Ian Robb
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6111 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 543-2375
Fax (925) 543-2324
irobb@chevron.com

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

Re: Former Service Station No. 30-7233
2259 First Street
Livermore, CA

I have reviewed the attached work plan dated June 10, 2009.

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

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

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

Sincerely,

Ian Robb
Project Manager

Attachment: Work Plan

CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
http://www.craworld.com

June 10, 2009 Reference No. 312264

Mr. Jerry Wickham
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Pilot Test Work Plan or Draft Corrective Action Plan
Former Texaco Service Station (Chevron Site 30-7233)
2259 First Street
Livermore, California
Fuel Leak Case RO0002908

Dear Mr. Wickham:

Conestoga Rovers & Associates (CRA) is submitting this Pilot Test Work Plan or Draft Corrective Action Plan on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. In a letter dated April 3, 2009, Alameda County Environmental Health (ACEH) requested remedial action for residual petroleum hydrocarbons in soil and groundwater (Attachment A). CRA understands the request, but believes that it is necessary to determine the groundwater flow direction, static groundwater elevations, and establish petroleum hydrocarbon concentration trends, prior to evaluating remedial options and conducting feasibility testing at the site. Therefore, CRA proposes to install four groundwater monitoring wells and collect groundwater data for at least four quarters before evaluating potential remedial options. Presented below are the site background and the proposed scope of work.

SITE BACKGROUND

The former service station site is the location of Mill Square Park, owned by the City of Livermore and located on the east corner of First Street and South Livermore Avenue in Livermore, California (Figure 1). Topography around the site slopes gently to the north at an elevation of approximately 485 feet above mean sea level. The park consists of grass and trees with a concrete walkway. Land use surrounding the park is primarily commercial.

The earliest available aerial photograph was from 1959, which shows a station building located on the southern edge of the property and two dispenser islands located on the western portion of the property. The 1973 aerial photograph indicates that the station building and dispenser

island had been removed and only a paved lot remained. By 1978, the property had been redeveloped as a park (Figure 2). The park remains in the same configuration as shown on the 1978 aerial photo. To date, a total of 31 soil borings and 6 soil vapor probes have been installed at the site. Previously collected soil, grab-groundwater, and soil vapor data is presented in Tables 1 through 3. A chronological summary of activities conducted to date at the site is presented as Appendix B.

SITE GEOLOGY AND HYDROGEOLOGY

According to the Groundwater Management Plan prepared by the Zone 7 Water Agency (Zone 7) and dated September 2005, the site is located in the Mocho II Sub-Basin of the Main Livermore-Amadore Valley Groundwater Basin. In this basin, recent alluvium consisting of sandy gravel and sandy clayey gravel are encountered from the surface to approximately 150 feet below grade (fbg). This alluvium overlies the Livermore Formation. At the site, silty sand, silty gravel and sandy gravel were encountered from the surface to roughly 9 fbg. Underlying silts and clays were encountered to approximately 45 fbg. Predominately sands and gravels were encountered from approximately 45 fbg to 80 fbg, the total depth explored.

Groundwater in this sub-basin typically flows westward. Based on recent quarterly data from three service stations within approximately five blocks of the site, the groundwater flow direction varies from north to southwest. The groundwater elevations at these sites fluctuate between approximately 10 and 40 fbg. Zone 7 Water Agency extracts groundwater from this basin for municipal drinking water.

PROPOSED SCOPE OF WORK

In a letter dated April 3, 2009, Alameda County Environmental Health (ACEH) requested remedial action for residual petroleum hydrocarbons in soil and groundwater (Attachment A). CRA understands the request, but believes that it is necessary to determine the groundwater flow direction, static groundwater elevations, and establish petroleum hydrocarbon concentration trends, prior to evaluating remedial options and conducting feasibility testing at the site. Therefore, CRA proposes to install four groundwater monitoring wells and collect groundwater data for at least four quarters before evaluating potential remedial options. This request is justified by the varying groundwater flow directions and wide range of static groundwater depths observed at three sites within approximately five blocks of the site. In addition, recent soil vapor data demonstrates that there is no risk to human health. Therefore,

CRA provides the following justification to install four monitoring wells in locations shown on Figure 3:

- Two wells will be installed onsite and screened between 30 and 55 fbg to verify groundwater concentrations from previous investigations and establish hydrocarbon concentration trends. One well will be installed near boring SB8, since elevated dissolved-phase petroleum hydrocarbons were detected in this boring. The other proposed onsite well is located what is thought to be downgradient of boring SB12, which previously had elevated petroleum hydrocarbons detected in soil.
- Two wells will be installed offsite and screened between 30 and 55 fbg to verify groundwater concentrations from previous investigations and establish hydrocarbon concentration trends. CRA proposes installing one well between borings CPT1 and CPT3 and another well near boring CPT5 to evaluate previously detected elevated dissolved-phase petroleum hydrocarbons concentrations.

The proposed screen lengths and screen intervals are based on first encountered groundwater depths from previous subsurface investigations and groundwater elevation data from nearby sites. The variability of groundwater elevations at nearby sites suggests that wells constructed with short screen intervals might not produce useful groundwater monitoring data. Historically, groundwater elevations at nearby sites have varied by as much as 40 feet. Monitoring reports for these sites indicate depth to groundwater is not consistent in the area. Therefore, the final screen lengths and screen intervals will be based on conditions observed during drilling. To accomplish this scope of work, Chevron and CRA propose to conduct the following:

Health and Safety Plan: CRA will prepare a health and safety plan to protect site workers. The plan will be reviewed and signed by all site workers and visitors. The plan will remain onsite during all field activities.

Permits: CRA will obtain monitoring well permits from the Zone 7 Water District and encroachment permits from the City of Livermore prior to beginning field operations.

Underground Utility Location: CRA will contact Underground Services Alert (USA) and use a private utility locator to confirm that no utilities exist at and near the proposed well locations. Per Chevron safety standards, each boring will be cleared to 8 fbg using an air knife assisted vacuum rig or hand augers.

Well Installation: The monitoring wells will be advanced with 10-inch diameter hollow-stem augers then completed as monitoring wells MW-1 through MW-4. The wells will be completed using 4-inch diameter Schedule 40 poly vinyl chloride (PVC) casing with a 0.010-inch slotted screen. Screen depths may be adjusted depending on the depth of groundwater encountered. The filter pack will consist of #2/12 sand from the bottom of the boring to approximately 2 feet above the screened interval. Exact boring locations and final depths will be based on site and utility constraints and the vertical extent of soil impact. Well location and top of casing elevation will be surveyed by a California licensed land surveyor. Well development will be completed at least two days after installation and groundwater sampling will be initiated on a quarterly basis for at least four quarters. CRA's Standard Field Procedures for Well Installation are presented as Attachment C.

Soil Sampling Protocol: Soil samples will be collected for laboratory analysis at approximate 10 foot intervals, at obvious changes in soil types, at depths where petroleum hydrocarbons have been previously detected, at depths where elevated photo-ionization detector concentrations are detected, and where hydrocarbon staining is observed, to the bottom of the boring. CRA geologists will log collected soils using the modified Unified Soil Classification System. All samples will be sealed, capped, labeled, logged on a chain-of-custody form, placed on ice and transported to a Chevron and State-approved laboratory for analysis.

