CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: May 11, 2012

REFERENCE NO.: 311976

PROJECT NAME: Chevron 91851

TO: Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED
10:30 am, May 17, 2012
Alameda County
Environmental Health

Please find enclosed:
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☒ Final
- ☐ Other

Sent via:
- ☐ Mail
- ☐ Overnight Courier
- ☐ Same Day Courier
- ☒ Other FTP/GeoTracker upload/Electronic upload

QUANTITY	DESCRIPTION
1	Subsurface Investigation Report

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐
- ☐

COMMENTS:
Please call Nathan Lee at (510) 420-3333 if you have any questions or concerns.
Thank you.

Copy to: Mr. Dave Patten, Chevron (*electronic copy*) and Mr. Mark Horne, Chevron (*electronic copy*)
Copy to: Mr. Navdeep Singh Grewal, Property Owner
Copy to: Mr. Bob Clark-Riddell, Property Owner Consultant (*electronic copy*)

Completed by: Nathan Lee [Please Print] Signed: Nathan Lee

Filing: **Correspondence File**

Dave Patten
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6491
drpatten@chevron.com

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

Re: Chevron Service Station No. 9-1851
451 Hegenberger Drive
Oakland, CA

I have reviewed the attached report dated May 11, 2012.

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

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

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

Sincerely,

Mark E. Ham for/

Dave Patten
Project Manager

Attachment: Report

SUBSURFACE INVESTIGATION REPORT

FORMER CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Prepared For:

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

Prepared by:
Conestoga-Rovers & Associates

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MAY 11, 2012
REF. NO. 311976 (16)
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SUBSURFACE INVESTIGATION REPORT

FORMER CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Sequoia Patterson

Nathan Lee PG# 8486

Prepared by:
Conestoga-Rovers & Associates

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MAY 11, 2012
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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) is submitting this *Subsurface Investigation Report* for the site referenced above on behalf of Chevron Environmental Management Company (Chevron). The purpose of this work was to assess hydrocarbon distribution in the area surrounding the former used-oil underground storage tank (UST).

CRA submitted a *Work Plan for Soil Boring* dated January 30, 2009, and the *Work Plan for Soil Borings Addendum* dated July 1, 2011, and the *Modified Work Plan Addendum* dated September 16, 2011. The work outlined in these documents was approved by Alameda County Environmental Health (ACEH) in a letter dated November 3, 2011 (Appendix A). Subsurface investigation involved advancing five soil borings on March 26 and March 27, 2012. The other borings proposed (two borings in the dispenser island area and the one down gradient of monitoring well MW-4) were unable to be advanced because of construction activities related to the Bay Area Rapid Transit (BART) extension to Oakland International Airport. A boring in the former used-oil UST approximate location could not be completed because the pea gravel used as back fill continued caving back into the boring. Presented below are site background, methods, investigation results, and CRA's conclusions and recommendations.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION

The site is currently an active gasoline service station located at 451 Hegenberger Road, on the northwest corner of Hegenberger and Edgewater Roads in Oakland, California (Figure 1). The operating gasoline service station consists of one building, two fuel dispenser islands, three 10,000-gallon USTs in one tank complex and one 10,000-gallon diesel UST in a separate tank complex (Figure 2). Chevron operated at the site from 1961 to 1999. In 1982 the used-oil tank was determined to be taking on water and was replaced with a 1,000-gallon single wall fiberglass tank. This used-oil tank was removed in 1998. In 1984, the existing steel tanks were removed and replaced with three 10,000-gallon single wall fiberglass USTs. Surrounding land use is commercial and industrial.

2.2 PREVIOUS ENVIRONMENTAL WORK

A total of five soil borings and seven groundwater monitoring wells have been installed since 1995. Previous environmental work is summarized in Appendix B

2.3 SITE GEOLOGY

Sediments in the vicinity consist of Holocene-age estuarine deposits comprised of organic clay and silty clay (Bay Mud); overlying Holocene-age alluvial sand and silt; and Pleistocene-age interbedded clay, silt, sand, and gravel.[1] Soils encountered beneath the site generally consist of silts, clays, silty sands and poorly graded sand to approximately 20 fbg, the total depth explored.

