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

Re: Former Texaco Station No. 21-1253
930 Springtown Boulevard
Livermore, CA

I have reviewed the attached report dated August 19, 2009.

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

MONITORING WELL INSTALLATION REPORT

FORMER TEXACO STATION 21-1253
930 SPRINGTOWN BOULEVARD
LIVERMORE, CALIFORNIA

Fuel Leak Case No. RO 0000189

Prepared For:
Mr. Jerry Wickham
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Prepared by:
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AUGUST 19, 2009
REF. NO. 060058 (4)
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MONITORING WELL INSTALLATION REPORT

FORMER TEXACO STATION 21-1253
930 SPRINGTOWN BOULEVARD
LIVERMORE, CALIFORNIA

Fuel Leak Case No. RO 0000189

Charlotte Evans

Brandon S. Wilken PG #7564

Prepared by:
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1.0 INTRODUCTION

1.1 GENERAL

Conestoga-Rovers & Associates (CRA) is submitting this *Monitoring Well Installation Report* on behalf of Chevron Environmental Management Company for the site referenced above. Work was performed according to the February 26, 2009 *Work Plan for Monitoring Well Installation* and Alameda County Environmental Health (ACEH) approval letters dated April 10, 2009 and July 1, 2009 (Attachment A). Eight groundwater monitoring wells were installed to obtain current groundwater monitoring, concentration, and plume extent data. Site background information, investigation procedures, investigation results and CRA's conclusions and recommendations are presented below.

1.2 SITE BACKGROUND

The site is a former Texaco service station located on the corner of Springtown Boulevard and Lassen Road in Livermore, California (Figure 1). In the summer of 1985, Texaco sold the site. The underground storage tanks (USTs) and product lines were removed concurrent with the construction of a 7-Eleven convenience store on the site. The site is still occupied by a 7-Eleven convenience store, surrounded by a paved parking area (Figure 2).

1.3 SITE GEOLOGY AND HYDROLOGY

The site geology consists of a heterogeneous mixture of alluvial and colluvial silty clays, clayey silts, sandy silts, silty sands, and gravelly sands of Holocene age. These sediments have a maximum thickness in the region of approximately 150 feet. The Pliocene-aged Tassajara Formation, described by California Department of Water Resources, consists of sandstone, shale and limestone, and forms the bedrock beneath the site.

The site is located in the Mocho II sub-basin of the Main Basin in the Livermore Valley, as defined by the DWR and the Zone 7 Water Agency. The Mocho II sub-basin is defined by the Livermore Fault on the west, thinning Quaternary alluvium on the east, the Livermore Uplands to the south and the Tassajara Formation to the north. General groundwater gradient in the basin is to the west; however, hills near the site appear to

affect the groundwater flow direction. Groundwater from the Main Basin is currently used as a drinking water resource. The nearest surface water bodies to the site are Arroyo Seco and Arroyo Las Positas, which converge approximately one mile west of the site. Historically, the depth to the first encountered shallow water-bearing zone has ranged from approximately 6.5 feet below grade (fbg) to 19.5 fbg at the site. Historical groundwater flow has varied from west to north, with flow predominantly to the northwest, parallel to Springtown Boulevard.

1.4 ENVIRONMENTAL SUMMARY

Prior to the current investigation, a total of 13 soil borings have been advanced, and 10 groundwater monitoring wells, 1 soil vapor extraction well, 1 air sparge well, and 1 groundwater extraction well have been installed at the site. In 2002, all previous site wells were destroyed based on ACEH and the San Francisco Bay Region-Regional Water Quality Control Board (RWQCB) concurrence that no further action was required. No remedial action completion certificate was ever issued by the RWQCB. In 2007, ACEH requested investigative work to fill data gaps prior to issuing case closure. A summary of environmental investigations conducted at the site is included as Attachment B.

2.0 MONITORING WELL INSTALLATION

A total of eight groundwater monitoring wells were installed to obtain hydrogeologic, hydrocarbon concentration and plume extent data (Figure 2). Monitoring wells were generally clustered to provide vertical delineation of dissolved petroleum hydrocarbons. Onsite monitoring wells MW-9 through MW-15 were installed adjacent to or downgradient of the former USTs and dispenser island. Offsite monitoring well MW-16 was installed near boring CPT3 to assess hydrocarbons previously detected in a grab-groundwater sample. The following tasks were completed to meet the investigation objectives.

Project Personnel: Ian Hull and Belew Yifru conducted all fieldwork under the supervision of California Professional Geologist Brandon S. Wilken P.G. #7564.

Permit: Zone 7 Water Agency Permit No. 29035 (Attachment C).

Drilling Company: Gregg Drilling and Testing, Inc. (Gregg) of Martinez, California (C57 License No. 485165)

Utility Clearance: CRA contacted Underground Service Alert (USA) to coordinate underground utility location. CRA hired a private utility locating company to confirm USA markings and locate any additional subsurface utilities. Gregg utility cleared the first 8 feet of each boring using an air-knife equipped vacuum truck and hand augers when necessary. Utility locations are shown on Figure 2. The proposed locations of wells MW-9, MW-10, MW-14, MW-15 and MW-16 were moved due to utility conflicts.

Drilling and Sampling: Following borehole clearance to 8 fbg, all wells were drilled with 10-inch diameter hollow-stem augers to depths ranging from 15 to 47 fbg. CRA personnel logged soils according to a modified Unified Soil Classification System. ACEH's April 10, 2009 letter did not require collection of soil samples for laboratory analysis; however, Chevron and CRA agreed to collect soil samples at 5-foot intervals from wells MW-10, MW-13 and MW-15. Undisturbed soil samples were collected in steam-cleaned brass sleeves using a split-spoon sampler advanced ahead of the augers. Soil samples were screened for organic vapors using a photo-ionization detector.

Well Construction: All wells were constructed of 4-inch diameter, Schedule 40 polyvinyl chloride casing with 0.010-inch machine slotted screen. Wells MW-9, MW-11 and MW-14 were screened from 5 to 15 fbg. Wells MW-10 and MW-12 were screened from 22 to 27 fbg. Well MW-16 was screened from 25 to 30 fbg, well MW-13 was screened

from 32 to 37 fbg and well MW-15 was screened from 41.5 to 46.5 fbg. A filter pack consisting of #2/16 Monterey Sand was placed in the annulus from the bottom of the boring to 1 or 2 feet above the screen interval. The remaining annulus was capped with a 2 foot thick bentonite seal and neat Portland Type I/II cement to the surface. The wells are secured by locking well caps and are protected by metal traffic rated well boxes installed in cement, flush to the existing grade. Boring logs showing soil types and well construction details are presented as Attachment D.

Well Survey: Morrow Surveying of West Sacramento, California surveyed the newly installed wells on July 22, 2009 (Attachment E).

Well Development and Sampling: On July 23, 2009, Gettler-Ryan, Inc. (G-R) of Dublin, California developed and sampled the monitoring wells.

Laboratory Analysis: Select soil samples were immediately capped with Teflon® tape and plastic caps, labeled, stored on ice and transported under proper chain of custody to Lancaster Laboratories of Pennsylvania. Soil samples were analyzed for the following:

- Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015B modified
- Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B

Table 1 summarizes the historical soil analytical data. Table 2 summarizes groundwater analytical data collected by G-R from wells MW-9 through MW-16 and historical grab-groundwater data. Laboratory analytical reports for soil are included as Attachment F and for groundwater as Attachment G.

Waste Disposal: Investigation derived soil cuttings were placed in 55-gallon drums and temporarily stored onsite. On July 15, 2009, Integrated Wastestream Management of San Jose, California removed the drums and disposed of them at Forward Landfill in Manteca, California.

3.0 HYDROCARBON DISTRIBUTION

CRA collected and analyzed soil samples at 5 foot intervals starting at approximately 10 fbg to the total depth of each boring for wells MW-10, MW-13 and MW-15. Current and historical soil analytical data are presented on Table 1. The soil laboratory analytical report is included as Attachment F.

G-R developed and sampled the wells on July 23, 2009. The Third Quarter 2009 Sampling and Monitoring Report prepared by G-R has not been finalized for submittal. The groundwater analytical data is presented on Table 2 and the laboratory analytical results for groundwater are included as Attachment G.

3.1 HYDROCARBON DISTRIBUTION IN SOIL

During the current investigation, elevated petroleum hydrocarbon concentrations were only detected in wells MW-13 and MW-15. TPHg was detected at a maximum concentration of 6,400 milligrams per kilogram (mg/kg) in well MW-15 at 19.5 fbg. Benzene was detected at a maximum concentration in well MW-15 of 4.5 mg/kg at 9.5 fbg. Toluene was detected at a maximum concentration of 50 mg/kg in MW-13 at 25.5 fbg. Ethylbenzene and xylenes were detected at maximum concentrations of 170 mg/kg and 530 mg/kg, respectively, in well MW-15 at 19.5 fbg.

The source area is adjacent to the former USTs and dispenser island. Petroleum hydrocarbons detected in soil are horizontally delineated onsite except crossgradient to the north of the site in Springtown Boulevard. However, historical grab-groundwater data collected from borings CPT4 through CPT6 and former well MW-4 complete delineation offsite toward the north. Elevated petroleum hydrocarbon concentrations are detected between approximately 5 to 30 fbg and are vertically delineated. Isoconcentration maps of TPHg and benzene in soil from 9-17 fbg are included as Figures 3 and 4.

3.2 HYDROCARBON DISTRIBUTION IN GROUNDWATER

The monitoring wells are divided into three different zones based on the screen intervals: shallow zone (wells MW-9, MW-11 and MW-14), intermediate zone (wells MW-10, MW-12, MW-13 and MW-16) and deep zone (well MW-15). The highest petroleum hydrocarbon concentrations are detected in the intermediate zone wells

which have 5 foot screen intervals ranging between 22 and 37 fbg. On July 23, 2009, the highest petroleum hydrocarbon concentrations were 52,000 micrograms per liter (µg/L) TPHg, 760 µg/L benzene, 6,200 µg/L toluene and 13,000 µg/L xylenes in well MW-13 and 1,300 µg/L ethylbenzene in well MW-12. The shallow zone is horizontally delineated by former destroyed well network. Lower concentrations of TPHg and benzene are detected in intermediate zone well MW-16 across Springtown Boulevard and in deep zone well MW-15 located near the source area. Additional groundwater monitoring and sampling data will be collected to further evaluate hydrocarbon concentrations before providing recommendations for the intermediate and deep zones wells.

4.0 CONCLUSIONS AND RECOMMENDATIONS

CRA makes the following conclusions:

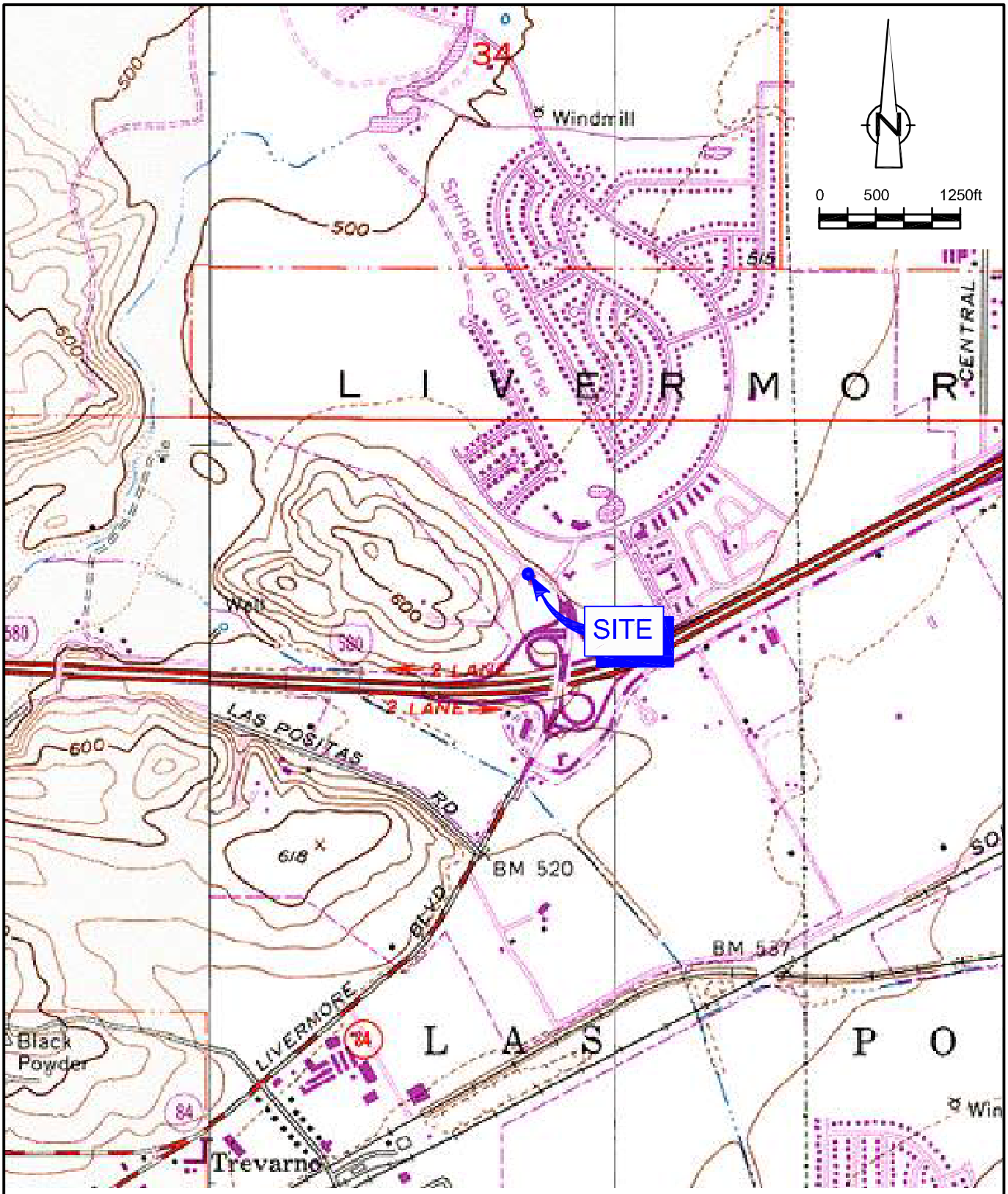
- Petroleum hydrocarbons detected in soil are adequately horizontally delineated.
- Petroleum hydrocarbon concentrations in soil above environmental screening levels[1] are detected between approximately 5 to 30 fbg and are vertically delineated.
- Groundwater in the shallow zone is horizontally delineated by former destroyed well network.

CRA makes the following recommendations:

- The newly installed monitoring wells will be sampled for four quarters to assess current groundwater conditions at the site
- As requested by ACEH, CRA will submit a Pilot Test Work Plan/Draft CAP by August 19, 2010 to evaluate appropriate remedial options and make additional recommendations

[1] Environmental Screening Levels for shallow and deep soils (commercial/industrial land use) from *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.