Chemical Analysis: Select soil samples will be analyzed for the following:

- Total Petroleum Hydrocarbons as motor oil and as diesel by EPA Method 8015 modified with silica gel cleanup;
- Total Petroleum Hydrocarbons as gasoline by EPA Method 8015 modified; and
- Benzene, toluene, ethylbenzene and xylenes by EPA Method 8260B.

Waste Disposal: Soil cuttings generated will be placed in drums and labeled appropriately. These wastes will be transported to the appropriate Chevron-approved disposal facility following receipt of analytical profile results.

Reporting: Upon completion of field activities and review of the analytical results, CRA will prepare an investigation report that, at a minimum, will contain:

- Descriptions of the drilling and sampling methods;
- Boring logs;
- Tabulated soil analytical results;
- Analytical reports and chain-of-custody forms;
- Soil disposal details;
- An evaluation of the extent of hydrocarbons in the subsurface; and
- Conclusions and recommendations.

SCHEDULE

CRA will proceed with the proposed scope of work upon receipt of written approval from ACEH. After approval, CRA will obtain the necessary drilling and encroachment permits, and schedule the subcontractors at their earliest availability. We will submit our investigation report approximately eight weeks after completion of field activities.

CONESTOGA-ROVERS
& ASSOCIATES

June 10, 2009

Reference No. 312264

We appreciate the opportunity to work with you on this project. If you determine that the proposed scope of work is not appropriate based on your request, please contact Ms. Charlotte Evans at (510) 420-3351 or Mr. Ian Robb at (925) 543-2375 to discuss the proposed work.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Charlotte Evans

Brandon S. Wilken, P.G. # 7564

CE/doh/2

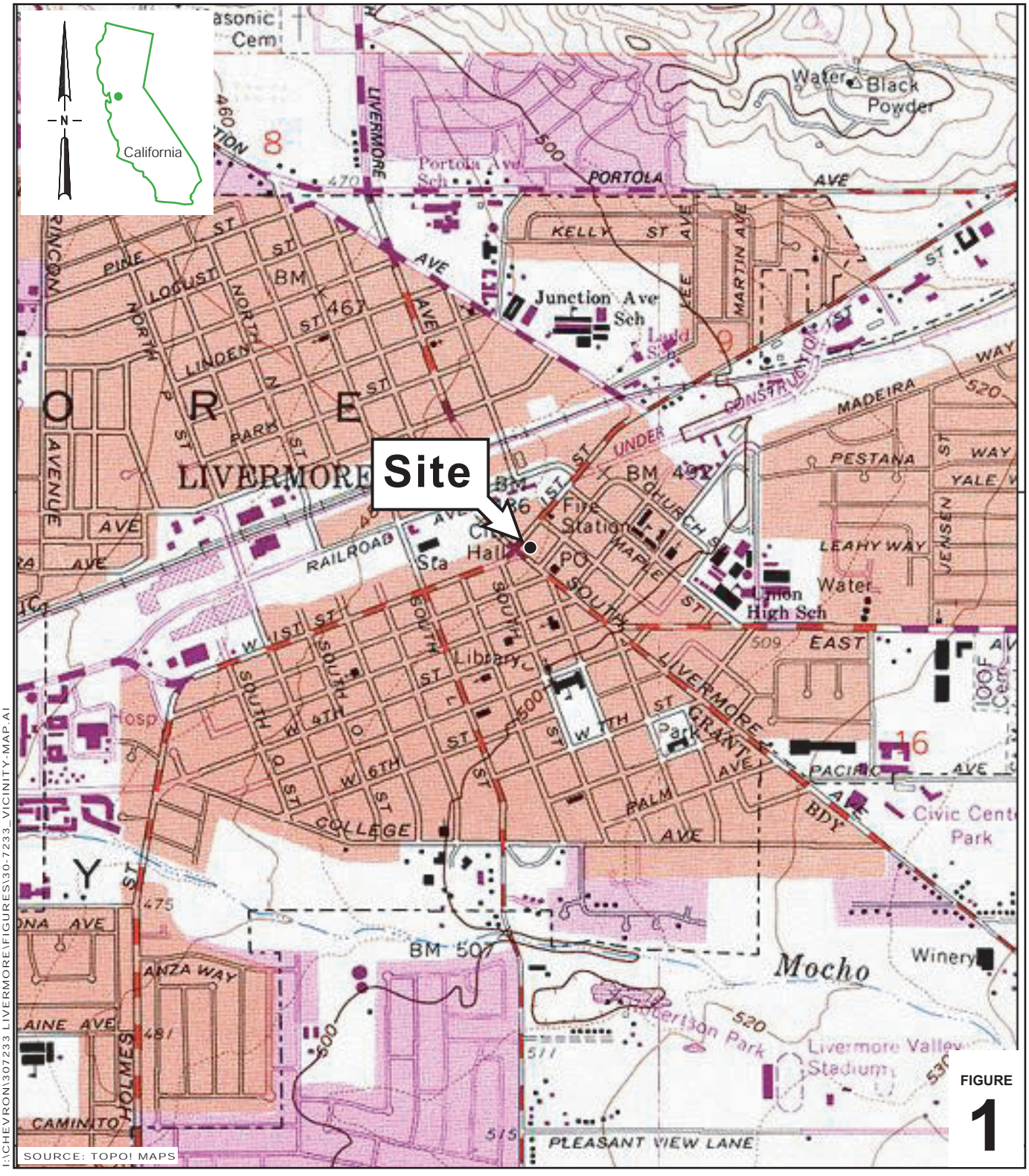
Encl.

Figure 1	Site Vicinity Map
Figure 2	Site Plan
Figure 3	Site Plan with Proposed Monitoring Well Locations
Table 1	Soil Analytical Data
Table 2	Groundwater Analytical Data
Table 3	Soil Vapor Analytical Data
Attachment A	ACEH April 3, 2009 Letter
Attachment B	Summary of Previous Environmental Work
Attachment C	Standard Field Procedures for Well Installation

cc: Mr. Ian Robb, Chevron Environmental Management Company
Ms. Chris Davidson, City of Livermore Economic Development Department
Mr. Wyman Hong, Zone 7 Water Agency

FIGURES

07/20/07



I:\CHEVRON\307233 LIVERMORE\FIGURES\30-7233_VICINITY-MAP.AI

FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Chevron Service Station 30-7233