2.4 SITE HYDROGEOLOGY

The site is located in the East Bay Plain Groundwater Basin, near the boundary of the Oakland and San Leandro Sub Basins. Groundwater in the basin typically flows towards San Francisco Bay. Site topography is relatively flat at an elevation of approximately 3 feet above mean sea level, with the surrounding topography sloping towards the southwest. The nearest down gradient surface water is San Leandro Creek, which is located approximately ¼-mile to the southwest. Depth to groundwater has historically ranged from approximately 2 to 7 fbg. Groundwater flow direction fluctuates, but is predominately to the southwest at a gradient of 0.003 to 0.06.

3.0 SUBSURFACE SOIL INVESTIGATION

The investigation objective was to assess soil conditions in the area surrounding the former waste oil UST. Field activities are summarized below.

Site Health and Safety Plan

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

1 *California's Groundwater Bulletin 118*; The State of California Department of Water Resources Agency February 27, 2004.

Permits

Drilling permits W2012-0079 was obtained from ACEH on January 23, 2012 (Appendix C).

Drilling Company

Vapor Tech Services (VTS), of Berkeley, California (C57 license #916085) preformed the soil boring advancement.

Drilling Dates

Drilling took place on March 26 and 27, 2012.

CRA Personnel

CRA Personnel, Sequoia Patterson and Margareta Wolf managed the drilling under the supervision of California Professional Geologist Nathan Lee (PG 8486).

Utility Clearance

Prior to drilling, CRA contacted Underground Service Alert (USA) to mark underground utilities near the proposed boring locations. CRA contracted Norcal Geophysical Services of Cotati California to verify underground utility locations near proposed boring locations using electronic line location, metal detectors, and ground penetrating radar.

Drilling Method

Vapor Tech Services advanced soil borings B-1 through B-5 using a 3 inch hand auger to clear each boring to 8 fbg, then continuing to 20 fbg, using direct push technology.

Boring Depths

Borings B-1 through B-5 were advanced to 20 fbg. Boring logs are included in Appendix D. Soil boring locations are shown on Figure 2.

Soil Sampling

Undisturbed soil samples were collected using a slide hammer lined with 6 inch brass tubes at a depth of 5 fbg for each boring location. At 10, 15 and 19.5 fbg samples were taken by cutting 6 inch selections directly from the acetate direct push liners. CRA's *Standard Field Procedures for Dual Tube Soil Boring and Sampling* is presented in Appendix E.

Soil was logged according to the ASTM D2488-06 Unified Soil Classification System and screened using a photo-ionization detector. Samples chosen for analysis were capped with Teflon® tape and plastic end caps. All samples were properly sealed, labeled, preserved on ice, logged on Chain-of-Custody forms, and released to Lancaster Laboratories (Lancaster) of Lancaster, Pennsylvania for analysis.

Water Sampling

Grab water samples were collected at first encountered water from borings B-1 through B-3, and from B-5. Groundwater samples were collected using a disposable bailer and decanted into laboratory provided containers. Water was not encountered in Boring B-4 and no water sample was collected.

All samples were properly sealed, labeled, preserved on ice, logged on Chain-of-Custody forms, and released to Lancaster.

Laboratory Analyses

Soil and water samples were analyzed by Lancaster Laboratories for the following constituents:

- Total petroleum hydrocarbons as gasoline (TPHg) by Environmental Protection Agency (EPA) Method 8015B modified
- Total petroleum hydrocarbons as diesel (TPHd) and total petroleum hydrocarbons as motor oil (TPHmo) by EPA Method 8015B modified with Silica Gel clean up
- Benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary-butyl ether (MTBE), di - Isopropyl ether (DIPE), Ethylbenzene (ETBE), t – Amyl methyl ether (TAME), t – Butyl alcohol (TBA)by EPA Method 8260B

Waste Disposal

Soil cuttings and rinsate water were stored onsite in sealed and labeled Department of Transportation (DOT) approved 55-gallon drums. All generated waste will be profiled and disposed of at Chevron approved disposal facility.