FIGURES



SOURCE: TOPO! MAPS.

Figure 1

VICINITY MAP
FORMER TEXACO SERVICE STATION 21-1253
930 SPRINGTOWN BOULEVARD
Livermore, California

60058-2009(004)GN-WA001 JUL 28/2009

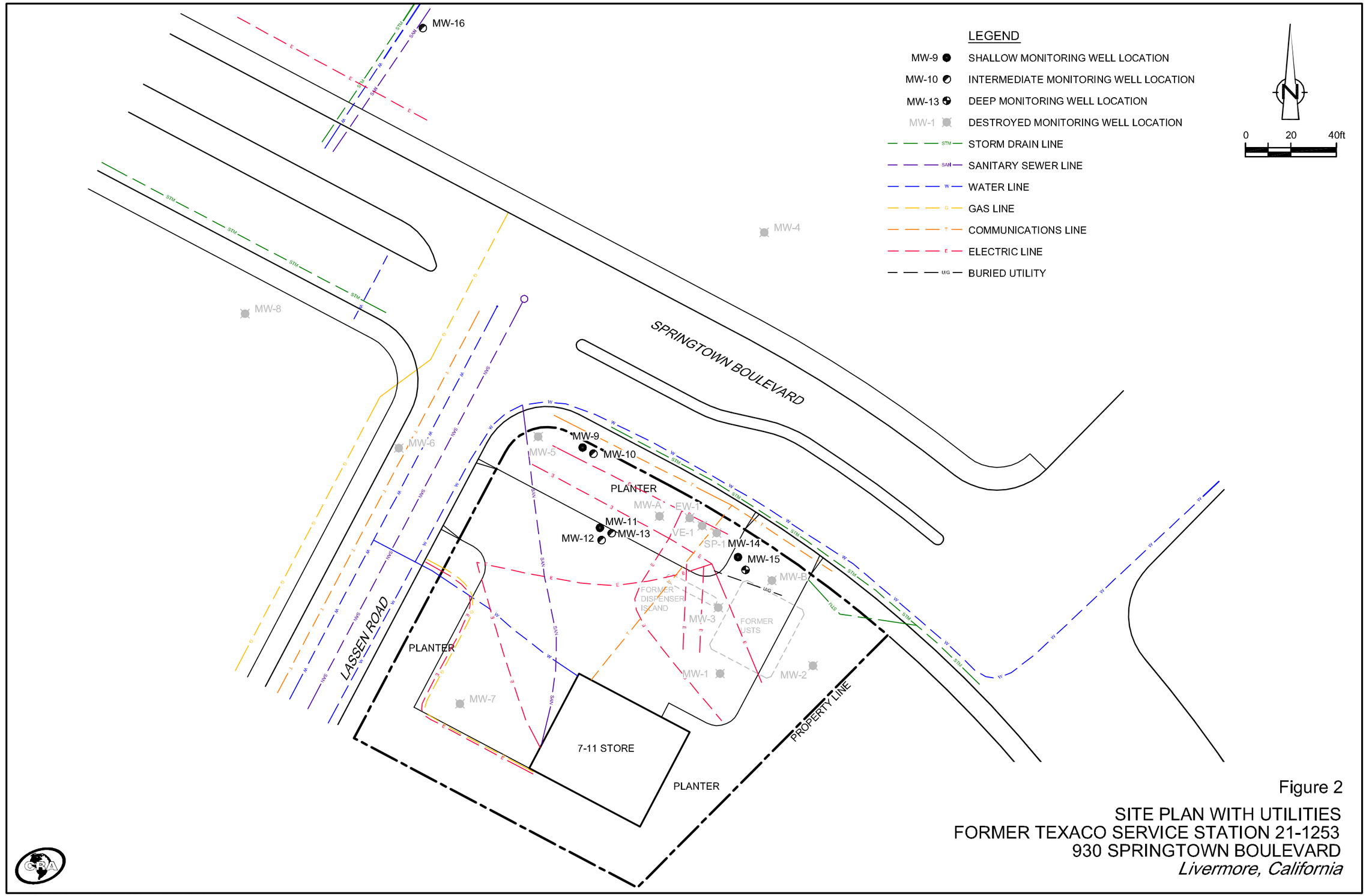


Figure 2

SITE PLAN WITH UTILITIES
FORMER TEXACO SERVICE STATION 21-1253
930 SPRINGTOWN BOULEVARD
Livermore, California

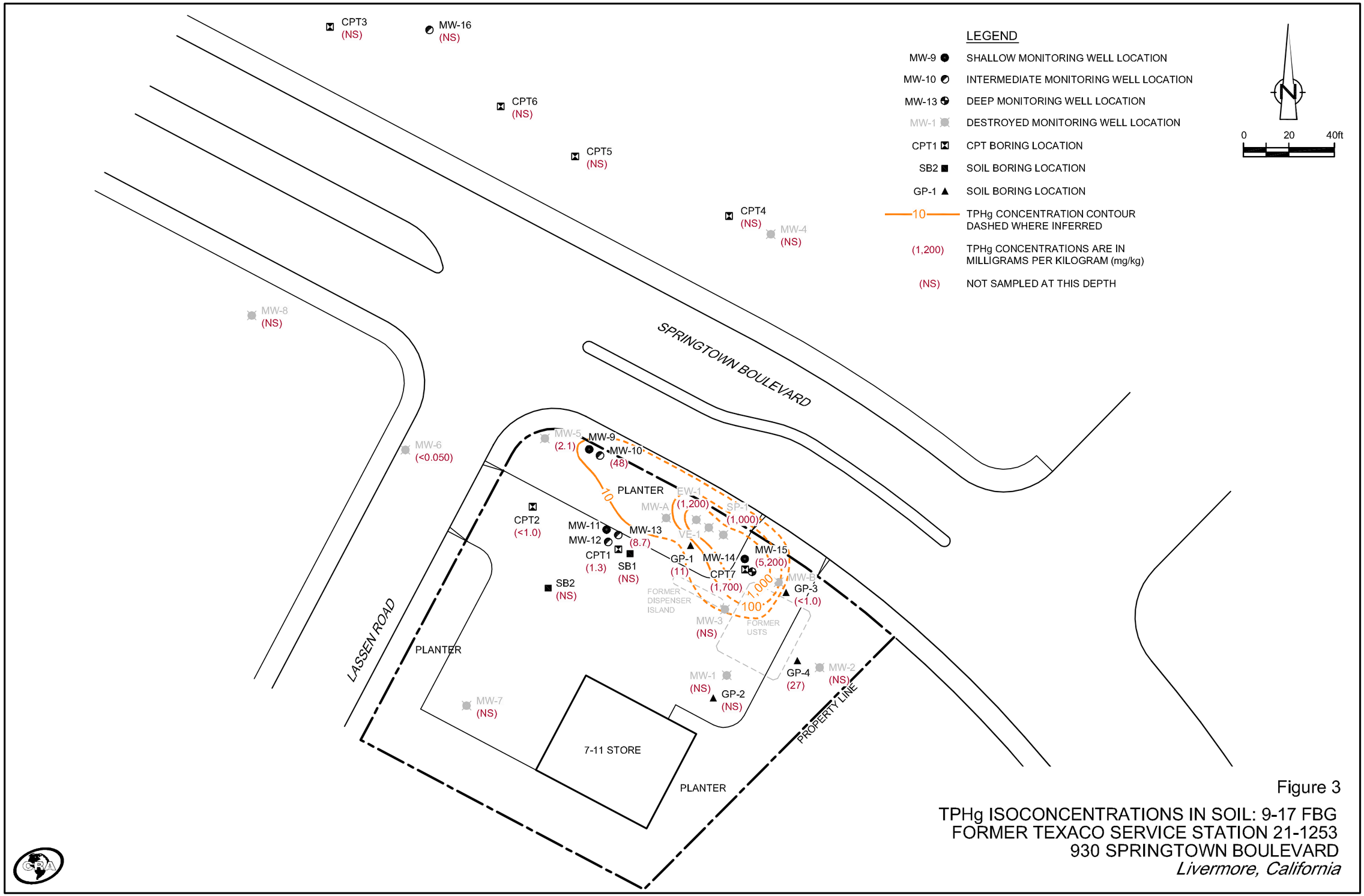


Figure 3

TPHg ISOCONCENTRATIONS IN SOIL: 9-17 FBG
FORMER TEXACO SERVICE STATION 21-1253
930 SPRINGTOWN BOULEVARD
Livermore, California

60058-2009(004)GN-WA004 AUG 12/2009

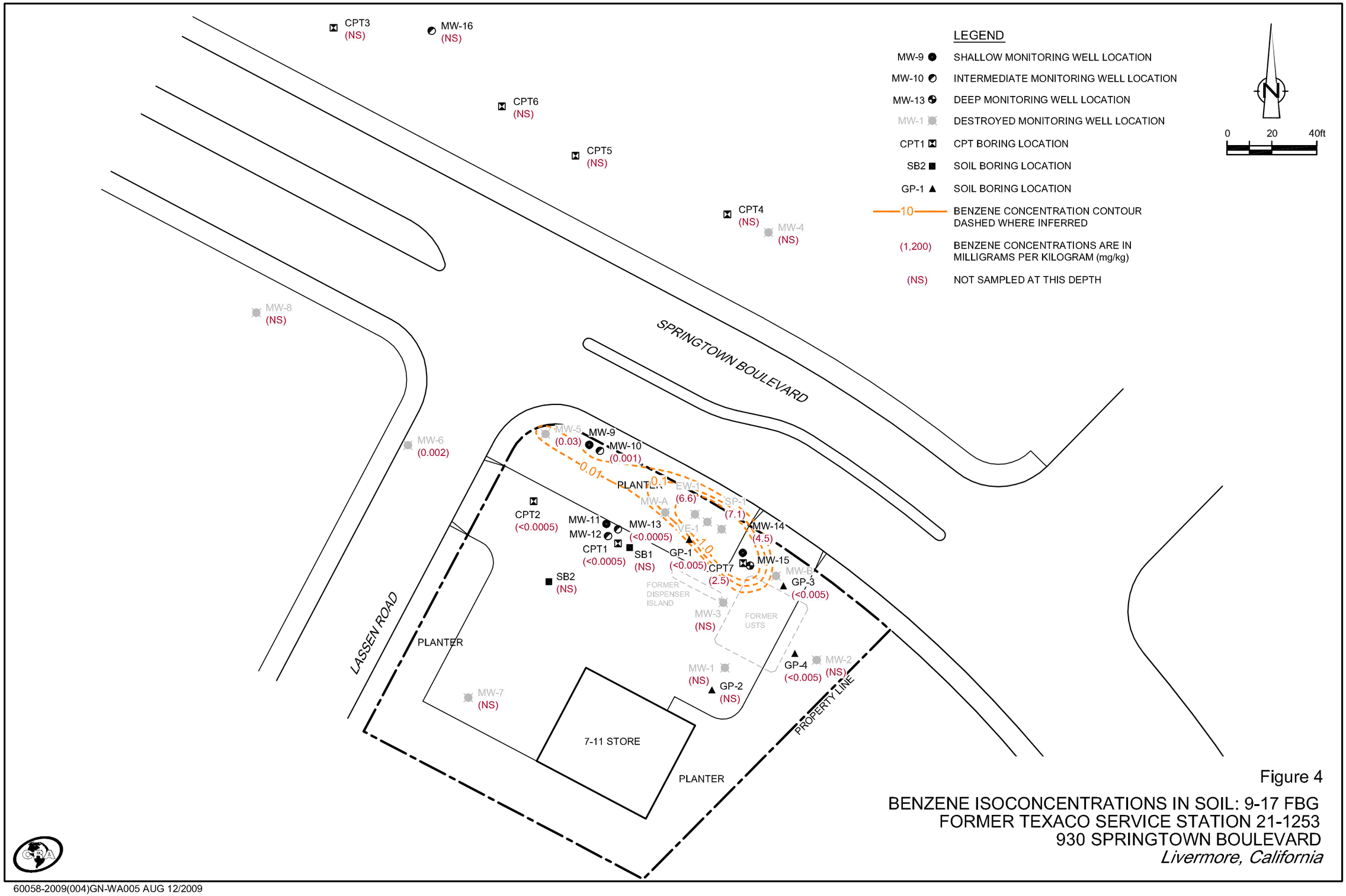


Figure 4

BENZENE ISOCONCENTRATIONS IN SOIL: 9-17 FBG
FORMER TEXACO SERVICE STATION 21-1253
930 SPRINGTOWN BOULEVARD
Livermore, California

60058-2009(004)GN-WA005 AUG 12/2009

TABLES

TABLE 1

SOIL ANALYTICAL DATA
FORMER TEXACO STATION (CHEVRON SITE #21-1253)
930 SPRINGTOWN BOULEVARD, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*
			Reported in milligrams per kilogram (mg/kg)											
ESLs - Shallow Soil		***--***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***
ESLs - Deep Soil		***--***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***
MW-10-S-10.5	06/24/09	10.5	48	<0.025	<0.051	0.094	<0.051	--	--	--	--	--	--	--
MW-10-S-15.5	06/24/09	15.5	1.7	0.001	0.006	0.16	0.12	--	--	--	--	--	--	--
MW-10-S-20.5	06/24/09	20.5	1.8	<0.0005	<0.001	0.005	0.001	--	--	--	--	--	--	--
MW-10-S-26	06/24/09	26	<1.0	<0.0005	<0.001	<0.001	<0.001	--	--	--	--	--	--	--
MW-13-S-10.5	06/24/09	10.5	<1.0	<0.0005	<0.001	<0.001	<0.001	--	--	--	--	--	--	--
MW-13-S-15.5	06/25/09	15.5	8.7	<0.0005	<0.0009	<0.0009	<0.0009	--	--	--	--	--	--	--
MW-13-S-20.5	06/25/09	20.5	11	**0.18**	0.005	0.017	0.008	--	--	--	--	--	--	--
MW-13-S-25.5	06/25/09	25.5	**1,100**	**1.2**	**50**	**13**	**90**	--	--	--	--	--	--	--
MW-13-S-31	06/25/09	31	**150**	**0.22**	**8.1**	**3.5**	**22**	--	--	--	--	--	--	--
MW-13-S-36.5	06/25/09	36.5	52	**0.046**	0.85	0.3	1.8	--	--	--	--	--	--	--
MW-15-S-9.5	06/30/09	9.5	**5,200**	**4.5**	**44**	**55**	**260**	--	--	--	--	--	--	--
MW-15-S-14.5	06/30/09	14.5	**150**	0.003	0.014	0.065	0.24	--	--	--	--	--	--	--
MW-15-S-19.5	06/30/09	19.5	**6,400**	<0.50	**31**	**170**	**530**	--	--	--	--	--	--	--
MW-15-S-24.5	06/30/09	24.5	34	<0.025	0.12	0.23	0.94	--	--	--	--	--	--	--
MW-15-S-29.5	06/30/09	29.5	4.9	<0.0005	0.028	0.037	0.20	--	--	--	--	--	--	--
MW-15-S-34.5	06/30/09	34.5	**86**	<0.023	0.34	0.65	**3.0**	--	--	--	--	--	--	--
Previous Data from CRA's August 13, 2008 Subsurface Investigation Report														
CPT1	11/21/07	5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001
CPT1	11/21/07	16	1.3	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001