2259 First Street

Livermore, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

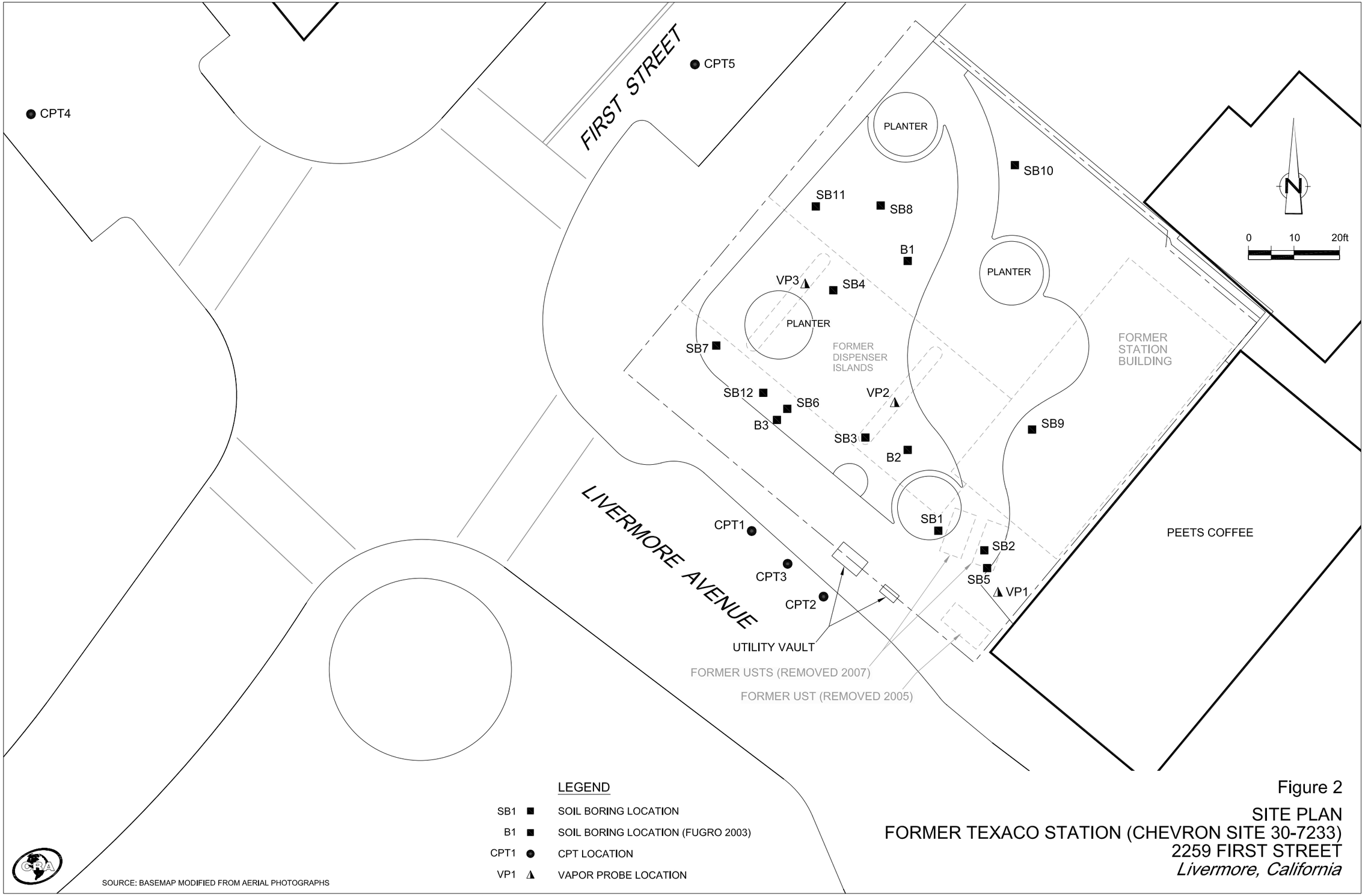


Figure 2

SITE PLAN
FORMER TEXACO STATION (CHEVRON SITE 30-7233)
2259 FIRST STREET
Livermore, California

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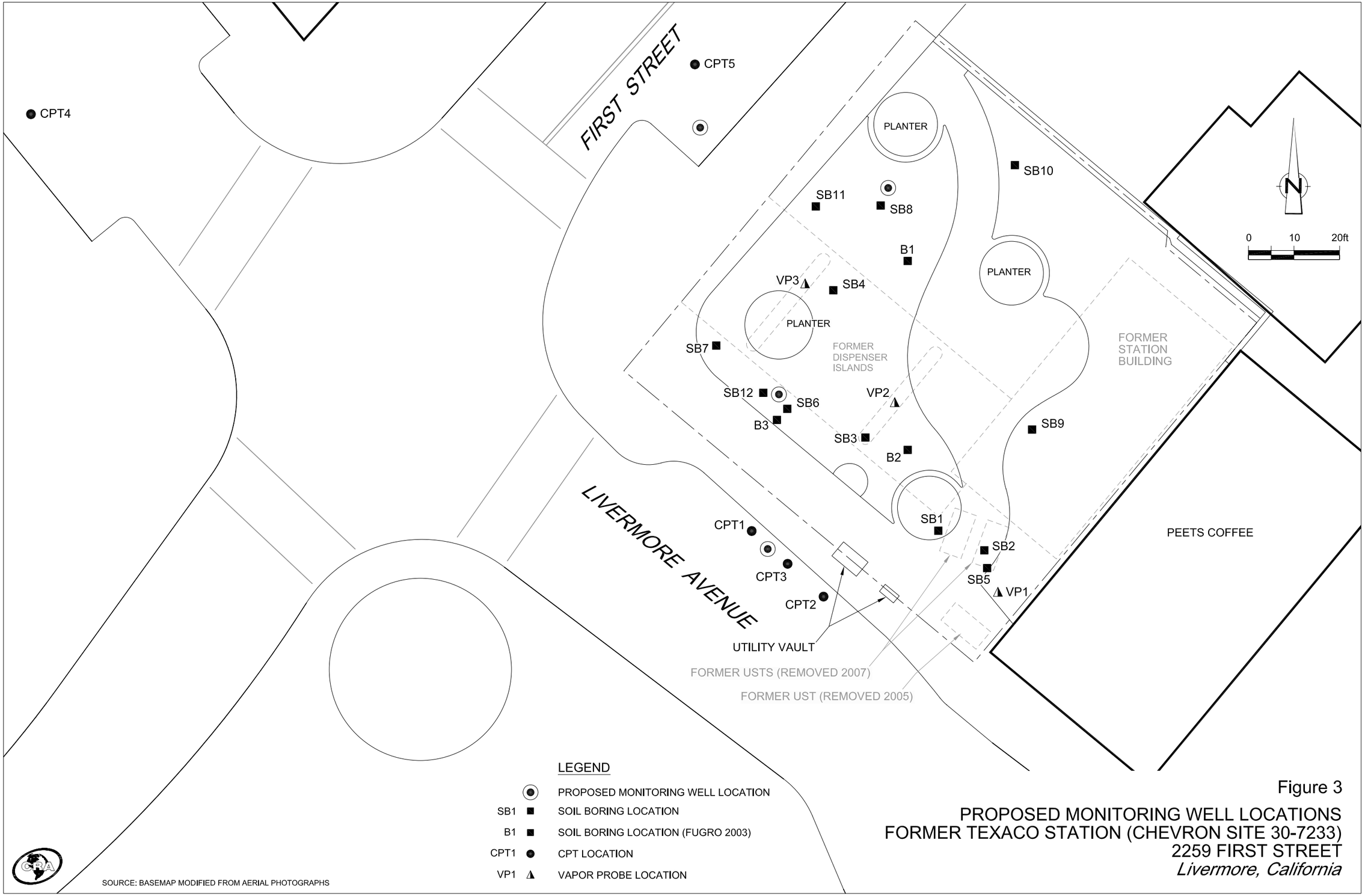