4.0 SUBSURFACE INVESTIGATION RESULTS

4.1 SOIL ANALYTICAL RESULTS

Current and historical soil analytical results are presented in Table 1. The laboratory analytical report for soil is included in Appendix F. Soil analytical results are summarized in Table A below. Concentrations are shown on Figures 3, 4 and 5.

TABLE A: SOIL ANALYTICAL RESULTS

		TPHmo	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*
ESL[2] Table G		NE	**83**	**83**	0.044	2.9	3.3	2.3	0.023
ESL[3] Table K-3		12,000	4,200	4,200	12	650	210	420	2,800
Sample ID	*Depth*	All results reported in mg/kg							
B-1-5	5	510	**300**	<10	<0.0005	<0.001	<0.001	<0.001	0.0008
B-1-10	10	<9.8	7.6	<1.0	<0.0005	<0.001	<0.001	<0.001	0.001
B-1-15	15	<10	10	1.1	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-1-19.5	19.5	34	22	4.3	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-2-5	5	**15,000**	**9,900**	52	0.016	0.002	0.006	0.041	0.002
B-2-10	10	<9.9	5.0	<0.9	0.021	<0.001	<0.001	<0.001	0.009
B-2-15	15	<9.8	8.4	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-2-19.5	19.5	<9.9	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-3-5	5	4,800	3,200	330	<0.026	<0.053	<0.053	<0.053	<0.026
B-3-10	10	<10	9.4	<1	0.002	<0.001	<0.001	<0.001	0.005
B-3-15	15	<9.9	4.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-3-19.5	19.5	<9.8	<3.9	<1.1	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-4-5	5	<10	<4.0	<1	<0.0005	<0.001	<0.001	<0.001	0.003
B-4-10	10	<9.9	4.0	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-4-15	15	<10	4.1	<0.9	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-4-19.5	19.5	<10	4.7	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005
B-5-5	5	<9.9	<4.0	<1	<0.0005	<0.001	<0.001	<0.001	0.0009
B-5-10	10	<10	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	0.0005
B-5-15	15	<10	4.1	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005

2 Environmental Screening Levels (ESLs) Soil Leaching to Drinking Water Resource from the *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, Table G

3 Environmental Screening Levels (ESLs) Construction/Trench Worker Exporsure from the *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, Table K-3

TABLE A: SOIL ANALYTICAL RESULTS									
		TPHmo	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*
ESL[2] Table G		NE	**83**	**83**	0.044	2.9	3.3	2.3	0.023
ESL[3] Table K-3		12,000	4,200	4,200	12	650	210	420	2,800
B-5-19.5	19.5	<10	5.1	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005
NE = Not Established									

4.2 GRAB GROUND WATER ANALYTICAL RESULTS

Complete grab groundwater results are included as Table 2. The laboratory analytical report for grab groundwater is included as Appendix G, and summarized in Table B below.

TABLE B: GRAB GROUNDWATER ANALYTICAL RESULTS								
	TPHmo	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*
ESL[4] Table F1-a	**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**
Boring ID	Reported in micrograms per liter (µg/L)							
B-1	**1,900,000**	**2,300,00**	**2,300**	0.6	<0.5	<0.5	<0.5	5
B-2	**650,000**	**460,000**	**1,800**	**100**	8	10	**52**	**24**
B-3	**190,000**	**140,000**	**850**	0.6	<0.5	<0.5	<0.5	**18**
B-5	<200	<160	<50	<0.5	<0.5	<0.5	<0.5	6

5.0 CONCLUSIONS AND RECOMMENDATIONS

The highest hydrocarbon concentrations occurred at approximately 5 fbg, in borings B-1 through B-3. Hydrocarbon concentrations decrease at and below 10 fbg. Hydrocarbon concentrations are below ESL in down gradient borings B-4 and B-5.

CRA proposes to conduct an excavation in the former used-oil UST area to address residual hydrocarbon source mass. The excavation will coincide with the site's redevelopment. CRA will submit a work plan outlining the excavation activities.