TABLE 1

SOIL ANALYTICAL DATA
FORMER TEXACO STATION (CHEVRON SITE #21-1253)
930 SPRINGTOWN BOULEVARD, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*
			Reported in milligrams per kilogram (mg/kg)											
ESLs - Shallow Soil		***--***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***
ESLs - Deep Soil		***--***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***
CPT1	11/21/07	20	<1.0	**0.073**	0.002	0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001
CPT1	11/21/07	30	59	**0.61**	2.8	0.42	**5.8**	<0.024	<0.97	<0.048	<0.048	<0.048	<0.048	<0.048
CPT1	11/21/07	37	16	0.004	0.56	0.39	0.3	<0.005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001
CPT1	11/21/07	41	**130**	0.043	1.1	0.52	**3.4**	<0.024	<0.97	<0.049	<0.049	<0.049	<0.049	<0.049
CPT1	11/21/07	45	1.8	0.004	0.059	0.018	0.13	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001
CPT1	11/21/07	50	<1.0	0.0008	0.022	0.009	0.06	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001
CPT2	11/19/07	5	<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	11/19/07	10.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001
CPT2	11/19/07	15.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001
CPT2	11/19/07	20.5	<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	11/19/07	30.5	<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	11/19/07	35.5	<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	11/19/07	40.5	<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	11/19/07	45.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001
CPT2	11/19/07	50.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001
CPT3	04/07/08	19.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001
CPT4	07/18/08	23.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001
CPT5	04/09/08	21.5	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009

TABLE 1

SOIL ANALYTICAL DATA
FORMER TEXACO STATION (CHEVRON SITE #21-1253)
930 SPRINGTOWN BOULEVARD, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*
			Reported in milligrams per kilogram (mg/kg)											
ESLs - Shallow Soil		***--***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***
ESLs - Deep Soil		***--***	***83***	***0.044***	***2.9***	***3.3***	***2.3***	***0.023***	***0.075***	***NE***	***NE***	***NE***	***0.0045***	***0.00033***
CPT6	11/19/07	5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	<0.001	<0.001
CPT6	11/20/07	25	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	<0.001	<0.001
CPT7	04/08/08	5	**510**	<0.026	<0.053	**3.6**	**16**	<0.026	<1.1	<0.053	<0.053	<0.053	<0.053	<0.053
CPT7	04/09/08	10.5	**1,700**	**2.5**	**20**	**14**	**70**	<0.025	<0.99	<0.050	<0.050	<0.050	<0.050	<0.050
CPT7	04/09/08	12	**510**	**0.28**	<0.050	2.8	1.4	<0.025	<1.0	<0.050	<0.050	<0.050	<0.050	<0.050
CPT7	04/09/08	17	**700**	**0.45**	**5.7**	**6**	**27**	<0.023	<0.92	<0.046	<0.046	<0.046	<0.046	<0.046
CPT7	04/09/08	20	**430**	**0.15**	**6.6**	**4.2**	**19**	<0.024	<0.97	<0.049	<0.049	<0.049	<0.049	<0.049
CPT7	04/09/08	25	53	0.039	1.6	2.4	**11**	<0.026	<1.0	<0.052	<0.052	<0.052	<0.052	<0.052
CPT7	04/09/08	30	82	**0.048**	0.6	0.5	2.2	<0.025	<0.98	<0.049	<0.049	<0.049	<0.049	<0.049
CPT7	04/09/08	35	16	<0.026	0.16	0.13	0.61	<0.026	<1.1	<0.053	<0.053	<0.053	<0.053	<0.053
CPT7	04/09/08	40	2.1	0.0007	0.031	0.049	0.24	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
CPT7	04/09/08	42	3.7	0.005	0.037	0.046	0.2	<0.0005	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001
CPT7	04/09/08	50.5	38	0.026	0.46	0.72	**3.3**	<0.026	<1.0	<0.051	<0.051	<0.051	<0.051	<0.051
CPT7	04/09/08	55	32	<0.026	0.52	0.83	**3.9**	<0.026	<1.0	<0.052	<0.052	<0.052	<0.052	<0.052

TABLE 1

SOIL ANALYTICAL DATA
FORMER TEXACO STATION (CHEVRON SITE #21-1253)
930 SPRINGTOWN BOULEVARD, LIVERMORE, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
			Reported in milligrams per kilogram (mg/kg)											
ESLs - Shallow Soil		--	*83*	*0.044*	*2.9*	*3.3*	*2.3*	*0.023*	*0.075*	*NE*	*NE*	*NE*	*0.0045*	*0.00033*
ESLs - Deep Soil		--	*83*	*0.044*	*2.9*	*3.3*	*2.3*	*0.023*	*0.075*	*NE*	*NE*	*NE*	*0.0045*	*0.00033*

Notes:

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

Benzene, toluene, ethylbenzene, and 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

ESLs = Environmental Screening Levels for shallow and deep soil (commercial/industrial land use) from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* Interim Final November 2007, revised May 2008 by the California Regional Water Quality Control Board, San Francisco Bay Region, Tables A and C

NE = Not established

fbg = feet below grade

<x = Not detected at reporting limit x

-- = Not analyzed/ not applicable

TABLE 2

GRAB-GROUNDWATER ANALYTICAL DATA
FORMER TEXACO STATION (CHEVRON SITE #21-1253)
930 SPRINGTOWN BOULEVARD, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*
			Reported in micrograms per liter (µg/L)											
ESLs		***--***	***100***	***1.0***	***40***	***30***	***20***	***5.0***	***12***	***NE***	***NE***	***NE***	***0.5***	***0.05***
MW-9	7/23/2009	5-15	**5,200**	**4**	5	**310**	**100**	--	--	--	--	--	--	--
MW-10	7/23/2009	22-27	**16,000**	**220**	**440**	**440**	**660**	--	--	--	--	--	--	--
MW-11	7/23/2009	5-15	**5,400**	**25**	28	**62**	**66**	--	--	--	--	--	--	--
MW-12	7/23/2009	22-27	**48,000**	**340**	**3,100**	**1,300**	**7,600**	--	--	--	--	--	--	--
MW-13	7/23/2009	32-37	**52,000**	**760**	**6,200**	**980**	**13,000**	--	--	--	--	--	--	--
MW-14	7/23/2009	5-15	**8,400**	**230**	**460**	**180**	**670**	--	--	--	--	--	--	--
MW-15	7/23/2009	42-47	**2,500**	**6**	17	16	**320**	--	--	--	--	--	--	--
MW-16	7/23/2009	25-30	**430**	0.6	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
Previous Data from CRA's August 13, 2008 Subsurface Investigation Report														
CPT1	11/26/2007	16	**1,700**	**7.0**	**110**	21	**140**	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT1	11/26/2007	24	**160,000**	**4,200**	**20,000**	**1,700**	**15,000**	<25	<100	<25	<25	<25	<25	<25
CPT1	11/26/2007	34	**30,000**	**1,500**	**1,600**	**710**	**2,900**	<2	<8	<2	<2	<2	<2	<2
CPT2	11/20/2007	16	<50	0.6	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
CPT2	11/20/2007	24	**2,000**	<0.5	<0.5	0.6	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5
CPT2	11/20/2007	34	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	**4.0**
CPT3	4/7/2008	26	**1,500**	**1.0**	**1.0**	<0.5	1.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT3	4/7/2008	40	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 2

GRAB-GROUNDWATER ANALYTICAL DATA
FORMER TEXACO STATION (CHEVRON SITE #21-1253)
930 SPRINGTOWN BOULEVARD, LIVERMORE, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*1,2-DCA*	*EDB*
			Reported in micrograms per liter (µg/L)											
ESLs		*--*	***100***	***1.0***	***40***	***30***	***20***	***5.0***	***12***	***NE***	***NE***	***NE***	***0.5***	***0.05***
CPT3	4/7/2008	50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT4	7/14/2008	24	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT4	7/14/2008	48	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT5	4/9/2008	28	**200**	0.5	6.0	6.0	**31**	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT5	4/9/2008	38	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT5	4/9/2008	45	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT6	11/19/2007	32	94	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT6	11/20/2007	48	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
CPT7	4/8/2008	13	**3,600**	**21**	25	**47**	**110**	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	**0.8**
CPT7	4/9/2008	43	**11,000**	**3.0**	**270**	**490**	**2,100**	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

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

ethyl tertiary-butyl ether (ETBE); t-amyl methyl ether (TAME); 1,2-dichloroethane (1,2-DCA); 1,2-dibromoethane (EDB) by EPA Method 8260B

ESL's = Environmental Screening Levels for groundwater that is a current or potential drinking water source (commercial/industrial land use) from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* Interim Final November 2007, revised May 2008 by the California Regional Water Quality Control Board, San Francisco Bay Region

fbg = feet below grade

<x = Not detected at reporting limit x

-- = Not analyzed/not applicable

APPENDIX A

REGULATORY CORRESPONDENCE

Recd Dec. 8 2008

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

December 4, 2008

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

Mr. Ken Hilliard
Environmental Services
7-Eleven, Inc.
One Arts Plaza, 1722 Routh St., Suite 1000
Dallas, TX 75201

Subject: Fuel Leak Case No. RO0000189 and Geotracker Global ID T0600101353, Chevron #21-1253/Texaco, 930 Springtown Boulevard, Livermore, CA 94550

Dear Mr. Robb and Mr. Hilliard:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the document entitled, "*Subsurface Investigation Report*," dated August 13, 2008. The "*Subsurface Investigation Report*," presents the results from several phases of cone penetration test (CPT) soil borings in 2007 and 2008. Soil and grab groundwater samples were collected from each of seven CPT borings. Total petroleum hydrocarbons as gasoline (TPHg) and benzene were detected in groundwater at maximum concentrations of 160,000 and 4,200 micrograms per liter (µg/L), respectively.

In correspondence dated March 8, 2002, Alameda County Environmental Health (ACEH) staff indicated that ACEH and the San Francisco Regional Water Quality Board had reviewed the case closure summary and concurred that no further action related to the underground storage tank release is required at this time. The March 8, 2002 correspondence went on to request that the nine monitoring wells at the site be decommissioned, if they will no longer be monitored. Subsequent review of the case file by ACEH staff in 2007, which is documented in correspondence dated January 31, 2007, identified data gaps that need to be addressed prior to considering the case for closure. The seven CPT borings advanced in 2007 and 2008 were implemented to address these data gaps.

The August 13, 2008 "*Subsurface Investigation Report,*" concludes that all data gaps identified in the ACEH letter dated January 31, 2007 have been addressed. The Report goes on to conclude that current site conditions are similar to conditions upon which ACEH and the Water Board concurred that no further action was necessary. No rationale for case closure is presented other than current conditions are believed to be similar to previously referenced conditions. A document entitled, "*Request for Closure,*" dated December 10, 2001 is referenced and included as Attachment G to the "*Subsurface Investigation Report.*" Based upon our review of the case file including the August 13, 2008 "*Subsurface Investigation Report,*" December 10, 2001 "*Request*

for Closure," and the August 13, 2001, "*Vadose Zone Investigation and Risk-Based Corrective Action (RBCA) Analysis*," we do not concur that current site conditions are similar to previously referenced conditions. Please see technical comments 1 through 4 for descriptions of specific differences.

Based upon our review of the case file, site conditions are significantly different than cited and represented in documents previously used to evaluate the site for case closure. The volume and concentration of residual soil and groundwater contamination at the site requires that the site be remediated. Therefore, we request that you submit a Work Plan for pilot testing or a Draft Corrective Action Plan **by February 26, 2009**.

TECHNICAL COMMENTS

1. **Plume Extent.** Our January 31, 2007 directive letter requested that you investigate the potential for the plume to have migrated off-site to the northwest, possibly along a preferential pathway. The four CPT borings were advanced off-site to the north and northwest to address this data gap. TPHg was detected at a concentration of 1,700 micrograms per liter (µg/L) in a grab groundwater sample collected from a sand layer at a depth of approximately 24 feet bags in boring CPT3. Boring CPT-3 is more than 300 feet from the former USTs and approximately 190 feet from the northern corner of the property. Therefore, we do not understand the conclusion in the August 13, 2008, "*Subsurface Investigation Report*," that the plume is limited to the northern property boundary. It appears that the plume extends off-site and is significantly larger than previously considered.

2. **Vertical Delineation.** In our January 31, 2007 directive letter, the vertical extent of contamination was identified as a data gap for the site based on the potential for downward migration of contamination at the site due to long-term water level fluctuations and the observation of fuel hydrocarbons at the lowest depths investigated. The CPT borings included depth-discrete soil and grab groundwater sampling that provided data on the vertical distribution of contamination to address this data gap. In the three CPT borings where the highest concentrations of petroleum hydrocarbons were detected, the grab groundwater samples collected below a depth of 20 feet bags contained the highest concentration of TPHg. In boring CPT-1, the concentration of TPHg in the grab groundwater sample collected at a depth of 24 feet bags (160,000 µg/L) was nearly two orders of magnitude higher than the concentration of TPHg in the shallower grab groundwater sample collected at 16 feet bags (1,700 µg/L). In the five (of total seven) CPT borings where petroleum hydrocarbons were detected in groundwater, the highest concentrations of TPHg were generally detected in grab groundwater samples collected between 24 and 43 feet bags. Groundwater monitoring wells MW-A and MW-B, which were directly downgradient from the former USTs, only extended to a depth of 16 feet bags. Wells MW-A and MW-B were the primary wells used to delineate the extent of contamination and trends in concentration over time. The 2007 and 2008 CPT investigation shows that the vertical extent and concentrations of petroleum hydrocarbons are significantly greater than previously assumed in 2002.