Figure 3

PROPOSED MONITORING WELL LOCATIONS
FORMER TEXACO STATION (CHEVRON SITE 30-7233)
2259 FIRST STREET
Livermore, California

I:\CHEV\3122--\312264 30-7233 LIVERMORE\312264 FIGURES\312264-2008(PRES001)GN-EM003 PROP JUN 02/2009

TABLES

TABLE 1

CUMULATIVE SOIL ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*	*Other VOCs**	*SVOCs**	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*	*PCBs**	*Pesticides**
			Reported in milligrams per kilogram (mg/kg)																						
ESLs - Soil less than 3 meters below grade			***2500***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***7.4***	*NE*	***750***	***150***	***600***	***0.74***	*NE*
ESLs - Soil deeper than 3 meters below			***5000***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***39***	***5,000***	***750***	***260***	***5,000***	***6.3***	*NE*
2008 Subsurface Investigations																									
CPT1	2/5/08	21	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT1	2/5/08	36	380	**100**	1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT2	2/4/08	22	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT2	2/4/08	30	<10	27	4.4	<0.026	<0.052	1.1	0.18	<0.026	<1.0	<0.052	<0.052	<0.052	<0.052	<0.052	--	--	--	--	--	--	--	--	--
CPT2	2/4/08	35	<12	<4.0	1.3	0.0009	<0.001	<0.001	0.002	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT3-S-18.5	11/4/08	18.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT3-S-35.5	11/4/08	35.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT3-S-55.5	11/4/08	55.5	<10	7.1	52	<0.024	<0.047	<0.047	<0.047	<0.024	<0.95	<0.047	<0.047	<0.047	<0.047	<0.047	--	--	--	--	--	--	--	--	--
CPT4-S-50	11/5/08	50	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
CPT5-S-51.5	11/3/08	51.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB6	1/28/08	1-8***	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	6.13	--	--	--	--
SB6	1/28/08	9.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	6.39	--	--	--	--
SB6	1/28/08	19.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	5.79	--	--	--	--
SB6	1/28/08	24	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	10.90	--	--	--	--
SB7	1/28/08	1-8***	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	8.57	--	--	--	--
SB7	1/30/08	9.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	8.30	--	--	--	--
SB7	1/30/08	19.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	4.70	--	--	--	--
SB7	1/30/08	29.5	<10	<4.0	3.7	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	10.50	--	--	--	--
SB7	1/30/08	34.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	11.60	--	--	--	--
SB8	1/28/08	1-8***	53	18	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	--	--	--	--	21.90	--	--	--	--
SB8	1/31/08	19.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	10.30	--	--	--	--
SB8	1/31/08	29.5	<10	<4.0	1.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	8.29	--	--	--	--
SB8	1/31/08	34.5	<10	67	**530**	<0.027	<0.054	0.10	<0.054	<0.027	<1.1	<0.054	<0.054	<0.054	<0.054	<0.054	--	--	--	--	7.86	--	--	--	--
SB8	1/31/08	39.5	<10	<4.0	<1.0	0.007	0.002	0.015	0.007	**0.039**	0.034	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	8.93	--	--	--	--
SB9	1/28/08	1-8***	32	13	1.3	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	13.50	--	--	--	--
SB9	1/29/08	15	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	6.36	--	--	--	--
SB9	1/29/08	27.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.022	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	7.92	--	--	--	--

TABLE 1

CUMULATIVE SOIL ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*	*Other VOCs**	*SVOCs**	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*	*PCBs**	*Pesticides**
			Reported in milligrams per kilogram (mg/kg)																						
ESLs - Soil less than 3 meters below grade			***2500***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***7.4***	*NE*	***750***	***150***	***600***	***0.74***	*NE*
ESLs - Soil deeper than 3 meters below			***5000***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***39***	***5,000***	***750***	***260***	***5,000***	***6.3***	*NE*
SB9	1/29/08	34.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	12.30	--	--	--	--
SB9	1/29/08	46.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.022	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	9.34	--	--	--	--
SB9	1/29/08	54.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.022	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	5.77	--	--	--	--
SB10-S-5	10/23/08	5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB10-S-16	11/4/08	16	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB10-S-26	11/4/08	26	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB10-S-36	11/4/08	36	<10	<4.0	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.018	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	--	--	--	--	--	--	--	--	--
SB10-S-46	11/4/08	46	<10	4.2	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB10-S-56	11/4/08	56	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB10-S-62	11/4/08	62	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB11-S-5	10/24/08	5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB11-S-11	11/3/08	11	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB11-S-16	11/3/08	16	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB11-S-26	11/3/08	26	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB11-S-36	11/3/08	36	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB11-S-45.5	11/3/08	45.5	<10	<4.0	59	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.018	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	--	--	--	--	--	--	--	--	--
SB11-S-50.5	11/3/08	50.5	<10	25	59	<0.023	<0.045	<0.045	<0.045	<0.023	<0.91	<0.045	<0.045	<0.045	<0.045	<0.045	--	--	--	--	--	--	--	--	--
SB11-S-56	11/3/08	56	<10	45	**98**	<0.023	<0.047	<0.047	<0.047	<0.023	<0.94	<0.047	<0.047	<0.047	<0.047	<0.047	--	--	--	--	--	--	--	--	--
SB11-S-61	11/3/08	61	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB12-S-5	10/24/08	5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB12-S-15.5	11/3/08	15.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB12-S-25.5	11/3/08	25.5	<10	<4.0	**120**	<0.023	<0.046	<0.046	<0.046	<0.023	<0.91	<0.046	<0.046	<0.046	<0.046	<0.046	--	--	--	--	--	--	--	--	--
SB12-S-30	11/3/08	30	<10	34	58	<0.024	<0.047	<0.047	<0.047	<0.024	<0.94	<0.047	<0.047	<0.047	<0.047	<0.047	--	--	--	--	--	--	--	--	--
SB12-S-35.5	11/3/08	35.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB12-S-45.5	11/3/08	45.5	<10	<4.0	1.3	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB12-S-50.5	11/3/08	50.5	<10	65	**1,200**	<0.023	<0.046	<0.046	<0.046	<0.023	<0.92	<0.046	<0.046	<0.046	<0.046	<0.046	--	--	--	--	--	--	--	--	--
SB12-S-55.5	11/3/08	55.5	<10	55	**1,300**	**1.1**	0.15	2.0	3.7	<0.024	<0.97	<0.049	<0.049	<0.049	<0.049	<0.049	--	--	--	--	--	--	--	--	--
SB12-S-60.5	11/3/08	60.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SSB1	2/1/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.52	--	--	--	--
SSB1	2/1/08	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52.9	--	--	--	--
SSB1	2/1/08	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.34	--	--	--	--