4 Environmental Screening Levels (ESLs) Groundwater Screening Levels - Current or Potential Drinking Water Resource from the *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, Table F1-a

FIGURES

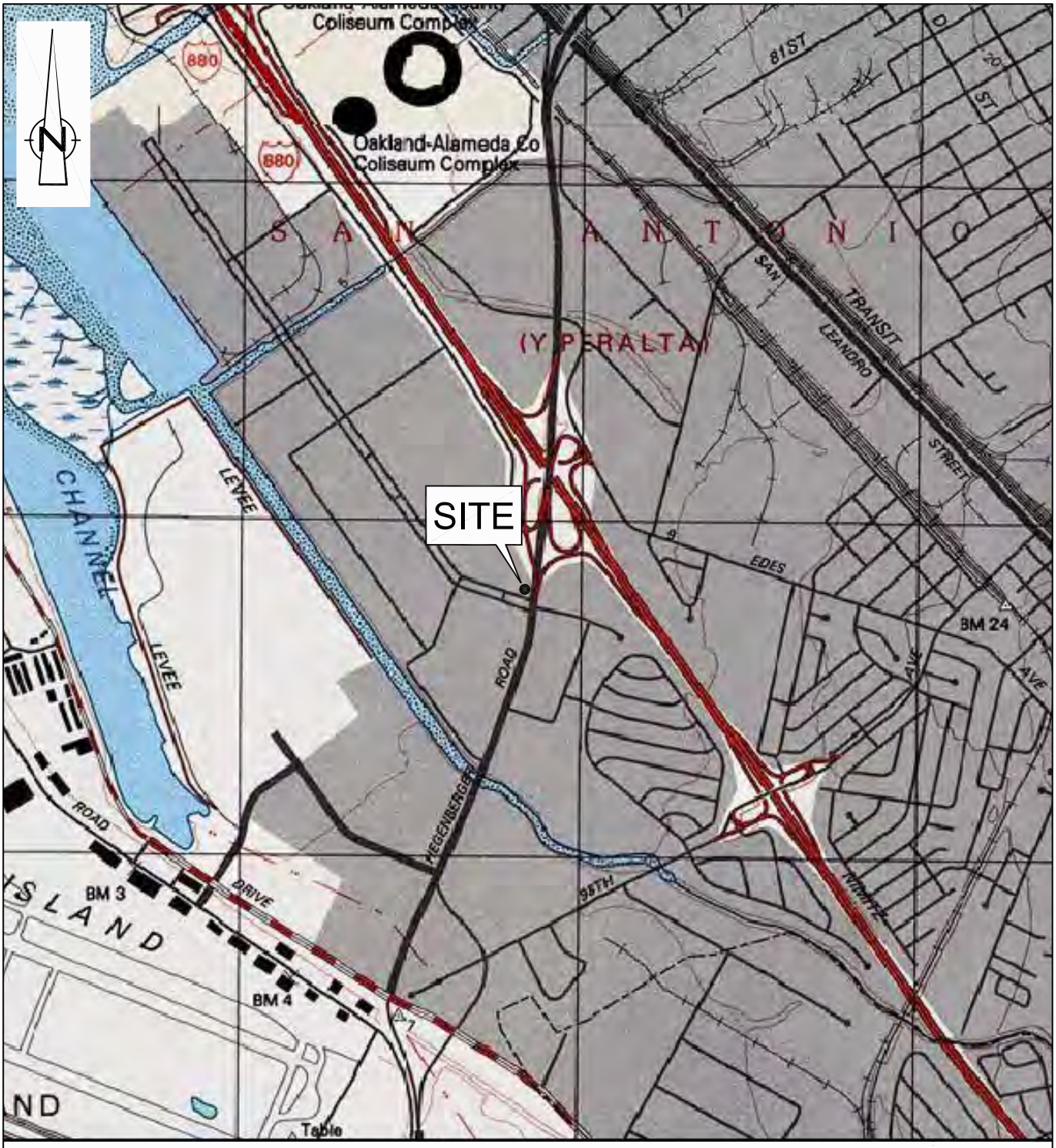

Figure 1

VICINITY MAP
FORMER CHEVRON SERVICE STATION 9-1851
451 HEGENBERGER ROAD
Oakland, California