3. **Grab Groundwater Results.** The August 13, 2008, "*Subsurface Investigation Report*," appears to discount the grab groundwater sampling results by stating that, "grab groundwater

samples are often one to two orders of magnitude higher than stabilized groundwater monitoring well samples." The basis for this statement is not provided. However, data from both types of sampling are available for this site and can be readily compared. Boring CPT-7 is adjacent to former well MW-B and boring CPT-1 is adjacent to former well MW-A. During the last monitoring well sampling event on January 4, 2002, the groundwater sample from well MW-B contained 10,000 µg/L of TPHg and 11 µg/L of benzene. Former well MW-B was screened from approximately 4 to 16 feet bgs; therefore, the results can be compared to the grab groundwater sample collected at a depth of 13 feet bgs from adjacent boring CPT-7. The grab groundwater sample collected at a depth of 13 feet bgs from boring CPT-7 contained 3,600 µg/L of TPHg and 21 µg/L of benzene. The TPHg concentration in the sample from the monitoring well is higher than the grab groundwater sampling result. At the second location, the results from monitoring well MW-A can be compared to the grab groundwater sample collected at a depth of 16 feet bgs from boring CPT-1 (monitoring well was screened from approximately 4 to 16 feet bgs). During the last monitoring well sampling event on January 4, 2002, the groundwater sample from well MW-A contained 9,100 µg/L of TPHg and 4.1 µg/L of benzene. In comparison, the grab groundwater sample collected at a depth of 16 feet bgs from boring CPT-1 contained 1,700 µg/L of TPHg and 7 µg/L of benzene. Again, the concentration of TPHg was higher in the groundwater sample from the monitoring well than in the comparable grab groundwater sample. These results do not fit with the stated conclusion that grab groundwater sampling results are one to two orders of magnitude higher than results from monitoring wells. As discussed in technical comment 2, the depth at which the grab groundwater samples were collected is a much more significant factor for this site than the sampling method.

4. **Comparison of Current Conditions to Conditions Cited in Request for Closure.** The August 13, 2008, "*Subsurface Investigation Report*," concludes that, "current site conditions are similar to conditions upon which ACEHS and RWQCB-SFB originally based their no further action determination" and requests that a remedial action completion certificate be issued. In order to evaluate this conclusion, we have compared the current site conditions to those described in the December 10, 2001 "*Request for Closure*," and in the August 13, 2001 "*Vadose Zone Investigation and Risk-Based Corrective Action (RBCA) Analysis*." Case closure was requested in the December 10, 2001 "*Request for Closure*," based on the following facts:

Basis for Case Closure Request in December 10, 2001 "*Request for Closure*"	**Current Conditions**
The USTs were removed in June 1985 and the site is currently a 7-Eleven convenience store	No changes.
Graphs show the effectiveness of SVE system in removing petroleum hydrocarbons from vadose zone soil	The graphs show that the SVE system performance declined over time but does not provide an indication of the mass removed or the effectiveness of the SVE system to remediate the vadose zone. Moreover, much of the contamination at this site is below the water table and not affected by SVE. Therefore, even if it

	could be assumed that SVE was effective in removing petroleum hydrocarbons from the vadose zone, site cleanup is necessary to address deeper contamination.
The effectiveness of the SVE system was confirmed by analysis of soil samples in June 2001. TPHg was detected in two samples at concentrations of 11 and 14 milligrams per kilogram (mg/kg), respectively.	TPHg and benzene were detected in vadose zone soil samples collected in 2008 at concentrations up to 1,700 and 2.5 mg/kg, respectively. This is a significant difference from the 2001 assumed conditions.
The dissolved petroleum plume is small (0.1 acres) and was assumed to be largely on site.	TPHg was detected in a grab groundwater sample from CPT-3 at a concentration of 1,500 micrograms per liter (µg/L). CPT3 is off-site more than 300 feet from the former USTs. This is a significant difference from the 2001 assumed conditions.
MTBE was not detected in groundwater samples during recent sampling events.	No changes
No registered water supply wells were identified within 1/2.-mile of the site.	No changes
Current conditions do not pose a threat to human health based on a 2001 RBCA analysis	The RBCA analysis was based on data that has been superseded by data from the 2007 and 2008 CPT investigation. Maximum concentrations from the 2007 and 2008 CPT investigation exceed the site-specific target levels in the 2001 RBCA. This is a significant difference from the 2001 assumed conditions.

Based upon the differences noted in the table above and the greater horizontal and vertical extent of contamination discussed in technical comments 1 and 2 above, there are significant differences between the conditions encountered during the 2007 and 2008 CPT investigation and the conditions described in the December 10, 2001 "*Request for Closure.*"

TECHNICAL REPORT REQUEST

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

- **February 26, 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

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

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

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 10, 2009

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

Mr. Ken Hilliard
Environmental Services
7-Eleven, Inc.
One Arts Plaza, 1722 Routh St., Suite 1000
Dallas, TX 75201

Subject: Fuel Leak Case No. RO0000189 and Geotracker Global ID T0600101353, Chevron #21-1253/Texaco, 930 Springtown Boulevard, Livermore, CA 94550

Dear Mr. Robb and Mr. Hilliard:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the recently submitted document entitled,"*Work Plan for Monitoring Well Installation*," dated February 26, 2009 (Work Plan). In correspondence dated December 4, 2008, ACEH requested that you prepare a Pilot Test Work Plan or Draft Corrective Action Plan to initiate site cleanup. The February 26, 2009 Work Plan, which was prepared on Chevron's behalf by Conestoga-Rovers & Associates, proposes installation of six monitoring wells and sampling of the wells for four quarters prior to considering site cleanup. The proposal to install monitoring wells at the site is generally acceptable; however, we do not concur with the proposal to sample the wells for four quarters before considering site cleanup.

The monitoring wells are generally proposed at locations where previous borings have been advanced to characterize the site stratigraphy and define the extent of soil and groundwater contamination. The hydraulic gradient and range of seasonal water level fluctuations are known from previous monitoring wells at the site and data from nearby sites. Therefore, the proposed monitoring wells will provide only limited new information, which does not justify delaying site cleanup for four quarters. We request that you submit the previously requested Pilot Test Work Plan or Draft Corrective Action Plan **no later than June 19, 2009**.

Installation of the proposed monitoring wells may be implemented at this time provided that the technical comments below are incorporated during well installation. We request that you address the following technical comments, perform the proposed work, and send us the reports requested below.

TECHNICAL COMMENTS

1. **Well Locations.** The proposed well locations are generally acceptable; however, we request that the proposed wells adjacent to CPT-1 and CPT-7 be moved short distances to locations that are more likely to be within the interior of the plume based on the locations of the former USTs and dispensers and the hydraulic gradient. We request that the proposed wells adjacent to CPT-1 be moved to locations immediately north of CPT-1 and the proposed wells adjacent to CPT-7 be moved to locations immediately south of CPT-7. The proposed well locations in the planter area and adjacent to CPT-3 are acceptable. However, please see the requested modifications and additional wells requested in technical comment 3.

2. **Proposed Depths of Well Screens.** Since 5 of the 6 proposed wells are in locations adjacent to CPT borings, we have compared the proposed depths of the well screen intervals to the CPT logs. Based on this comparison, we request the following modifications:

Proposed Well and Well Screen Interval	Requested Well Screen Interval
Shallow well adjacent to CPT-1: 5-15 feet bgs	No change.
Deeper well adjacent to CPT-1: 25-30 feet bgs	Install well screen within sand where highest concentration of TPH and BTEX was detected from 22-27 feet bgs. We also request that a third well be installed at this location with a screen interval from 32 to 37 feet bgs to monitor a lower sand layer where elevated concentrations of TPH and BTEX were detected in a grab groundwater sample from CPT-1.
Shallow well adjacent to CPT-7: 5-15 feet bgs	No change.
Deeper well adjacent to CPT-7: 25-30 feet bgs	No sand layer is present in CPT-7 log near depths of 25-30 feet bgs. We request that the well be screened in a lower sand layer observed on CPT-7 log from 42-47 feet bgs.
Shallow well in planter area north of CPT-1: 5-15 feet bgs.	No change.
Planter Area north of CPT-1: no deeper wells proposed	We request that an additional well with a screen interval from 22-27 feet bgs be installed within the Planter Area.
Shallow well adjacent to CPT-3: 5-20 feet bgs	We request that the well be screened within sand layer from 25-30 feet bgs.

Please present the results of the well installation in the Monitoring Well Installation Report requested below.

3. **Proposed Soil Sampling.** The Work Plan proposes collection of soil samples for laboratory analysis at 5-foot intervals, obvious changes in soils, and where hydrocarbon staining or odors are observed to the bottoms of the borings. Since the proposed wells are generally adjacent to previous boring locations where soil samples have already been collected at 5-

foot intervals using these criteria, we do not concur with the proposed soil sample collection. Therefore, we do not request laboratory analysis of soil samples from the well borings. Please present the results of the well installation in the Monitoring Well Installation Report requested below

TECHNICAL REPORT REQUEST

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

- **June 19, 2009** – Pilot Test Work Plan or Draft Corrective Action Plan
- **August 19, 2009** – Monitoring Well Installation Report

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

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

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

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

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

July 1, 2009

Mr Ian Robb
Chevron Environmental Management Company
6001 Bollinger Canyon Rd , K2256
San Ramon, CA 94583-2324

Mr Ken Hilliard
Environmental Services
7-Eleven, Inc
One Arts Plaza, 1722 Routh St , Suite 1000
Dallas, TX 75201

Subject Fuel Leak Case No RO0000189 and Geotracker Global ID T0600101353, Chevron #21-1253/Texaco, 930 Springtown Boulevard, Livermore, CA 94550

Dear Mr Robb and Mr Hilliard

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the recently submitted correspondence entitled, "*Response to Request for Pilot Test Work Plan of Draft Corrective Action Plan*," dated June 19, 2009 In correspondence dated April 10, 2009, ACEH approved the installation and sampling of the proposed monitoring wells and requested that you prepare a Pilot Test Work Plan or Draft Corrective Action Plan to initiate site cleanup The June 19, 2009 correspondence, which was prepared on Chevron's behalf by Conestoga-Rovers & Associates, presents a discussion of the rationale for collecting groundwater monitoring data for a one year period prior to evaluating remedial options in a Corrective Action Plan (CAP)

Based on the rationale presented in the June 19, 2009 correspondence, the proposal to collect groundwater monitoring data for a period of one year to assess current groundwater conditions is acceptable A Pilot Test Work Plan or Draft CAP is to be prepared following the collection of four quarters of groundwater data from the recently installed six monitoring wells

TECHNICAL REPORT REQUEST

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

- **August 19, 2009** – Monitoring Well Installation Report
- **30 days following end of each quarter** – Groundwater Monitoring Report
- **August 19, 2010** – 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

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 March 27, 2009
	PREVIOUS REVISIONS December 16, 2005, October 31, 2005
SECTION Miscellaneous Administrative Topics & Procedures	**SUBJECT** Electronic Report Upload (ftp) Instructions

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

REQUIREMENTS

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

Additional Recommendations

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

Submission Instructions

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

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

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov org notify us that you have placed a report on our ftp site
   b) Copy your Caseworker on the e-mail Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov org (e g , firstname lastname@acgov org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload** (e g , Subject RO1234 Report Upload) If site is a new case without an RO# use the street address instead
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site

APPENDIX B

SITE HISTORY

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

1984 Initial Investigation: In September 1984, J.H. Kleinfelder and Associates (Kleinfelder) discovered approximately 1-inch of light non-aqueous phase liquid hydrocarbons during underground storage tank (UST) removal. No additional information from this report is available.

1985 Hydrocarbon Investigation and UST/Product Line Removal: Groundwater Technology Incorporated (GTI) likely installed monitoring wells MW-1 through MW-3 adjacent to the UST pit to assess the extent of hydrocarbons detected by Kleinfelder. Groundwater monitoring wells MW-A and MW-B were supposedly installed prior to this investigation, but no records were available. Subsequent reports state that four monitoring wells were installed during this investigation. GTI also collected soil confirmation samples and observed the UST and product piping removal during the decommissioning of the Texaco station. The maximum hydrocarbon concentrations detected in soil were 3.2 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and 0.58 mg/kg benzene. GTI conducted a ½-mile well survey through the Alameda Flood Control and Water Conservation District and no registered water supply wells were identified. A sensitive receptor survey did not identify any other sensitive receptors near the site. More information is available in GTI's August 1985 *Hydrocarbon Investigation Report*.

1987 Monitoring Well Installation: In March 1987, GTI installed wells MW-5 and MW-6. The highest hydrocarbon concentrations detected in soil were 2.1 mg/kg TPHg and 0.030 mg/kg benzene from MW-5 at 14 feet below grade (fbg). The new wells were surveyed and GTI began monthly monitoring of groundwater levels at the site. More information is available in GTI's March 23, 1987 *Status Report*.

1990 Additional Site Assessment: In April 1990, GTI advanced four soil borings, two of which were converted to monitoring wells MW-7 and MW-8. No soil results are available from this report. The highest hydrocarbon concentrations detected in groundwater were 39,000 micrograms per liter (µg/L) TPHg and 2,700 µg/L benzene in wells MW-A and MW-B. No hydrocarbon concentrations were detected in wells MW 1, MW 4, MW-7 and MW-8. More information is available in GTI's April 10, 1990 *Report of Additional Environmental Site Assessment*.

1993 Extraction Well Installation and Feasibility Testing: In January 1993, Weiss Associates (WA) advanced soil borings B-1 and B-2, and installed groundwater extraction well EW-1, vapor extraction well VE-1, and air sparge well SP-1. The highest hydrocarbon concentration detected in soil was 1,200 mg/kg TPHg, just below the water table at 14.4 fbg in boring B-1. WA developed, sampled and conducted a 24 hour aquifer test on EW-1. WA concluded that the extraction well would likely capture most of the dissolved hydrocarbons and limit offsite migration. WA also conducted a vapor extraction test on vapor extraction well VE-1, groundwater extraction well EW-1, and existing monitoring wells MW-A, MW-B and MW-5. WA concluded that soil vapor extraction (SVE) could effectively remove vapors from a majority of the impacted vadose zone. WA conducted an air sparging and SVE pilot test from the air sparge well SP-1 and vapor extraction wells VE-1, and concluded that air sparging with vapor extraction would effectively remove hydrocarbons from saturated sediments. More information is available in WA's January 5, 1993 *Extraction Well Installation and Feasibility Testing*.

1994 Remediation System Start-Up: GTI started operation of an SVE system in November 1994. GTI's March 1995 report diagrams the remediation system and presents startup testing and sampling activities. More information is available in GTI's March 10, 1995 *Remediation System Start-up/Air Monitoring and Sampling Report*.

1996 Well Destruction Report: In February 1996, Kaprealian Engineering Incorporated (KEI) destroyed monitoring wells MW-6 and MW-7 by overdrilling them to 25 fbg and backfilling the borings with grout. More information is available in KEI's January 22, 1996 *Report of Destruction of Monitoring Wells*.

1997 Tier 2 RBCA Input Summary: In December 1997, KEI submitted a summary of the input parameters to be used for a subsequent Tier 2 Risk-Based Corrective Action (RBCA) analysis, including subsurface soil and groundwater sample analytic results. More information is available in KEI's October 31, 1997 *Risk-Based Corrective Action Analysis*.

2001 Vadose Zone Investigation and RBCA Analysis: In August 2001, KHM Environmental Management (KHM) submitted a RBCA analysis indicating that current conditions did not pose a threat to human health or the environment and no further active remediation was required. Their analysis was based on soil and soil vapor sample results collected from borings GP-1 through GP-4 in June 2001. In September 2001, KHM prepared an addendum in response to

comments received by email from ACEHS. More information is available in KHM's August 13, 2001 *Vadose Zone Investigation and Risk-Based Correction Action (RBCA) Analysis*.