TABLE 1

CUMULATIVE SOIL ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*	*Other VOCs**	*SVOCs**	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*	*PCBs**	*Pesticides**
			Reported in milligrams per kilogram (mg/kg)																						
ESLs - Soil less than 3 meters below grade			***2500***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***	***--***	***27*****	***7.4***	***NE***	***750***	***150***	***600***	***0.74***	***NE***
ESLs - Soil deeper than 3 meters below			***5000***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***	***--***	***27*****	***39***	***5,000***	***750***	***260***	***5,000***	***6.3***	***NE***
SSB2	1/28/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.4	--	--	--	--
SSB2	1/30/08	2.5	--	11	1.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	40.6	--	--	--	--
SSB2	1/30/08	4.5	--	4.4	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	15.0	--	--	--	--
SSB2	1/30/08	8	--	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	7.45	--	--	--	--
SSB3	1/30/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42.8	--	--	--	--
SSB3	2/6/08	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52.4	--	--	--	--
SSB3	2/6/08	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42.2	--	--	--	--
SSB4	2/1/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.2	--	--	--	--
SSB4	2/1/08	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	517	--	--	--	--
SSB4	2/1/08	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	616	--	--	--	--
SSB4	2/1/08	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	90.8	--	--	--	--
SSB5	2/6/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.2	--	--	--	--
SSB5	2/6/08	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47.5	--	--	--	--
SSB5	2/6/08	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	117	--	--	--	--
SSB5	2/6/08	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63.5	--	--	--	--
SSB6	2/6/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.3	--	--	--	--
SSB6	2/6/08	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	98.9	--	--	--	--
SSB7	2/6/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	--	--	--
SSB7	2/6/08	3.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.73	--	--	--	--
SSB7	2/6/08	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.60	--	--	--	--
SSB7	2/6/08	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.97	--	--	--	--
SSB8	2/1/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	168	--	--	--	--
SSB8	2/1/08	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	160	--	--	--	--
SSB8	2/1/08	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33.8	--	--	--	--
SSB9	2/6/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	189	--	--	--	--
SSB9	2/6/08	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.0	--	--	--	--
SSB9	2/6/08	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.24	--	--	--	--
SSB9	2/6/08	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.36	--	--	--	--
SSB10	1/31/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38.9	--	--	--	--
SSB10	2/6/08	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	67.2	--	--	--	--
SSB10	2/6/08	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.00	--	--	--	--
SSB10	2/6/08	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.34	--	--	--	--
SSB11	2/6/08	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.67	--	--	--	--

TABLE 1

CUMULATIVE SOIL ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*	*Other VOCs**	*SVOCs**	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*	*PCBs**	*Pesticides**
			Reported in milligrams per kilogram (mg/kg)																						
ESLs - Soil less than 3 meters below grade			***2500***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***7.4***	*NE*	***750***	***150***	***600***	***0.74***	*NE*
ESLs - Soil deeper than 3 meters below			***5000***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***39***	***5,000***	***750***	***260***	***5,000***	***6.3***	*NE*
SSB11	2/6/08	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.86	--	--	--	--
SSB11	2/6/08	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.90	--	--	--	--
SSB11	2/6/08	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.62	--	--	--	--
VP1	2/1/08	4.5	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	6.1	--	--	--	--
VP1	2/1/08	8	<10	<4.0	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	--	--	--	--	9.03	--	--	--	--
VP2	2/1/08	4.5	54	25	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.018	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	--	--	--	--	75.4	--	--	--	--
VP2	2/1/08	9.5	<10	<4.0	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	--	--	--	--	15.6	--	--	--	--
VP3	2/1/08	4.5	<10	<4.0	1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	6.12	--	--	--	--
VP3	2/1/08	8	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	4.22	--	--	--	--
2007 Tank Pull																									
EX1	6/20/2007	7	<580	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	ND	0.406	55.5	4.98	95.3	45.8	ND	--
EX2	6/20/2007	7	<580	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	ND	0.313	63.2	3.29	104	32.9	ND	--
EX3	6/20/2007	7	<580	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	ND	0.327	46.7	5.13	117	38.5	ND	--
EX4	6/20/2007	8	**11,000**	**2,800**	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.81b	0.876	48.2	**1,170**	74.2	206	0.044d	--
EX4	6/20/2007	9	**3,100**	**1,400**	<100	<0.0005	<0.001	<0.001	0.004	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.18b	0.874	65.6	**1,470**	85.9	329	0.062d	--
EX5	6/20/2007	8	<580	**100**	<10	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	ND	0.458	61.7	190	109	102	ND	--
EX6	6/20/2007	8	**3,000**	**1,300**	<400	<0.0005	<0.002	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.36c	0.984	57.9	**1,500**	128	347	0.0083d	--
P1	6/20/2007	5	<580	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	ND	0.317	51.8	27.1	115	42.3	ND	--
October 2006 Subsurface Investigation																									
SB-1	10/26/06	10	<10	<10	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-1	10/26/06	15	350	**140**	15	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-1	10/26/06	22	1,400	**780**	**2,800**	<0.062	<0.12	<0.12	<0.12	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-1	10/26/06	26	390	**590**	**1,100**	<0.62	0.19	**5.5**	**19**	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-1	10/26/06	32	94	**120**	**180**	**2.0**	**17**	**13**	**65**	<0.063	<2.5	<0.13	<0.13	<0.13	<0.13	<0.13	--	--	--	--	--	--	--	--	--
SB-1	10/26/06	35.5	67	**99**	**1,200**	**1.0**	**5.5**	2.7	**16**	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-1	10/26/06	39.5	<10	20	**1,000**	**0.90**	0.93	2.5	**11**	<0.063	<2.5	<0.13	<0.13	<0.13	<0.13	<0.13	--	--	--	--	--	--	--	--	--
SB-3	10/23/06	10	<10	<10	<1.0	<0.0005	0.001	<0.001	0.002	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-3	10/23/06	15	<10	<10	<1.0	<0.0005	<0.001	<0.001	0.002	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-3	10/23/06	21	<20	82	**1,800**	<0.062	<0.12	**4.8**	**15**	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--

TABLE 1

CUMULATIVE SOIL ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*	*Other VOCs**	*SVOCs**	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*	*PCBs**	*Pesticides**
			Reported in milligrams per kilogram (mg/kg)																						
ESLs - Soil less than 3 meters below grade			*2500*	*83*	*83*	*0.044*	*2.9*	*3.3*	*2.3*	*0.023*	*0.075*	*NE*	*NE*	*NE*	*0.0045*	*0.00033*	*--*	*27***	*7.4*	*NE*	*750*	*150*	*600*	*0.74*	*NE*
ESLs - Soil deeper than 3 meters below			*5000*	*83*	*83*	*0.044*	*2.9*	*3.3*	*2.3*	*0.023*	*0.075*	*NE*	*NE*	*NE*	*0.0045*	*0.00033*	*--*	*27***	*39*	*5,000*	*750*	*260*	*5,000*	*6.3*	*NE*
SB-3	10/23/06	25	88	**3,000**	**8,700**	**14**	**410**	**120**	**770**	<0.31	<12	<0.062	<0.062	<0.062	<0.062	<0.062	--	--	--	--	--	--	--	--	--
SB-3	10/23/06	30	<20	**230**	**5,400**	**3.2**	**68**	**40**	**250**	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-3	10/23/06	35	<10	17	**630**	**0.080**	<0.12	0.56	1.1	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-3	10/23/06	39.5	<20	62	**130**	**0.23**	1.5	0.81	**5.5**	<0.063	<2.5	<0.13	<0.13	<0.13	<0.13	<0.13	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	5	<18	33	1.3	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	10	<20	28	2.8	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	15	<20	<12	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	20	<20	<10	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	25	<20	24	**310**	<0.003	<0.005	0.008	<0.005	<0.003	<0.10	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	27.5	<20	**260**	**1,600**	**0.10**	0.14	**4.5**	**19**	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	30	<20	<12	22	0.003	<0.005	0.014	0.007	<0.002	<0.099	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	35	<20	45	**320**	<0.063	<0.13	<0.13	<0.13	<0.063	<2.5	<0.13	<0.13	<0.13	<0.13	<0.13	--	--	--	--	--	--	--	--	--
SB-4	9/12/06	39.5	<16	<10	1.2	**0.15**	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-5	10/24/06	10	<10	<10	<1.0	<0.0005	<0.001	0.001	0.002	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-5	10/26/06	15	<10	<10	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-5	10/26/06	19.5	560	**700**	27	<0.0005	<0.001	<0.001	0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--
SB-5	10/26/06	26	450	**620**	**1,100**	**0.78**	<0.13	**8.5**	**12**	<0.063	<2.5	<0.13	<0.13	<0.13	<0.13	<0.13	--	--	--	--	--	--	--	--	--
SB-5	10/26/06	30	140	**320**	**950**	<0.062	<0.12	1.1	2.0	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
SB-5	10/26/06	34	290	**630**	**3,100**	**17**	**67**	**38**	**130**	<0.13	<5	<0.25	<0.25	<0.25	<0.25	<0.25	--	--	--	--	--	--	--	--	--
SB-5	10/26/06	39.5	<10	80	**1,400**	**5.4**	2.6	**13**	**73**	<0.062	<2.5	<0.12	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--	--	--
2005 Consolidated Engineering Tank Pull																									
Sample (1) LFD	9/20/08	3	<2,500	**4,100**	--	<0.017	<0.017	<0.017	<0.017	<0.017	--	--	--	--	--	--	0.140a	--	--	--	--	--	--	--	--
Sample (2)	9/20/08	3	<250	**1,300**	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	ND	--	--	--	--	--	--	ND	ND
Sample (3)	9/20/08	3	<200	**670**	--	<0.022	<0.022	<0.022	<0.022	<0.022	--	--	--	--	--	--	ND	--	--	--	--	--	--	--	--
Sample (4)	9/20/08	3	<50	1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	ND	--	--	--	--	--	--	--	--
Sample (5)	9/20/08	3	54	**140**	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	ND	--	--	--	--	--	--	--	--
Sample (6)	9/20/08	3	<50	2.1	3,300	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	ND	--	--	--	--	--	--	--	--
2004 Fugro Subsurface Investigation																									
B-1	9/17/03	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--

