (concentrations reported in mg/kg)           7         9/15/2004         -         -         <0.005	(fbg)         (concentrations reported in mg/kg)           7         9/15/2004         -         -         <0.005

#### **Additional Notes**

TPHg = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015

TPHd - Total Petroleum Hydrocarbons as Diesel

TOG = Total oil and gas by EPA Method 5520

fbg = feet below grade

"-" = Not analyzed

ND = Not detected

#7\* = sample was overexcavated

ESL = Shallow soil non-drinking water basin, commercial soil