2001 Closure Request: In December 2001, KHM submitted a case closure request summarizing the site background, and soil, groundwater, and soil vapor data collected. More information is available in KHM's December 10, 2001 letter requesting closure.

2003 Well Destruction Report: In December 2002, with approval from the ACEHS, KHM destroyed wells MW-1 through MW-5, MW-A, MW-B, EW-1, VE-1, and SP-1 by pressure grouting. More information is available in KHM's January 7, 2003 *Well Destructions – MW-1 through MW-5, MW-8, MW-A, MW-B, EW-1, VE-1 and SP-1*.

2007/2008 Subsurface Investigation: In 2007 and 2008, to re-evaluate the site for case closure, CRA advanced cone penetration testing (CPT) borings CPT-1 through CPT-7 onsite and offsite. The highest hydrocarbon concentrations detected were 1,700 mg/kg TPHg and 2.5 mg/kg benzene in boring CPT7 at 10.5 fbg. No TPHg or BTEX were detected in soil from CPT2 through CPT6. No fuel oxygenates, including MTBE, were detected in soil. Multiple grab-groundwater samples were collected from each boring to investigate current hydrocarbon concentrations in groundwater. Maximum hydrocarbon concentrations of 160,000 µg/L TPHg and 4,200 µg/L benzene were detected in boring CPT1 at 24 fbg. Groundwater from CPT7 at 42 fbg also contained 11,000 µg/L TPHg and 3 µg/L benzene. Except for 4.0 µg/L 1,2-dibromoethane, no MTBE or other fuel oxygenates were detected in groundwater. More information is available in CRA's August 13, 2008 *Subsurface Investigation Report*.

APPENDIX C

PERMITS

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306
E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT CHEVRON SITE 21-1253
930 SPRINGTOWN BLVD.
LIVERMORE,

Coordinates Source _____ ft. Accuracy± _____ ft.
LAT: _____ ft. LONG: _____ ft.
APN _____

CLIENT
Name CHEVRON ENVIRONMENTAL MANAGEMENT
Address 6111 BOLLINGER CNY. RD Phone 925-543-2375
City SAN RAMON Zip 94583

APPLICANT
Name CONESTOGA-ROVERS & ASSOCIATES (CRA)
Email ihull@craworld.com Fax 510-420-9170
Address 5900 HOLLIS ST., A Phone 510-376-2749
City EMERYVILLE Zip 94608

TYPE OF PROJECT:

Well Construction	☒	Geotechnical Investigation	☐
Well Destruction	☐	Contamination Investigation	☐
Cathodic Protection	☐	Other _____	☐

PROPOSED WELL USE:

Domestic	☐	Irrigation	☐
Municipal	☐	Remediation	☐
Industrial	☐	Groundwater Monitoring	☒
Dewatering	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Hollow Stem Auger	☒
Cable Tool	☐	Direct Push	☐	Other _____	☐

DRILLING COMPANY GREGG DRILLING & TESTING

DRILLER'S LICENSE NO. C57- 485165

WELL SPECIFICATIONS:
Drill Hole Diameter 10 in. Maximum
Casing Diameter 4 in. Depth 50 ft.
Surface Seal Depth Min. 3 ft. Number 8-10
SOIL BORINGS:
Number of Borings 0 Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE JUNE 22
ESTIMATED COMPLETION DATE JUNE 30

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Ian Hull Date 05/26/09
Ian Hull

ATTACH SITE PLAN OR SKETCH

PERMIT NUMBER 29035
WELL NUMBER 3S/2E-3B2 & 3S/2E-3G23 to 3G29
APN 99-0023-004-00

PERMIT CONDITIONS
(Circled Permit Requirements Apply)

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original **Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller.**
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

(C.) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached.

G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report **including all soil and water laboratory analysis results.**

Approved Wyman Hong Date 6/1/09
Wyman Hong

APPENDIX D

BORINGS LOGS

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

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-9
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	24-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	24-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	523.43 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	523.14 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	5 to 15 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	11.0 ft (24-Jun-09) ▽
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	13.00 ft (23-Jul-09) ▼
REMARKS	Hand cleared to 8 fbg. Log is based on well MW-10.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
				0	ML		**Clayey SILT with gravel:** Dark Brown; damp; moderate plasticity.		Portland Type I/II
								3.0	Bentonite Seal
							Sandy SILT: Light brown; damp; low plasticity.		
				5					
					ML				
				10					Monterey Sand #2/12 4"-diam., 0.010" Slotted Schedule 40 PVC
							▽		
							▼	13.0	
7					SW		**Gravely SAND (F to C):** Dark Grey; wet; non-plastic.		
				15				15.0	Bottom of Boring @ 15 ft

WELL LOG (PID) I:\CHEVRON\0600-\060058~1\0603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

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

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-10
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	24-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	24-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	523.21 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	522.76 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	22 to 27 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	15.0 ft (24-Jun-09)
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	12.59 ft (23-Jul-09)
REMARKS	Hand cleared to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	DEPTH (ft bgs)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
					Sandy GRAVEL (Fill): Grey; damp; non-plastic.	
				ML	**SILT with sand (F):** Brown; damp; low plasticity.	3.0
			5		**Clayey SILT:** Brown; damp; moderate plasticity.	5.0
6		MW-10-10.5	10	ML	Grades to sandy silt @ 13 fbg.	
111		MW-10-15.5	15		**Gravelly SAND (M):** Grey; wet; non-plastic.	15.0
12		MW-10-20.5	20	SP		
			25		**SAND (F to M):** Grey; wet; non-plastic.	24.5
8		MW-10-26		SW		27.0

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Monterey Sand #2/12
- 4"-diam., 0.010" Slotted Schedule 40 PVC

Bottom of Boring @ 27 ft

WELL LOG (PID) I:\CHEVRON\0600-\060058-\10603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

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

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-11
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	24-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	24-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	523.81 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	523.25 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	5 to 15 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	14.0 ft (24-Jun-09) ▽
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	13.05 ft (23-Jul-09) ▼
REMARKS	Hand cleared to 8 fbg. Log based on well MW-13		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.5	Portland Type I/II
					GM		**Sandy silty GRAVEL (Fill):** Dark grey; damp; non-plastic.	1.5	
					CL		**Silty CLAY with gravel:** Grey; damp; low plasticity.	3.0	Bentonite Seal
				5	ML		**Sandy SILT:** Grey; damp; low plasticity.		
				10	SW		**Gravelly SAND (F to C):** Grey; wet; non-plastic. ▼ ▽	9.0	Monterey Sand #2/12 4"-diam., 0.010" Slotted Schedule 40 PVC
				15				15.0	Bottom of Boring @ 15 ft

WELL LOG (PID) I:\CHEVRON\0600-\060058~1\0603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

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

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-12
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	25-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	25-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	523.88 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	523.42 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	22 to 27 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	10.0 ft (25-Jun-09)
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	13.03 ft (23-Jul-09)
REMARKS	Hand cleared to 8 fbg. Log based on MW-13.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					GP		**ASPHALT**	0.5	
							Sandy GRAVEL: Dark grey; damp; non-plastic.	1.5	
					CL		**Silty CLAY with gravel:** Grey; damp; low plasticity.	3.0	
							Sandy SILT with clay: Grey; damp; low plasticity.		
				5	ML				
				10			**Gravelly SAND (F to C):** Grey; wet; non-plastic.	10.0	Portland Type I/II
				15	SW				
				20			**SAND (M):** Grey; wet; non-plastic.	20.0	Bentonite Seal
				25	SP				Monterey Sand #2/12 4"-diam., 0.010" Slotted Schedule 40 PVC
								27.0	Bottom of Boring @ 27 ft

WELL LOG (PID) I:\CHEVRON\0600-\060058-\10603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

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

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-13
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	25-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	25-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	523.61 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	523.12 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	32 to 37 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	15.0 ft (25-Jun-09) ▽
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	12.75 ft (23-Jul-09) ▼
REMARKS	Hand cleared to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					GP		**ASPHALT**	0.5	
							Sandy GRAVEL: Dark brown; damp; non-plastic.	1.5	
					CL		**Silty CLAY with gravel:** Dark brown; damp; low plasticity.	3.0	
							Sandy SILT with clay: Brown; damp; low plasticity.		
				5	ML				
				10			**Gravelly SAND (F to C):** Grey; wet; non-plastic.	10.0	
		MW-13-10.5							
69		MW-13-15.5		15	SW				Portland Type I/II
				20			**SAND (M):** Brown; wet; non-plastic.	20.0	
130		MW-13-20.5							
2470		MW-13-25.5		25					
				30	SP				Bentonite Seal
559		MW-13-31							Monterey Sand #2/12 4"-diam.,
				35					

WELL LOG (PID) I:\CHEVRON\0600-\060058~1\0603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

Continued Next Page

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5900 Hollis Street, Suite A
Emeryville, CA 94608
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Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-13
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	25-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	25-Jun-09

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
237		MW-13-36.5					Grades to gravelly sand @ 35 fbg.	37.0	0.010" Slotted Schedule 40 PVC Bottom of Boring @ 37 ft

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Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-14
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	29-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	29-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	521.20 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	520.88 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	5 to 15 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	13.0 ft (29-Jun-09) ▽
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	10.40 ft (23-Jul-09) ▼
REMARKS	Hand cleared to 8 fbg. Log based on well MW-15.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.5	
							Sandy GRAVEL (Fill): Dark grey, damp, non-plastic	1.5	Portland Type I/II Bentonite Seal
							Sandy SILT: Grey, damp, low plasticity.		
				5	ML				
								8.0	
							Silty SAND (M): Dark grey, damp, non-plastic. ▼ ▽		Monterey Sand #2/12 4"-diam., 0.010" Slotted Schedule 40 PVC
				10	SM				
				15				15.0	Bottom of Boring @ 15 ft

WELL LOG (PID) I:\CHEVRON\0600-\060058~1\0603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

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

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-15
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	30-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	30-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	521.25 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	520.87 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	41.5 to 46.5 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	14.5 ft (30-Jun-09) ▽
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	10.33 ft (23-Jul-09) ▼
REMARKS	Hand cleared to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					GW		**ASPHALT**	0.5	
					GW		**Sandy GRAVEL (Fill):** Dark grey; damp; non-plastic.	1.5	
							Sandy SILT: Light grey ; damp; low plasticity.		
481				5	ML				
1278									
847									
								8.0	
1505	3 5 6	MW-15-9.5		10	SM		**Silty SAND (F):** Grey; compact; moist; non-plastic.		
490									
								14.5	
756	35 35 50	MW-15-14.5		15	SW		**SAND (F to C):** Dark grey; very dense; wet; non-plastic.		
								19.0	
1185	7 15 18	MW-15-19.5		20	SM		**Silty SAND (F):** Grey; dense; wet; non-plastic.		Portland Type I/II
								24.0	
490	4 9 12	MW-15-24.5		25	ML		**Sandy SILT:** Light grey; very stiff; damp; low plasticity.		
								28.5	
53	4 6 8	MW-15-29.5		30	SM		**Silty SAND (F to C):** Grey; compact; wet; non-plastic.		
	6 8 11			35					

WELL LOG (PID) I:\CHEVRON\0600--\060058~1\10603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

Continued Next Page

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BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-15
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	30-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	30-Jun-09

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
		MW-15-34.5							
23	14 28 36			40	SW		**Gravely SAND (F to C):** Grey; very dense; wet; non-plastic.	38.5	Bentonite Seal
	8 12 16			45					Monterey Sand #2/12 4"-diam., 0.010" Slotted Schedule 40 PVC
								47.0	
							Flowing sands reduced boring depth and prohibited well placement @ bottom of well.		Bottom of Boring @ 47 ft

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Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	MW-16
JOB/SITE NAME	Former Chevron Station 21-1253	**DRILLING STARTED**	29-Jun-09
LOCATION	930 Springtown Blvd., Livermore, California	**DRILLING COMPLETED**	29-Jun-09
PROJECT NUMBER	060058	**WELL DEVELOPMENT DATE (YIELD)**	23-Jul-09
DRILLER	Gregg Drilling & Testing, Inc. (C57 #485165)	**GROUND SURFACE ELEVATION**	521.08 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	520.50 ft above msl
BORING DIAMETER	10-inches	**SCREENED INTERVAL**	25 to 30 ft bgs
LOGGED BY	B.Yifru	**DEPTH TO WATER (First Encountered)**	21.0 ft (29-Jun-09)
REVIEWED BY	Brandon S. Wilken P.G. #7564	**DEPTH TO WATER (Static)**	10.63 ft (23-Jul-09)
REMARKS	Hand cleared to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.5	
							Sandy GRAVEL (Fill): Dark grey; damp; non-plastic.	1.0	
							Silty SAND (M): Brown; damp; non-plastic.		
				5	SM				
								8.0	
							Sandy SILT: Light brown; damp; low plasticity.		
				10					Portland Type I/II
				15	ML				
				20					Bentonite Seal
								23.0	
							Silty SAND (M): Light brown; wet; non-plastic.		
				25	SM				Monterey Sand #2/12 4"-diam., 0.010" Slotted Schedule 40 PVC
								28.5	
					SW		**SAND (F to C):** Grey; wet; non-plastic.		
				30			Grades to gravelly sand @29.5 fbg.	30.0	Bottom of Boring @ 30 ft

WELL LOG (PID) I:\CHEVRON\0600-\060058~1\0603E2~1\060058-BORING LOGS.GPJ DEFAULT.GDT 8/11/09

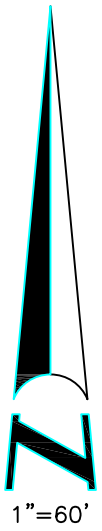
APPENDIX E

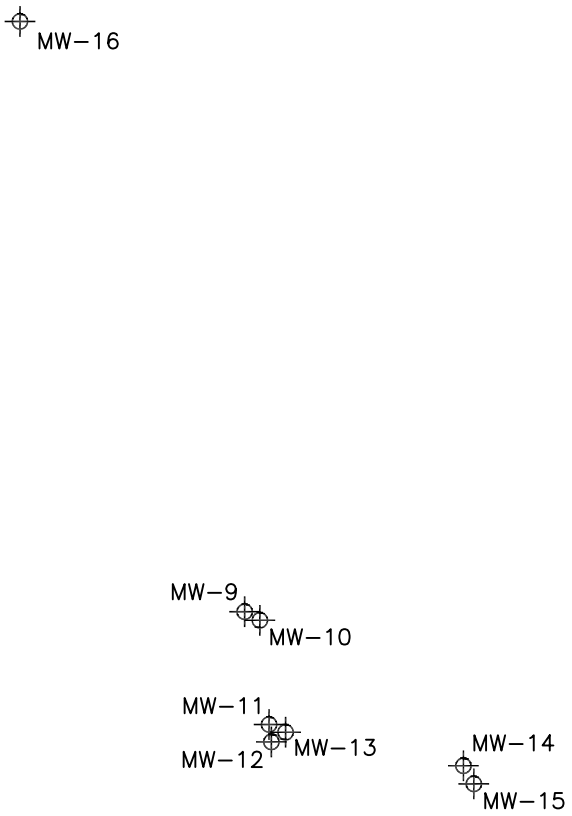
LAND SURVEYING DATA

Monitoring Well Exhibit

Prepared for:

Conestoga-Rovers and Associates





DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)
MW-9	2081649.4	6202583.0	37.7052730	-121.7412833	523.14	523.43
MW-10	2081646.7	6202587.7	37.7052658	-121.7412668	522.76	523.21
MW-11	2081614.2	6202590.6	37.7051764	-121.7412554	523.25	523.81
MW-12	2081608.7	6202591.3	37.7051615	-121.7412526	523.42	523.88
MW-13	2081611.7	6202595.8	37.7051700	-121.7412374	523.12	523.61
MW-14	2081601.3	6202651.3	37.7051433	-121.7410449	520.88	521.20
MW-15	2081595.6	6202654.6	37.7051278	-121.7410334	520.87	521.25
MW-16	2081833.9	6202512.8	37.7057769	-121.7415345	520.50	521.08

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING CSDS VIRTUAL REFERENCE NETWORK.