TABLE 1

CUMULATIVE SOIL ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB	Other VOCs*	SVOCs*	Cd	Cr	Pb	Ni	Zn	PCBs*	Pesticides*
			Reported in milligrams per kilogram (mg/kg)																						
ESLs - Soil less than 3 meters below grade			***2500***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***7.4***	*NE*	***750***	***150***	***600***	***0.74***	*NE*
ESLs - Soil deeper than 3 meters below			***5000***	***83***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	*NE*	*NE*	*NE*	***0.0045***	***0.00033***	*--*	*27***	***39***	***5,000***	***750***	***260***	***5,000***	***6.3***	*NE*
B-1	9/17/03	25.5	<50	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	9/17/03	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3,700******	--	--	--	--
B-2	9/17/03	15.5	--	--	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	9/17/03	30	<50	9.6	3.5	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	9/17/03	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.8	--	--	--	--
B-3	9/17/03	25.5	<50	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

Total petroleum hydrocarbons as motor oil (TPHmo) analyzed by EPA Method 8015B modified unless otherwise noted.

Total petroleum hydrocarbons as diesel (TPHd) analyzed by EPA Method 8015B with silica gel cleanup unless otherwise noted.

Total petroleum hydrocarbons as gasoline (TPHg) analyzed by EPA Method 8015B modified unless otherwise noted.

Benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tertiary-butyl ether (MTBE); t-butyl alcohol (TBA); di-isopropyl ether (DIPE); ethyl tertiary-butyl ether (ETBE); t-amyl methyl ether (TAME); 1,2-dichloroethane (1,2-DCA); 1,2-dibromoethane (EDB) unless otherwise noted.

Volatile Organic Compounds (VOCs) by EPA Method 8260B

Semivolatile Organic Compounds (SVOCs) by EPA Method 8270C

Cd = cadmium, Cr = cromium, Pb = lead, Ni = nickel and Zn = zinc analyzed by EPA method 6010B unless otherwise noted.

Polychlorobiphenyls (PCBs) by EPA Method 8082

Pesticides = Organochlorine Pesticides analyzed by EPA Method 8081

fbg = feet below grade.

<x = Not detected at reporting limit x.

ND = not detected at various laboratory method detection limits.

Environmental Screening Levels (ESLs) for commerical land use where groundwater is a current or potential drinking water source from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* presented by the California Regional Water Quality Control Board - San Francisco Bay Region Interim Final November 2007, revised May 2008, Tables A and C.

NE = Not established

-- = Not applicable/not analyzed.

* = Refer to related investigation report for complete analytical results: only highest constituent detection reported

** = Only most stringent ESL for the detected compounds listed

*** = Discrete sample could not be collected due to large cobbles, composite sample collected.

**** = Soluble Lead Toxicity Characteristic Leaching Potential (TCLP) analysis resulted in a concentration <0.50 milligrams per liter.

a = 0.140 mg/kg of 1,3,5-Trimethylbenzene.

b = bis (2-ethylhexyl) phthalate.

c = benzo (g,h,i) perylene.

d = PCB-1248.

TABLE 2

CUMULATIVE GRAB-GROUNDWATER ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Sample Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*
			Reported in micrograms per liter (µg/L)													
ESLs	***--***	***--***	***100***	***100***	***100***	***1.0***	***40***	***30***	***20***	***5.0***	***12***	***NE***	***NE***	***NE***	***0.5***	***0.05***
CRA 2008 SSI																
CPT1	02/05/08	42	**1,500**	**3,300**	**47,000**	**5**	2	3	2	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT2	02/04/08	31	**1,500**	**4,100**	**10,000**	**14**	2	**57**	**110**	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
CPT3	11/04/08	56	**4,500**	**36,000**	**29,000**	**200**	**140**	**740**	**1,100**	<1	<4	<1	<1	<1	<1	<1
CPT4	11/05/08	54	**720**	**400**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
CPT4	11/05/08	60	**1,400**	**490**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
CPT5	11/03/08	55	**510**	**43,000**	**2,500**	<0.5	<0.5	1	0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
CPT5	11/03/08	68	<400	**340**	70	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
SB6	01/30/08	22	<400	**110**	**300**	**3**	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
SB7	01/30/08	31	<400	**3,000**	**6,400**	<0.5	<0.5	<0.5	<0.5	<0.5	**16**	<0.5	<0.5	<0.5	<0.5	<0.5
SB8*	01/31/08	34	--	**18,000**	**52,000**	<1	<1	8	2	<1	<4	<1	<1	<1	<1	<1
SB9	01/29/08	55	**450**	**1,000**	**490**	<0.5	<0.5	<0.5	0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
SB10	11/04/08	50	<400	<320	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
SB11	11/03/08	50	<400	**20,000**	**9,000**	<0.5	3	17	**150**	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
SB12	11/03/08	50	<400	**4,000**	**5,500**	**190**	15	**100**	**220**	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 2

CUMULATIVE GRAB-GROUNDWATER ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	Date	Sample Depth (fbg)	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
			Reported in micrograms per liter (µg/L)													
ESLs	***--***	***--***	***100***	***100***	***100***	***1.0***	***40***	***30***	***20***	***5.0***	***12***	***NE***	***NE***	***NE***	***0.5***	***0.05***

Notes:

Total petroleum hydrocarbons as motor oil (TPHmo) analyzed by EPA Method 8015B modified.

Total petroleum hydrocarbons as diesel (TPHd) analyzed by EPA Method 8015B with silica gel cleanup.