COORDINATE DATUM IS NAD 83(CORS).

REFERENCE GEOID IS GEOID03.

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.

MORROW SURVEYING
1255 Starboard Drive
West Sacramento, CA 95691
(916) 372-8124

SITE: CHEVRON 21-1253 - 930 SPRINGTOWN RD. LIVERMORE
CLIENT: CONESTOGA-ROVERS & ASSOCIATES
DATE: 7-22-09
SCALE: 1" = 60'
DRAWING: 0857148 GT

APPENDIX F

LABORATORY ANALYTICAL REPORTS FOR SOIL

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

925-842-8582

Prepared by:

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

July 10, 2009

SAMPLE GROUP

The sample group for this submittal is 1151137. Samples arrived at the laboratory on Saturday, June 27, 2009. The PO# for this group is 0015039978 and the release number is ROBB.

Client Description	Lancaster Labs Number
MW-10-S-10.5-090624 Grab Soil	5710775
MW-10-S-15.5-090624 Grab Soil	5710776
MW-10-S-20.5-090624 Grab Soil	5710777
MW-10-S-26-090624 Grab Soil	5710778
MW-13-S-10.5-090625 Grab Soil	5710779
MW-13-S-15.5-090625 Grab Soil	5710780
MW-13-S-20.5-090625 Grab Soil	5710781
MW-13-S-25.5-090625 Grab Soil	5710782
MW-13-S-31-090625 Grab Soil	5710783
MW-13-S-36.5-090625 Grab Soil	5710784

METHODOLOGY

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

ELECTRONIC COPY TO	Chevron	Attn: CRA EDD
ELECTRONIC COPY TO	CRA	Attn: Charlotte Evans

Lancaster Laboratories

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

Analysis Report

ELECTRONIC COPY TO CRA

Attn: Ian Hull

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

Respectfully Submitted,

Robin C. Runkle
Senior Specialist

Lancaster Laboratories

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

Analysis Report

Lancaster Laboratories Sample No. SW 5710775 **Group No. 1151137**
CA

MW-10-S-10.5-090624 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-10

Collected: 06/24/2009 10:10 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.025	0.25	50.92
07360	Ethylbenzene	100-41-4	0.094	0.051	0.25	50.92
07360	Toluene	108-88-3	N.D.	0.051	0.25	50.92
07360	Xylene (Total)	1330-20-7	N.D.	0.051	0.25	50.92
	The GC/MS volatile analysis was performed according to the high level soil method due to the level of non-target compounds. Therefore, the reporting limits were raised.					
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	48	2.0	2.0	50

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	R091891AA	07/08/2009 19:03	Angela D Sneeringer	50.92
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:19	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:20	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:20	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 05:48	Marie D John	50
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:21	Larry E Bevins	n.a.

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

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 5710776

Group No. 1151137
CA

MW-10-S-15.5-090624 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-10

Collected: 06/24/2009 10:12 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1015

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	0.001	0.0005	0.005	1.08
07360	Ethylbenzene	100-41-4	0.16	0.001	0.005	1.08
07360	Toluene	108-88-3	0.006	0.001	0.005	1.08
07360	Xylene (Total)	1330-20-7	0.12	0.001	0.005	1.08
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1.7	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	A091881AA	07/07/2009 12:37	Kathrine K Muramatsu	1.08
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:23	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:23	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:23	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 06:25	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:24	Larry E Bevins	n.a.

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

Lancaster Laboratories

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

Analysis Report

Lancaster Laboratories Sample No. SW 5710777

Group No. 1151137
CA

MW-10-S-20.5-090624 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-10

Collected: 06/24/2009 10:15 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1020

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.0005	0.005	1.03
07360	Ethylbenzene	100-41-4	0.005	0.001	0.005	1.03
07360	Toluene	108-88-3	N.D.	0.001	0.005	1.03
07360	Xylene (Total)	1330-20-7	0.001	0.001	0.005	1.03
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1.8	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	A091882AA	07/08/2009 01:31	Sara E Wolf	1.03
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:26	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:26	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:27	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 07:03	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:27	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710778

Group No. 1151137
CA

MW-10-S-26-090624 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-10

Collected: 06/24/2009 10:20 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1026

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.0005	0.005	0.99
07360	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
07360	Toluene	108-88-3	N.D.	0.001	0.005	0.99
07360	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
SW-846 8015B modified GC Volatiles			**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	A091881AA	07/07/2009 13:22	Kathrine K Muramatsu	0.99
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:29	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 07:41	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:30	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710779

Group No. 1151137
CA

MW-13-S-10.5-090625 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-13

Collected: 06/25/2009 08:20 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1310

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.0005	0.005	1.05
07360	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.05
07360	Toluene	108-88-3	N.D.	0.001	0.005	1.05
07360	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.05
SW-846 8015B modified GC Volatiles			**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	A091881AA	07/07/2009 13:45	Kathrine K Muramatsu	1.05
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:32	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:32	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 08:19	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:33	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710780

Group No. 1151137
CA

MW-13-S-15.5-090625 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-13

Collected: 06/25/2009 08:25 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1315

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.0005	0.005	0.94
07360	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.94
07360	Toluene	108-88-3	N.D.	0.0009	0.005	0.94
07360	Xylene (Total)	1330-20-7	N.D.	0.0009	0.005	0.94
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	8.7	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	X091881AA	07/08/2009 01:08	Holly Berry	0.94
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:35	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:35	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:36	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 08:56	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:36	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710781

Group No. 1151137
CA

MW-13-S-20.5-090625 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-13

Collected: 06/25/2009 08:28 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1320

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	0.18	0.0005	0.005	0.96
07360	Ethylbenzene	100-41-4	0.017	0.001	0.005	0.96
07360	Toluene	108-88-3	0.005	0.001	0.005	0.96
07360	Xylene (Total)	1330-20-7	0.008	0.001	0.005	0.96
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	11	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	X091891AA	07/08/2009 15:34	Matthew S Woods	0.96
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:38	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:38	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:39	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/01/2009 21:00	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:39	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710782

Group No. 1151137
CA

MW-13-S-25.5-090625 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-13

Collected: 06/25/2009 09:00 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1325

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	1.2	0.025	0.25	50.71
07360	Ethylbenzene	100-41-4	13	0.051	0.25	50.71
07360	Toluene	108-88-3	50	0.51	2.5	507.1
07360	Xylene (Total)	1330-20-7	90	0.51	2.5	507.1
SW-846 8015B modified GC Volatiles			**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1,100	200	200	5000

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091901AA	07/09/2009 13:19	Stephanie A Selis	50.71
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091901AA	07/09/2009 13:42	Stephanie A Selis	507.1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:56	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 09:57	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 09:57	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 09:34	Marie D John	5000
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 09:58	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710783

Group No. 1151137
CA

MW-13-S-31-090625 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-13

Collected: 06/25/2009 11:10 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1331

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	0.22	0.023	0.23	46.13
07360	Ethylbenzene	100-41-4	3.5	0.046	0.23	46.13
07360	Toluene	108-88-3	8.1	0.046	0.23	46.13
07360	Xylene (Total)	1330-20-7	22	0.046	0.23	46.13
SW-846 8015B modified GC Volatiles			**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	150	20	20	500

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091901AA	07/09/2009 15:13	Stephanie A Selis	46.13
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 10:00	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 10:00	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 10:00	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A33A	07/02/2009 10:12	Marie D John	500
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 10:01	Larry E Bevins	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5710784

Group No. 1151137
CA

MW-13-S-36.5-090625 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-13

Collected: 06/25/2009 11:15 by BY

Account Number: 10880

Submitted: 06/27/2009 10:00
Reported: 07/10/2009 at 16:37
Discard: 08/10/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1336

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	0.046	0.025	0.25	50.4
07360	Ethylbenzene	100-41-4	0.30	0.050	0.25	50.4
07360	Toluene	108-88-3	0.85	0.050	0.25	50.4
07360	Xylene (Total)	1330-20-7	1.8	0.050	0.25	50.4
SW-846 8015B modified GC Volatiles			**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	52	8.0	8.0	200

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091901AA	07/09/2009 12:56	Stephanie A Selis	50.4
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 10:02	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918018527	06/29/2009 10:03	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918018527	06/29/2009 10:03	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09182A16A	07/01/2009 20:49	Marie D John	200
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918018527	06/29/2009 10:04	Larry E Bevins	n.a.

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1151137
Reported: 07/10/09 at 04:37 PM

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A091881AA	Sample number(s): 5710776,5710778-5710779								
Benzene	N.D.	0.0005	0.005	mg/kg	106		83-116		
Ethylbenzene	N.D.	0.001	0.005	mg/kg	98		79-110		
Toluene	N.D.	0.001	0.005	mg/kg	99		81-112		
Xylene (Total)	N.D.	0.001	0.005	mg/kg	97		78-108		
Batch number: A091882AA	Sample number(s): 5710777								
Benzene	N.D.	0.0005	0.005	mg/kg	109	114	83-116	4	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	92	96	79-110	4	30
Toluene	N.D.	0.001	0.005	mg/kg	93	97	81-112	5	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	90	93	78-108	3	30
Batch number: Q091901AA	Sample number(s): 5710782-5710784								
Benzene	N.D.	0.025	0.25	mg/kg	93	98	83-116	5	30
Ethylbenzene	N.D.	0.050	0.25	mg/kg	88	94	79-110	7	30
Toluene	N.D.	0.050	0.25	mg/kg	88	95	81-112	7	30
Xylene (Total)	N.D.	0.050	0.25	mg/kg	87	93	78-108	6	30
Batch number: R091891AA	Sample number(s): 5710775								
Benzene	N.D.	0.025	0.25	mg/kg	93	95	83-116	2	30
Ethylbenzene	N.D.	0.050	0.25	mg/kg	87	90	79-110	3	30
Toluene	N.D.	0.050	0.25	mg/kg	89	91	81-112	3	30
Xylene (Total)	N.D.	0.050	0.25	mg/kg	87	89	78-108	2	30
Batch number: X091881AA	Sample number(s): 5710780								
Benzene	N.D.	0.0005	0.005	mg/kg	107	103	83-116	3	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	105	100	79-110	5	30
Toluene	N.D.	0.001	0.005	mg/kg	105	101	81-112	4	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	105	101	78-108	4	30
Batch number: X091891AA	Sample number(s): 5710781								
Benzene	N.D.	0.0005	0.005	mg/kg	104	104	83-116	0	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	102	105	79-110	2	30
Toluene	N.D.	0.001	0.005	mg/kg	102	105	81-112	3	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	103	105	78-108	2	30
Batch number: 09182A16A	Sample number(s): 5710784								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	94	98	67-119	4	30
Batch number: 09182A33A	Sample number(s): 5710775-5710783								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	92	89	67-119	3	30

Sample Matrix Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1151137
Reported: 07/10/09 at 04:37 PM
Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: A091881AA	Sample number(s): 5710776,5710778-5710779 UNSPK: P710335								
Benzene	97	106	55-143	4	30				
Ethylbenzene	71	87	44-141	15	30				
Toluene	101	127	50-146	17	30				
Xylene (Total)	65	78	44-136	13	30				
Batch number: A091882AA	Sample number(s): 5710777 UNSPK: P716129								
Benzene	119		55-143						
Ethylbenzene	93		44-141						
Toluene	96		50-146						
Xylene (Total)	90		44-136						
Batch number: X091881AA	Sample number(s): 5710780 UNSPK: P710976								
Benzene	117		55-143						
Ethylbenzene	119		44-141						
Toluene	117		50-146						
Xylene (Total)	117		44-136						
Batch number: X091891AA	Sample number(s): 5710781 UNSPK: P714154								
Benzene	99		55-143						
Ethylbenzene	97		44-141						
Toluene	100		50-146						
Xylene (Total)	98		44-136						

Surrogate Quality Control

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

Analysis Name: BTEX+MTBE by 8260B
Batch number: A091881AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5710776	85	78	81	81
5710778	83	78	81	75
5710779	86	81	78	76
Blank	82	80	82	78
LCS	85	83	82	82
MS	86	79	101	61*
MSD	85	77	104	59*
Limits:	71-114	70-109	70-123	70-111

Analysis Name: BTEX+MTBE by 8260B
Batch number: A091882AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5710777	86	81	76	81
Blank	88	86	77	77
LCS	87	86	79	84
LCSD	86	85	80	84

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1151137
Reported: 07/10/09 at 04:37 PM

Surrogate Quality Control

MS	88	82	78	84
Limits:	71-114	70-109	70-123	70-111

Analysis Name: BTEX+MTBE by 8260B
Batch number: Q091901AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5710782	72	77	87	90
5710783	77	83	82	83
5710784	83	85	82	83
Blank	98	100	98	96
LCS	91	93	87	85
LCSD	94	94	92	90
Limits:	71-114	70-109	70-123	70-111

Analysis Name: BTEX+MTBE by 8260B
Batch number: R091891AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5710775	80	82	80	78
Blank	95	99	94	90
LCS	94	96	92	91
LCSD	95	100	93	90
Limits:	71-114	70-109	70-123	70-111

Analysis Name: BTEX+MTBE by 8260B
Batch number: X091881AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5710780	88	84	86	83
Blank	92	86	88	83
LCS	90	82	94	88
LCSD	90	83	93	87
MS	89	80	95	86
Limits:	71-114	70-109	70-123	70-111

Analysis Name: BTEX+MTBE by 8260B
Batch number: X091891AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5710781	85	83	86	80
Blank	91	85	87	82
LCS	90	85	93	87
LCSD	88	84	94	87
MS	88	82	93	86
Limits:	71-114	70-109	70-123	70-111

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 09182A16A

	Trifluorotoluene-F
5710784	14*
Blank	81

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1151137
Reported: 07/10/09 at 04:37 PM

Surrogate Quality Control

LCS	80
LCSD	82
Limits:	61-122

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 09182A33A
Trifluorotoluene-F

5710775	44*
5710776	74
5710777	75
5710778	78
5710779	77
5710780	77
5710781	80
5710782	4*
5710783	9*
Blank	82
LCS	88
LCSD	86
Limits:	61-122

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

062609-03

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 5710775-84 SCR#: 250714

C# 1151137

Facility #: 21-1253 AIL
Site Address: 930 SPRINGTOWN BLVD., LIVERMORE, CA
Chevron PM: I. ROBB Lead Consultant: CRA
Consultant/Office: EMERYVILLE
Consultant Prj. Mgr.: CHARLOTTE EVANS
Consultant Phone #: 510-420-3351 Fax #: 510-420-9170
Sampler: BELEW YIFRU
Service Order #: ☐ Non SAR:

Analyses Requested

Preservation Codes

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420 ☐ 7421 ☐
MW-10-S-10.5	SOIL	N	10.5	2009/6/24	1010	Y	X		1	X	X				
MW-10-S-~~20~~15.5	"	"	15.5	"	1012	Y	X		1	X	X				
MW-10-S-20.5	"	"	20.5	"	1015	Y	X		1	X	X				
MW-10-S-26	"	"	26.0	"	1020	Y	X		1	X	X				

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

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

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

Comments / Remarks
PLEASE EMAIL RESULTS TO
cevans@craworld.com
ihull
EDF TO
dohare@craworld.com

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

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Relinquished by:	Date	Time	Received by:	Date	Time
1		06/24/09	1745	SECURE LOCATION		
2	BELEW YIFRU	6/25/09	946		6/26/09	0946
3	26 Lancaster		1630	FED EX		
4	Relinquished by Commercial Carrier: UPS FedEx Other					
	Temperature Upon Receipt 3.4 C°			Custody Seals Intact? Yes No		

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
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062609-01

For Lancaster Laboratories use only
Acct #: 10880 Sample #: 5710775-84 SCR#:

250715

C# 1151137

Facility #: 21-1253 AIL
Site Address: 930 SPRINGTOWN BLVD., LIVERMORE, CA
Chevron PM: IAN ROBB Lead Consultant: CRA
Consultant/Office: EMERYVILLE
Consultant Prj. Mgr.: CHARLOTTE EVANS
Consultant Phone #: 510-420-3351 Fax #: 510-420-9170
Sampler: BELEW YIFRU
Service Order #: ☐ Non SAR:

Analyses Requested

Preservation Codes

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420 ☐ 7421 ☐
MW-13-S-10.5	SOIL	N	10.5	2009/06/25	0820	Y	X		1	X	X				
MW-13-S-15.5			15.5		0825										
MW-13-S-20.5			20.5		0828										
MW-13-S-25.5			25		0900										
MW-13-S-31			31		1110										
MW-13-S-36.5			36.5		1115										

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

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
PLEASE E-MAIL RESULTS TO
cevans1hull@craworld.com
EDF DATA TO.
ddhare@craworld.com

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

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date 6/25/2009	Time 1730	Received by: SECURE	Date	Time
Relinquished by: BELEW YIFRU	Date 6/26/09	Time 945	Received by:	Date 6/26/9	Time 0945
Relinquished by:	Date 26 JUN 09	Time 1639	Received by: FEDEX	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	Date 6/26/09	Time 1600
Temperature Upon Receipt 3.4 C°			Custody Seals Intact? Yes No		

Lancaster Laboratories
Explanation of Symbols and Abbreviations

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

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

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

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

925-842-8582

Prepared by:

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

July 13, 2009

SAMPLE GROUP

The sample group for this submittal is 1151942. Samples arrived at the laboratory on Thursday, July 02, 2009. The PO# for this group is 0015039978 and the release number is ROBB.

Client Description	Lancaster Labs Number
MW-15-S-9.5-090630 Grab Soil	5715155
MW-15-S-14.5-090630 Grab Soil	5715156
MW-15-S-19.5-090630 Grab Soil	5715157
MW-15-S-24.5-090630 Grab Soil	5715158
MW-15-S-29.5-090630 Grab Soil	5715159
MW-15-S-34.5-090630 Grab Soil	5715160

METHODOLOGY

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

ELECTRONIC COPY TO	Chevron	Attn: CRA EDD
ELECTRONIC COPY TO	CRA	Attn: Charlotte Evans
ELECTRONIC COPY TO	CRA	Attn: Ian Hull

Lancaster Laboratories

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Analysis Report

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

Respectfully Submitted,

Robin C. Runkle
Senior Specialist

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 5715155 **Group No. 1151942**
CA

MW-15-S-9.5-090630 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-15

Collected: 06/30/2009 08:15 by IH

Account Number: 10880

Submitted: 07/02/2009 09:00
Reported: 07/13/2009 at 19:11
Discard: 08/13/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1509

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	4.5	0.27	2.7	539.96
07360	Ethylbenzene	100-41-4	55	0.54	2.7	539.96
07360	Toluene	108-88-3	44	0.54	2.7	539.96
07360	Xylene (Total)	1330-20-7	260	0.54	2.7	539.96
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	5,200	400	400	10000

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091912AA	07/11/2009 02:59	Lauren C Marzario	539.96
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 17:48	Justin M Bowers	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918318572	07/02/2009 17:48	Justin M Bowers	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 17:49	Justin M Bowers	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09189A33A	07/08/2009 19:57	Marie D John	10000
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918318572	07/02/2009 17:51	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	2	200918318572	07/02/2009 17:52	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	3	200918318572	07/02/2009 17:53	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	4	200918318572	07/02/2009 17:49	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	5	200918318572	07/02/2009 17:50	Justin M Bowers	n.a.

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

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 5715156

Group No. 1151942
CA

MW-15-S-14.5-090630 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-15

Collected: 06/30/2009 08:20 by IH

Account Number: 10880

Submitted: 07/02/2009 09:00
Reported: 07/13/2009 at 19:11
Discard: 08/13/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1514

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	0.003	0.0005	0.005	0.97
07360	Ethylbenzene	100-41-4	0.065	0.001	0.005	0.97
07360	Toluene	108-88-3	0.014	0.001	0.005	0.97
07360	Xylene (Total)	1330-20-7	0.24	0.001	0.005	0.97
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	150	20	20	500

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	A091903AA	07/10/2009 00:11	Holly Berry	0.97
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 17:55	Justin M Bowers	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918318572	07/02/2009 17:55	Justin M Bowers	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 17:55	Justin M Bowers	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09189A33A	07/08/2009 19:20	Marie D John	500
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918318572	07/02/2009 17:59	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	2	200918318572	07/02/2009 17:56	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	3	200918318572	07/02/2009 17:57	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	4	200918318572	07/02/2009 17:58	Justin M Bowers	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	5	200918318572	07/02/2009 17:59	Justin M Bowers	n.a.

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

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 5715157 **Group No. 1151942**
CA

MW-15-S-19.5-090630 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-15

Collected: 06/30/2009 08:25 by IH

Account Number: 10880

Submitted: 07/02/2009 09:00
Reported: 07/13/2009 at 19:11
Discard: 08/13/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1519

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.50	5.0	998
07360	Ethylbenzene	100-41-4	170	1.0	5.0	998
07360	Toluene	108-88-3	31	1.0	5.0	998
07360	Xylene (Total)	1330-20-7	530	1.0	5.0	998
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	6,400	400	400	10000

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091912AA	07/11/2009 03:23	Lauren C Marzario	998
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:01	Justin M Bowers	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918318572	07/02/2009 18:02	Justin M Bowers	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:02	Justin M Bowers	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09189A33A	07/08/2009 20:35	Marie D John	10000
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918318572	07/02/2009 18:03	Justin M Bowers	n.a.

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

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 5715158 **Group No. 1151942**
CA

MW-15-S-24.5-090630 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-15

Collected: 06/30/2009 08:30 by IH

Account Number: 10880

Submitted: 07/02/2009 09:00
Reported: 07/13/2009 at 19:11
Discard: 08/13/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1524

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.025	0.25	49.7
07360	Ethylbenzene	100-41-4	0.23	0.050	0.25	49.7
07360	Toluene	108-88-3	0.12	0.050	0.25	49.7
07360	Xylene (Total)	1330-20-7	0.94	0.050	0.25	49.7
	The GC/MS volatile analysis was performed according to the high level soil method due to the level of non-target compounds. Therefore, the reporting limits were raised.					
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	34	8.0	8.0	200

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091912AA	07/11/2009 03:45	Lauren C Marzario	49.7
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:07	Justin M Bowers	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918318572	07/02/2009 18:08	Justin M Bowers	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:08	Justin M Bowers	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09189A33A	07/08/2009 18:03	Marie D John	200
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918318572	07/02/2009 18:09	Justin M Bowers	n.a.

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

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 5715159 **Group No. 1151942**
CA

MW-15-S-29.5-090630 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-15

Collected: 06/30/2009 08:40 by IH

Account Number: 10880

Submitted: 07/02/2009 09:00
Reported: 07/13/2009 at 19:11
Discard: 08/13/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1529

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.0005	0.005	1.05
07360	Ethylbenzene	100-41-4	0.037	0.001	0.005	1.05
07360	Toluene	108-88-3	0.028	0.001	0.005	1.05
07360	Xylene (Total)	1330-20-7	0.20	0.001	0.005	1.05
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	4.9	1.0	1.0	25

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	A091903AA	07/10/2009 00:34	Holly Berry	1.05
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:10	Justin M Bowers	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918318572	07/02/2009 18:11	Justin M Bowers	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:11	Justin M Bowers	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09189A33A	07/08/2009 17:25	Marie D John	25
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918318572	07/02/2009 18:12	Justin M Bowers	n.a.

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

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Analysis Report

Lancaster Laboratories Sample No. SW 5715160

Group No. 1151942
CA

MW-15-S-34.5-090630 Grab Soil
Facility# 211253 CRAW
930 Springtown-Livermore T0600101353 MW-15

Collected: 06/30/2009 08:45 by IH

Account Number: 10880

Submitted: 07/02/2009 09:00
Reported: 07/13/2009 at 19:11
Discard: 08/13/2009

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

L1534

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
07360	Benzene	71-43-2	N.D.	0.023	0.23	46.21
07360	Ethylbenzene	100-41-4	0.65	0.046	0.23	46.21
07360	Toluene	108-88-3	0.34	0.046	0.23	46.21
07360	Xylene (Total)	1330-20-7	3.0	0.046	0.23	46.21
SW-846 8015B modified	**GC Volatiles**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	86	8.0	8.0	200

General Sample Comments

State of California Lab Certification No. 2116

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07360	BTEX+MTBE by 8260B	SW-846 8260B	1	Q091912AA	07/11/2009 04:09	Lauren C Marzario	46.21
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:13	Justin M Bowers	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	200918318572	07/02/2009 18:14	Justin M Bowers	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	200918318572	07/02/2009 18:15	Justin M Bowers	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	09189A33A	07/08/2009 18:42	Marie D John	200
01150	GC - Bulk Soil Prep	SW-846 5030A	1	200918318572	07/02/2009 18:15	Justin M Bowers	n.a.

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

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1151942
Reported: 07/13/09 at 07:11 PM

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A091903AA	Sample number(s): 5715156,5715159								
Benzene	N.D.	0.0005	0.005	mg/kg	104	101	83-116	2	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	91	89	79-110	3	30
Toluene	N.D.	0.001	0.005	mg/kg	92	90	81-112	3	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	89	86	78-108	3	30
Batch number: Q091912AA	Sample number(s): 5715155,5715157-5715158,5715160								
Benzene	N.D.	0.025	0.25	mg/kg	103	94	83-116	10	30
Ethylbenzene	N.D.	0.050	0.25	mg/kg	105	95	79-110	11	30
Toluene	N.D.	0.050	0.25	mg/kg	107	96	81-112	11	30
Xylene (Total)	N.D.	0.050	0.25	mg/kg	103	94	78-108	9	30
Batch number: 09189A33A	Sample number(s): 5715155-5715160								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	77	86	67-119	10	30

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: A091903AA	Sample number(s): 5715156,5715159 UNSPK: P710791								
Benzene	109		55-143						
Ethylbenzene	88		44-141						
Toluene	91		50-146						
Xylene (Total)	85		44-136						

Surrogate Quality Control

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

Analysis Name: BTEX+MTBE by 8260B
Batch number: A091903AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5715156	76	76	83	88
5715159	83	79	80	86
Blank	87	87	80	78
LCS	86	83	82	84

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1151942
Reported: 07/13/09 at 07:11 PM

Surrogate Quality Control

LCSD	86	83	81	84
MS	88	84	81	84
Limits:	71-114	70-109	70-123	70-111

Analysis Name: BTEX+MTBE by 8260B
Batch number: Q091912AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5715155	78	84	94	93
5715157	83	79	92	90
5715158	85	88	91	89
5715160	76	83	87	84
Blank	87	93	91	90
LCS	99	99	103	98
LCSD	91	93	93	91
Limits:	71-114	70-109	70-123	70-111

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 09189A33A

	Trifluorotoluene-F
5715155	3*
5715156	5*
5715157	8*
5715158	12*
5715159	75
5715160	12*
Blank	82
LCS	85
LCSD	85
Limits:	61-122

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

063009-04

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 5715155-60 SCR#:

C# 1151942

Facility #: 21-1253 AIL
Site Address: 930 SPRINGTOWN BLVD., LIVERMORE, CA
Chevron PM: IAN ROBB Lead Consultant: CRA
Consultant/Office: EMERYVILLE
Consultant Prj. Mgr.: CHARLOTTE EVANS
Consultant Phone #: 510-420-3351 Fax #: 510-420-9170
Sampler: IAN HULL
Service Order #: ☐ Non SAR:

Analyses Requested

Preservation Codes

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	___ Oxygenates	Lead 7420 ☐ 7421 ☐
MW-15-S-9.5	SOIL	N	9.5	2009 06 30	0815	Y	X		1	X	X				
MW-15-S-14.5			14.5		0820										
MW-15-S-19.5			19.5		0825										
MW-15-S-24.5			24.5		0830										
MW-15-S-29.5			29.5		0840										
MW-15-S-34.5			34.5		0845										

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

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

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

Comments / Remarks
PLEASE EMAIL RESULTS TO
evans, ihull @cramer ld.com
EDF DATA TO
dohare@cramer ld.com

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

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by:	06/30/2009	1610	Received by:	6/30/09	1610
Relinquished by:	01JUL09	1636	Received by: FEDEX		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS ~~FedEx~~ Other			Received by:	7/1/09	0900
Temperature Upon Receipt 1.1-2.2 C°			Custody Seals Intact? ~~Yes~~ No		

Lancaster Laboratories
Explanation of Symbols and Abbreviations

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

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

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

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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APPENDIX G

LABORATORY ANALYTICAL REPORTS FOR GROUNDWATER

Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

925-842-8582

Prepared by:

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

August 07, 2009

SAMPLE GROUP

The sample group for this submittal is 1154946. Samples arrived at the laboratory on Saturday, July 25, 2009. The PO# for this group is 0015039978 and the release number is ROBB.