Total petroleum hydrocarbons as gasoline (TPHg) analyzed by EPA Method 8015B modified.

Benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tertiary-butyl ether (MTBE); t-butyl alcohol (TBA); di-isopropyl ether (DIPE); ethyl tertiary-butyl ether (ETBE); t-amyl methyl ether (TAME); 1,2-dichloroethane (1,2-DCA); 1,2-dibromoethane (EDB) analyzed by EPA Method 8260B.

Environmental Screening Levels (ESLs) for groundwater that is a current or potential drinking water source from Screening for Environemental Concerns at Sites with Contaminated Soil and Groundwater presented by the California Regional Water Quality Control Board - San Francisco Bay Region Interim Final November 2007, revised May 2008, Tables A and C.

fbg = feet below grade.

<x = Not detected at reporting limit x.

* = Soil boring produced inadequate groundwater volume to run all laboratory analyses.

-- = Not applicable/not analyzed.

TABLE 3

CUMULATIVE SOIL VAPOR ANALYTICAL DATA
FORMER TEXACO SERVICE STATION (CHEVRON SITE #30-7233)
2259 FIRST STREET, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes* [1]	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*EDB*	*1,2-DCA*	*Naphalene*	*VOCs*	*Helium*	*Oxygen*	*CO_2*
			Reported in micrograms per cubic meter ($\mu g/m^3$)														*Reported in % Volume*		
ESLs	*--*	*--*	*29,000*	*280*	*180,000*	*580,000*	*58,000*	*--*	*--*	*--*	*--*	*--*	*14*	*310*	*240*	*--*	*--*	*--*	*--*
2008 Subsurface Investigation																			
VP1-5	03/10/08	5 - 5.5	940	<3.2	18	5.6	<4.4	<3.6	<31	<17	<17	<17	<7.8	<4.1	<21	--	0.24	38	0.36
VP1-5	LAB DUPLICATE		--	<3.2	13	<4.4	<4.4	<3.6	<31	<17	<17	<17	<7.8	<4.1	<21	--	0.20	38	0.36
VP1-5	11/07/08	5 - 5.5	<250	<3.9	<4.6	<5.2	<5.2	<4.4	<15	<20	<20	<20	<9.3	<4.9	<25	ND	<0.12	19	2.5
VP1-5	LAB DUPLICATE		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.12	19	2.5
VP1-10	03/10/08	9.5 - 10	<250	<3.9	<4.6	<5.2	<5.2	<4.4	<37	<20	<20	<20	<9.3	<4.9	<25	--	<0.12	20	1
VP1-10	11/07/08	9.5 - 10	260	<3.7	<4.4	<5.0	6.5	<4.2	<14	<19	<19	<19	<9.0	<4.7	<24	SEE LAB ANALYTICAL	<0.12	19	2.1
VP1-10 Duplicate	11/07/08	9.5 - 10	270	<3.8	<4.5	<5.2	<5.2	<4.3	<14	<20	<20	<20	<9.1	<4.8	<25	SEE LAB ANALYTICAL	<0.12	19	2.1
VP1-10 Duplicate	LAB DUPLICATE		270	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VP2-5	03/10/08	5 - 5.5	500	<4.0	19	6.4	31	<4.6	<38	<21	<21	<21	<9.7	<5.1	<26	--	<0.13	17	2
VP2-5 Duplicate	03/10/08	5 - 5.5	<260	<4.0	<4.8	<5.5	<5.5	<4.6	<38	<21	<21	<21	<9.7	<5.1	<26	--	<0.13	17	2
VP2-9.5	03/10/08	9.5 - 10	450	<3.9	29	9.7	11	<4.4	<37	<21	<21	<21	<9.5	<5.0	<26	--	<0.12	18	1.6
VP3-5	03/10/08	5 - 5.5	<260	<4.0	<4.8	<5.5	6.3	<4.6	<38	<21	<21	<21	<9.7	<5.1	<26	--	<0.13	17	2.3
VP3-5	03/10/08	9.5 - 10	<250	<3.9	<4.6	<5.4	<5.4	<4.4	<37	<21	<21	<21	<9.5	<5.0	<26	--	<0.12	18	2.2

Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-3.

Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Ethanol, Methyl Tertiary Butyl Ether (MtBE), t-Butyl Alcohol (TBA), di-Isopropyl ether (DIPE), Ethyl t-butyl ether (ETBE), t-amyl methyl ether (TAME), 1,2-Dibromoethane (EDB) and 1,2-Dichloroethane (1,2-DCA) by EPA Method TO-15.

Helium, Oxygen, and Carbon Dioxide (CO_2) by modified ASTM D-1946.

fbg = Feet below grade.

Environmental Screening Levels (ESLs) for shallow soil gas commercial/industrial landuse from Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater prepared by the California Regional Water Quality Control Board - San Francisco Bay Region Interim Final November 2007, Revised May 2008, Table E-2.

<X = Not detected above method detection limit x.

ND = Not detected above various laboratory method detection limits.

-- = not analyzed or not applicable.

1 = Values for highest value of Xylenes detected.

APPENDIX A

ACEH APRIL 3, 2009 LETTER

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-93

April 3, 2009

Mr. Ian Robb
Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583-2324

Ms. Chris Davidson
City of Livermore Economic Development
1052 S. Livermore Ave.
Livermore, CA 94550

Subject: Fuel Leak Case No. RO0002908 and Geotracker Global ID T0600196622, Miller Square Park, 2259 First Street, Livermore, CA 94550

Dear Mr. Robb and Ms. Davidson:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above referenced site including the recently submitted document entitled, "*Subsurface Investigation Report*," dated March 5, 2009, which was prepared on behalf of Chevron by Conestoga-Rovers & Associates. The Subsurface Investigation Report presents the results from soil and groundwater sampling in three cone penetration test (CPT) borings and three soil borings. Results from re-sampling of soil vapor probes were also presented. The results were generally consistent with previous investigation results. Total petroleum hydrocarbons as gasoline were detected in soil and groundwater at concentrations up to 1,300 milligrams per kilogram and 52,000 micrograms per liter, respectively. The highest concentrations of TPHg were generally detected in soil at depths of approximately 45 to 55 feet bgs.

One proposed off-site CPT boring (CPT-6) was not advanced because an access agreement could not be completed with the adjacent property owner. Proposed boring CPT6 is located in a crossgradient location (north) from the former USTs and dispensers at the site. Boring SB10 was advanced near the northern site boundary, approximately 40 south of the proposed location of CPT6. Petroleum hydrocarbons were not detected in soil and groundwater samples collected from boring SB10, which appears to define the northern extent of contamination in this area of the site. Based on these results, it does not appear that boring CPT6 is required.

Based on the extent of contamination and elevated concentrations of fuel hydrocarbons, remedial action will be required for the site. We request that you prepare a Pilot Test Work Plan or Draft Corrective Action Plan **by June 10, 2009** to begin site cleanup. The Pilot Test Work Plan or Draft Corrective Action Plan is to include plans for groundwater monitoring wells that can be used to estimate the hydraulic gradient, monitor fuel hydrocarbon transport, and evaluate the long-term effectiveness of site cleanup.

TECHNICAL REPORT REQUEST

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

- **June 10, 2009** – Pilot Test Work Plan or Draft Corrective Action 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/cleanup/electronic_reporting).