Client Description	Lancaster Labs Number
QA-T-090723 NA Water	5732923
MW-9-W-090723 Grab Water	5732924
MW-10-W-090723 Grab Water	5732925
MW-11-W-090723 Grab Water	5732926
MW-12-W-090723 Grab Water	5732927
MW-13-W-090723 Grab Water	5732928
MW-14-W-090723 Grab Water	5732929
MW-15-W-090723 Grab Water	5732930
MW-16-W-090723 Grab Water	5732931

METHODOLOGY

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

ELECTRONIC COPY TO	CRA c/o Gettler-Ryan	Attn: Cheryl Hansen
ELECTRONIC COPY TO	CRA	Attn: Charlotte Evans

Lancaster Laboratories

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Analysis Report

Questions? Contact your Client Services Representative
Jill M Parker at (717) 656-2300

Respectfully Submitted,

Tracy A. Cole
Senior Specialist

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5732923

Group No. 1154946
CA

QA-T-090723 NA Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 QA

Collected: 07/23/2009

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBLQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F092112AA	07/30/2009 12:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F092112AA	07/30/2009 12:55	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A08A	07/28/2009 12:57	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09209A08A	07/28/2009 12:57	Fanella S Zamcho	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5732924 **Group No. 1154946**
CA

MW-9-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-9

Collected: 07/23/2009 11:35 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	4	0.5	1
06053	Ethylbenzene	100-41-4	310	5	10
06053	Toluene	108-88-3	5	0.5	1
06053	Xylene (Total)	1330-20-7	100	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	5,200	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F092151AA	08/03/2009 23:32	Kelly E Brickley	1
06053	BTEX by 8260B	SW-846 8260B	1	P092163AA	08/05/2009 07:58	Kelly E Brickley	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F092151AA	08/03/2009 23:32	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	P092163AA	08/05/2009 07:58	Kelly E Brickley	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A08A	07/28/2009 23:22	Fanella S Zamcho	5
01146	GC VOA Water Prep	SW-846 5030B	1	09209A08A	07/28/2009 23:22	Fanella S Zamcho	5

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Analysis Report

Lancaster Laboratories Sample No. WW 5732925 **Group No. 1154946**
CA

MW-10-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-10

Collected: 07/23/2009 13:55 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	220	5	10
06053	Ethylbenzene	100-41-4	440	5	10
06053	Toluene	108-88-3	440	5	10
06053	Xylene (Total)	1330-20-7	660	5	10
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	16,000	500	10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F092151AA	08/04/2009 00:15	Kelly E Brickley	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F092151AA	08/04/2009 00:15	Kelly E Brickley	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A08A	07/28/2009 23:46	Fanella S Zamcho	10
01146	GC VOA Water Prep	SW-846 5030B	1	09209A08A	07/28/2009 23:46	Fanella S Zamcho	10

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Analysis Report

Lancaster Laboratories Sample No. WW 5732926 **Group No. 1154946**
CA

MW-11-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-11

Collected: 07/23/2009 09:35 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	25	0.5	1
06053	Ethylbenzene	100-41-4	62	0.5	1
06053	Toluene	108-88-3	28	0.5	1
06053	Xylene (Total)	1330-20-7	66	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	5,400	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/31/2009 03:15	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D092113AA	07/31/2009 03:15	Michael A Ziegler	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A07A	07/30/2009 00:44	Fanella S Zamcho	5
01146	GC VOA Water Prep	SW-846 5030B	1	09209A07A	07/30/2009 00:44	Fanella S Zamcho	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5732927 **Group No. 1154946**
CA

MW-12-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-12

Collected: 07/23/2009 15:15 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	340	1	2
06053	Ethylbenzene	100-41-4	1,300	10	20
06053	Toluene	108-88-3	3,100	10	20
06053	Xylene (Total)	1330-20-7	7,600	100	200
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	48,000	1,000	20

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/31/2009 04:04	Michael A Ziegler	2
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/31/2009 04:29	Michael A Ziegler	20
06053	BTEX by 8260B	SW-846 8260B	1	Z092164AA	08/05/2009 01:17	Holly Berry	200
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D092113AA	07/31/2009 04:04	Michael A Ziegler	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	D092113AA	07/31/2009 04:29	Michael A Ziegler	20
01163	GC/MS VOA Water Prep	SW-846 5030B	3	Z092164AA	08/05/2009 01:17	Holly Berry	200
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A07A	07/30/2009 01:37	Fanella S Zamcho	20
01146	GC VOA Water Prep	SW-846 5030B	1	09209A07A	07/30/2009 01:37	Fanella S Zamcho	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5732928 **Group No. 1154946**
CA

MW-13-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-13

Collected: 07/23/2009 12:45 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	760	3	5
06053	Ethylbenzene	100-41-4	980	3	5
06053	Toluene	108-88-3	6,200	130	250
06053	Xylene (Total)	1330-20-7	13,000	13	25
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	52,000	1,000	20

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/31/2009 04:53	Michael A Ziegler	5
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/31/2009 05:18	Michael A Ziegler	25
06053	BTEX by 8260B	SW-846 8260B	1	Z092164AA	08/05/2009 01:42	Holly Berry	250
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D092113AA	07/31/2009 04:53	Michael A Ziegler	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	D092113AA	07/31/2009 05:18	Michael A Ziegler	25
01163	GC/MS VOA Water Prep	SW-846 5030B	3	Z092164AA	08/05/2009 01:42	Holly Berry	250
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A07A	07/30/2009 02:05	Fanella S Zamcho	20
01146	GC VOA Water Prep	SW-846 5030B	1	09209A07A	07/30/2009 02:05	Fanella S Zamcho	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5732929 **Group No. 1154946**
CA

MW-14-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-14

Collected: 07/23/2009 08:25 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	230	5	10
06053	Ethylbenzene	100-41-4	180	5	10
06053	Toluene	108-88-3	460	5	10
06053	Xylene (Total)	1330-20-7	670	5	10
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	8,400	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z092164AA	08/05/2009 02:07	Holly Berry	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z092164AA	08/05/2009 02:07	Holly Berry	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A07A	07/30/2009 01:11	Fanella S Zamcho	5
01146	GC VOA Water Prep	SW-846 5030B	1	09209A07A	07/30/2009 01:11	Fanella S Zamcho	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5732930

Group No. 1154946
CA

MW-15-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-15

Collected: 07/23/2009 15:55 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	6	0.5	1
06053	Ethylbenzene	100-41-4	16	0.5	1
06053	Toluene	108-88-3	17	0.5	1
06053	Xylene (Total)	1330-20-7	320	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,500	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/31/2009 06:08	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D092113AA	07/31/2009 06:08	Michael A Ziegler	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A07A	07/30/2009 00:16	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09209A07A	07/30/2009 00:16	Fanella S Zamcho	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5732931

Group No. 1154946
CA

MW-16-W-090723 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-16

Collected: 07/23/2009 13:35 by SR

Account Number: 10904

Submitted: 07/25/2009 09:30
Reported: 08/07/2009 at 15:19
Discard: 09/07/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SBL16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06053	Benzene	71-43-2	0.6	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	430	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	D092113AA	07/30/2009 21:31	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D092113AA	07/30/2009 21:31	Michael A Ziegler	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09209A07A	07/29/2009 14:41	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09209A07A	07/29/2009 14:41	Fanella S Zamcho	1

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Analysis Report

Quality Control Summary

Client Name: Chevron Group Number: 1154946
Reported: 08/07/09 at 03:19 PM

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D092113AA	Sample number(s): 5732926-5732928,5732930-5732931							
Benzene	N.D.	0.5	ug/l	110		80-116		
Ethylbenzene	N.D.	0.5	ug/l	107		80-113		
Toluene	N.D.	0.5	ug/l	109		80-115		
Xylene (Total)	N.D.	0.5	ug/l	109		81-114		
Batch number: F092112AA	Sample number(s): 5732923							
Benzene	N.D.	0.5	ug/l	96		80-116		
Ethylbenzene	N.D.	0.5	ug/l	95		80-113		
Toluene	N.D.	0.5	ug/l	97		80-115		
Xylene (Total)	N.D.	0.5	ug/l	96		81-114		
Batch number: F092151AA	Sample number(s): 5732924-5732925							
Benzene	N.D.	0.5	ug/l	93	93	80-116	1	30
Ethylbenzene	N.D.	0.5	ug/l	95	94	80-113	1	30
Toluene	N.D.	0.5	ug/l	93	92	80-115	0	30
Xylene (Total)	N.D.	0.5	ug/l	94	94	81-114	1	30
Batch number: P092163AA	Sample number(s): 5732924							
Ethylbenzene	N.D.	0.5	ug/l	93		80-113		
Batch number: Z092164AA	Sample number(s): 5732927-5732929							
Benzene	N.D.	0.5	ug/l	95	95	80-116	0	30
Ethylbenzene	N.D.	0.5	ug/l	95	95	80-113	0	30
Toluene	N.D.	0.5	ug/l	96	95	80-115	1	30
Xylene (Total)	N.D.	0.5	ug/l	95	96	81-114	1	30
Batch number: 09209A07A	Sample number(s): 5732926-5732931							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30
Batch number: 09209A08A	Sample number(s): 5732923-5732925							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	118	109	75-135	8	30

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D092113AA	Sample number(s): 5732926-5732928,5732930-5732931 UNSPK: 5732931								
Benzene	110	102	80-126	7	30				
Ethylbenzene	105	102	77-125	3	30				

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

Quality Control Summary

Client Name: Chevron Group Number: 1154946
Reported: 08/07/09 at 03:19 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Toluene	108	103	80-125	5	30				
Xylene (Total)	108	103	79-125	5	30				
Batch number: F092112AA	Sample number(s): 5732923 UNSPK: P731947								
Benzene	102	101	80-126	2	30				
Ethylbenzene	103	101	77-125	3	30				
Toluene	102	102	80-125	1	30				
Xylene (Total)	103	100	79-125	2	30				
Batch number: F092151AA	Sample number(s): 5732924-5732925 UNSPK: P734224								
Benzene	94		80-126						
Ethylbenzene	95		77-125						
Toluene	94		80-125						
Xylene (Total)	95		79-125						
Batch number: P092163AA	Sample number(s): 5732924 UNSPK: P737079								
Ethylbenzene	105	105	77-125	1	30				
Batch number: Z092164AA	Sample number(s): 5732927-5732929 UNSPK: P737323								
Benzene	103		80-126						
Ethylbenzene	101		77-125						
Toluene	100		80-125						
Xylene (Total)	101		79-125						
Batch number: 09209A07A	Sample number(s): 5732926-5732931 UNSPK: P732941								
TPH-GRO N. CA water C6-C12	77		63-154						
Batch number: 09209A08A	Sample number(s): 5732923-5732925 UNSPK: P731947								
TPH-GRO N. CA water C6-C12	110	83	63-154	19	30				

Surrogate Quality Control

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

Analysis Name: BTEX by 8260B
Batch number: D092113AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5732926	105	102	98	110
5732927	105	103	95	113
5732928	107	103	97	109
5732930	105	101	97	100
5732931	106	101	99	103
Blank	108	105	97	99
LCS	108	102	99	104
MS	106	105	99	104
MSD	107	104	100	105
Limits:	80-116	77-113	80-113	78-113

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

Quality Control Summary

Client Name: Chevron Group Number: 1154946
Reported: 08/07/09 at 03:19 PM

Surrogate Quality Control

Analysis Name: BTEX by 8260B
Batch number: F092112AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5732923	80	84	91	96
Blank	88	91	94	100
LCS	89	90	90	101
MS	90	92	89	101
MSD	89	88	87	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX by 8260B
Batch number: F092151AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5732924	90	92	91	102
5732925	91	90	93	101
Blank	94	94	92	101
LCS	94	95	92	101
LCSD	95	94	91	102
MS	94	94	91	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX by 8260B
Batch number: P092163AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	85	90	86	84
LCS	84	92	86	85
MS	84	91	87	85
MSD	85	90	86	86
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX by 8260B
Batch number: Z092164AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5732929	109	105	110	99
Blank	109	105	110	96
LCS	108	105	108	98
LCSD	110	105	109	99
MS	111	106	108	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 09209A07A

	Trifluorotoluene-F
5732926	122
5732927	132
5732928	124
5732929	124
5732930	113

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

Quality Control Summary

Client Name: Chevron Group Number: 1154946
Reported: 08/07/09 at 03:19 PM

Surrogate Quality Control

5732931	116
Blank	100
LCS	113
LCSD	112
MS	106
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 09209A08A
Trifluorotoluene-F

5732923	103
5732924	112
5732925	125
Blank	104
LCS	110
LCSD	109
MS	113
MSD	111
Limits:	63-135

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

072409-03

For Lancaster Laboratories use only

Acct. #: 10904 Sample # 573923-31 Group #: 017593

G# 1154946

Facility #: SS#211253-OML G-R#385867 Global ID#T0600101353

Site Address: 930 SPRINGTOWN BLVD., LIVERMORE, CA

Chevron PM: JR Lead Consultant: CRACE

Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568

Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)

Consultant Phone #: 925-551-7555 Fax #: 925-551-7899

Sampler: Steve Rice, Alex Wong

Analyses Requested

Preservation Codes

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

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

8021 MTBE Confirmation
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

Sample Identification	Date Collected	Time Collected	Matrix: Grab	Composite	Soil	Water	Oil	Air	Potable	NPDES	Total Number of Containers	BTEX + [redacted] 8260 ☐ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates ____	Total Lead Method ____	Dissolved Lead Method ____
QA	7/23/09					X					2	X	X					
MW-9	↓	1135	X			X					6	X	X					
MW-10		1355	X			X					6	X	X					
MW-11		0935	X			X					6	X	X					
MW-12		1515	X			X					6	X	X					
MW-13		1245	X			X					6	X	X					
MW-14		0825	X			X					6	X	X					
MW-15		1555	X			X					6	X	X					
MW-16	↓	1335	X			X					6	X	X					

Comments / Remarks

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

Data Package Options (please circle if required)
QC Summary | Type I - Full | **EDF/EDD**
Type VI (Raw Data) | ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by:	7/24/09	0930	Received by:	7-24-09	0930
Relinquished by:	7-24-09	1225	Received by:	7/24/09	1225
Relinquished by:	7/24/09	1515	Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	7/25/09	0930
Temperature Upon Receipt ____ C°			Custody Seals Intact? Yes No		

Lancaster Laboratories
Explanation of Symbols and Abbreviations

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

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

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

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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