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) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway
Livermore, CA 94551

Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street
Pleasanton, CA 94566

John Rigter, Livermore-Pleasanton Fire Department, 3560 Nevada Street
Pleasanton, CA 94566

Charlotte Evans, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A
Emeryville, CA 94608

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

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

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

EQUIREMENTS

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

dditional Recommendations

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

ubmission Instructions

) Obtain User Name and Password:
  a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    i) Send an e-mail to dehloptoxic@acgov.org
    or
    ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
  b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses,** and the **Case Numbers (RO# available in Geotracker) you will be posting for.**

:) Upload Files to the ftp Site
  a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
    (i) Note: Netscape and Firefox browsers will not open the FTP site.
  b) Click on File, then on Login As.
  c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
  d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
  e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
  b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
  c) The subject line of the e-mail must start with the RO# followed by **Report Upload.** (e.g., Subject: RO1234 Report Upload)

APPENDIX B

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

September 2003 Investigation: The City of Livermore Engineering Division, as part of a redevelopment plan, retained Fugro West, Inc. (Fugro) to investigate soil and groundwater conditions beneath Mills Square Park to evaluate the potential presence of petroleum hydrocarbons resulting from the historic use of the site as a service station. Fugro advanced three soil borings onsite. Hydrocarbons were only detected in one soil sample, which contained 9.6 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as diesel (TPHd) and 3.5 mg/kg total petroleum hydrocarbons as gasoline (TPHg). Groundwater samples contained up to 42,000 micrograms per liter (µg/l) TPHd and 18,000 µg/l TPHg. No benzene was detected in soil, but was detected in groundwater up to 140 µg/l. Total lead concentrations up to 3,700 mg/kg were detected in soil samples at 3 feet below grade (fbg). Details can be found in Fugro's January 6, 2004 *Soil and Groundwater Investigation Report.*

September 2005 UST Removal: In September 2005, an orphan underground storage tank (UST) was encountered beneath the sidewalk on the southwest corner of the site. At the direction of the Livermore-Pleasanton Fire Department, the UST was removed, soil samples collected, and the excavated soil was backfilled into the UST pit. Soil beneath the UST contained up to 54 mg/kg total petroleum hydrocarbons as motor oil (TPHmo), 4,100 mg/kg TPHd, and 1,200 mg/kg TPHg. Chevron was not involved with the tank removal and was contacted later by ACEH to investigate whether any other USTs remained in Mills Square Park. Additional information is available in Consolidated Engineering Laboratories' October 4, 2005, *Environmental Sampling, Testing and Evaluation of Soil* report.

August 2006 Geophysical Investigation: Cambria Environmental Technology, Inc. (Cambria), now Conestoga-Rovers & Associates (CRA), contracted NORCAL Geophysical Consultants, Inc. to determine if any USTs still remained onsite. Two suspected tanks were identified in the southwest corner of the park, measuring approximately 5 by 7 feet and located approximately 3 fbg. More information available in Cambria's December 22, 2006 *Subsurface Investigation Report*.

September and October 2006 Site Investigation: Cambria observed Woodward Drilling Company, Inc. advance borings SB1 through SB5 in the vicinity of the former dispenser islands and suspected USTs. Up to 1,400 mg/kg TPHmo, 3,000 mg/kg TPHd, 8,700 mg/kg TPHg, and 14 mg/kg benzene were detected in soil. The maximum lead concentration was 65.4 mg/kg at 5 fbg. No groundwater was encountered to the total explored depth of 40 fbg. More information is available in Cambria's December 22, 2006 *Subsurface Investigation Report*.

June 2007 Tank Removal: On June 20, 2007, CRA observed Gettler-Ryan Inc. removing two 750-gallon single-wall steel gasoline USTs and approximately 27 feet of associated product

piping. CRA collected compliance soil samples from beneath the ends and middle of both USTs and from below the pipes protruding from the northwestern wall of the tank pit. Up to 11,000 mg/kg TPHmo and 2,800 mg/kg TPHd were detected. No TPHg was detected in any sample. Lead was detected at a maximum concentration of 1,170 mg/kg at 8 fbg. More information can be found in CRA's August 17, 2007 *Underground Storage Tank Removal and Compliance Sampling Report*.

January and February 2008 Site Investigation: CRA observed Gregg Drilling & Testing, Inc. (Gregg), RSI Drilling, and Vironex Environmental Field Services advance soil borings CPT1, CPT2 and SB6 through SB9, shallow soil borings SSB1 through SSB11, and install vapor probes VP-1 through VP 3, both on- and offsite. Maximum concentrations in soil detected above environmental screening levels[1] (ESLs) were 100 mg/kg TPHd in boring CPT1 at 36 fbg and 530 mg/kg TPHg in boring SB8 at 34.5 fbg. The highest concentrations detected in groundwater above ESLs were 1,500 µg/L TPHmo in both borings CPT1 and CPT2 at 42 and 31 fbg, respectively, 52,000 µg/L TPHd and 18,000 µg/L TPHg in boring SB8 at 34 fbg, and 14 µg/L benzene in boring CPT2 at 31 fbg. No benzene was detected in soil vapor. No other constituents were detected above the shallow soil gas ESLs for evaluation of potential vapor intrusion concerns for residential and commercial/industrial land uses. More information is available in CRA's March 27, 2008 *Subsurface Investigation Report and Well Installation Workplan*.

October and November 2008 Site Investigation: CRA observed Gregg Drilling advance soil borings CPT3 through CPT5 and SB10 through SB12, both on- and offsite. CRA re-sampled soil vapor probe VP1 to confirm previous soil vapor data. Concentrations above ESLs in soil were only detected in boring SB12 at 1,300 mg/kg TPHg and 1.1 mg/kg benzene, both at 55.5 fbg. Maximum concentrations detected in groundwater were 5,500 µg/L TPHmo in borings CPT3 at 56 fbg, 43,000 µg/L TPHd in boring CPT5 at 55 fbg, and 29,000 µg/L TPHg and 200 µg/L benzene in boring CPT3 at 56 fbg. No benzene was detected in soil vapor. No other constituents were detected above the shallow soil gas ESLs for evaluation of potential vapor intrusion concerns for residential and commercial/industrial land uses. Additional information is available in CRA's March 5, 2009 *Subsurface Investigation Report*.

[1] Environmental Screening Levels (ESLs) for commercial/industrial land use from the 2007 *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* by the California Regional Water Quality Control Board, San Francisco Bay Region Interim Final November 2007, revised May 2008.

APPENDIX C

STANDARD FIELD PROCEDURES FOR WELL INSTALLATION

Conestoga-Rovers & Associates

STANDARD FIELD PROCEDURES FOR MONITORING WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

DRILLING AND SAMPLING

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Professional Geologist (PG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Prior to drilling, the first 8 ft of the boring are cleared using an air or water knife and vacuum extraction. This minimizes the potential for impacting utilities.

Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. 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 at the bottom of the borehole.

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 Analysis

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^{o}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 volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater 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 groundwater 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^{o}C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. Equipment blanks may be analyzed if non-dedicated sampling equipment is used.

MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Well Construction and Surveying

Groundwater monitoring wells are installed to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. Rinsed and graded sand corresponding to the slot size occupies the annular space between the boring and the well screen to about one to two feet above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I, II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Groundwater Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized. Groundwater samples are collected using bailers or pumps and 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^{o}C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically 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. Upon receipt of analytic results, 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.