311976-2008(PRES001)GN-EM001

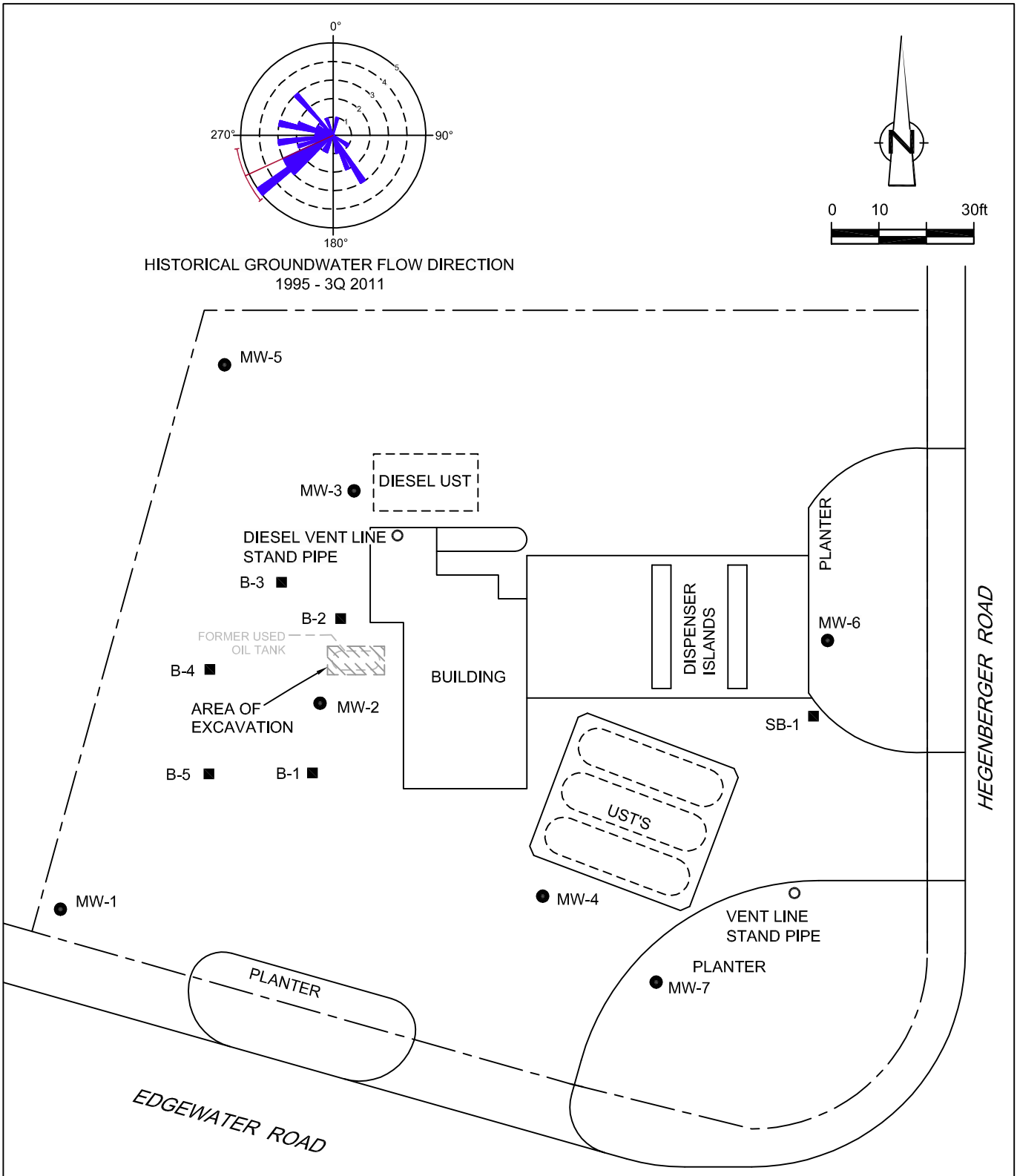

Figure 2

SITE PLAN
CHEVRON SERVICE STATION 9-1851
451 HEGENBERGER ROAD
Oakland, California

311976-2012(016) GN-EM001 APRIL 19/2011

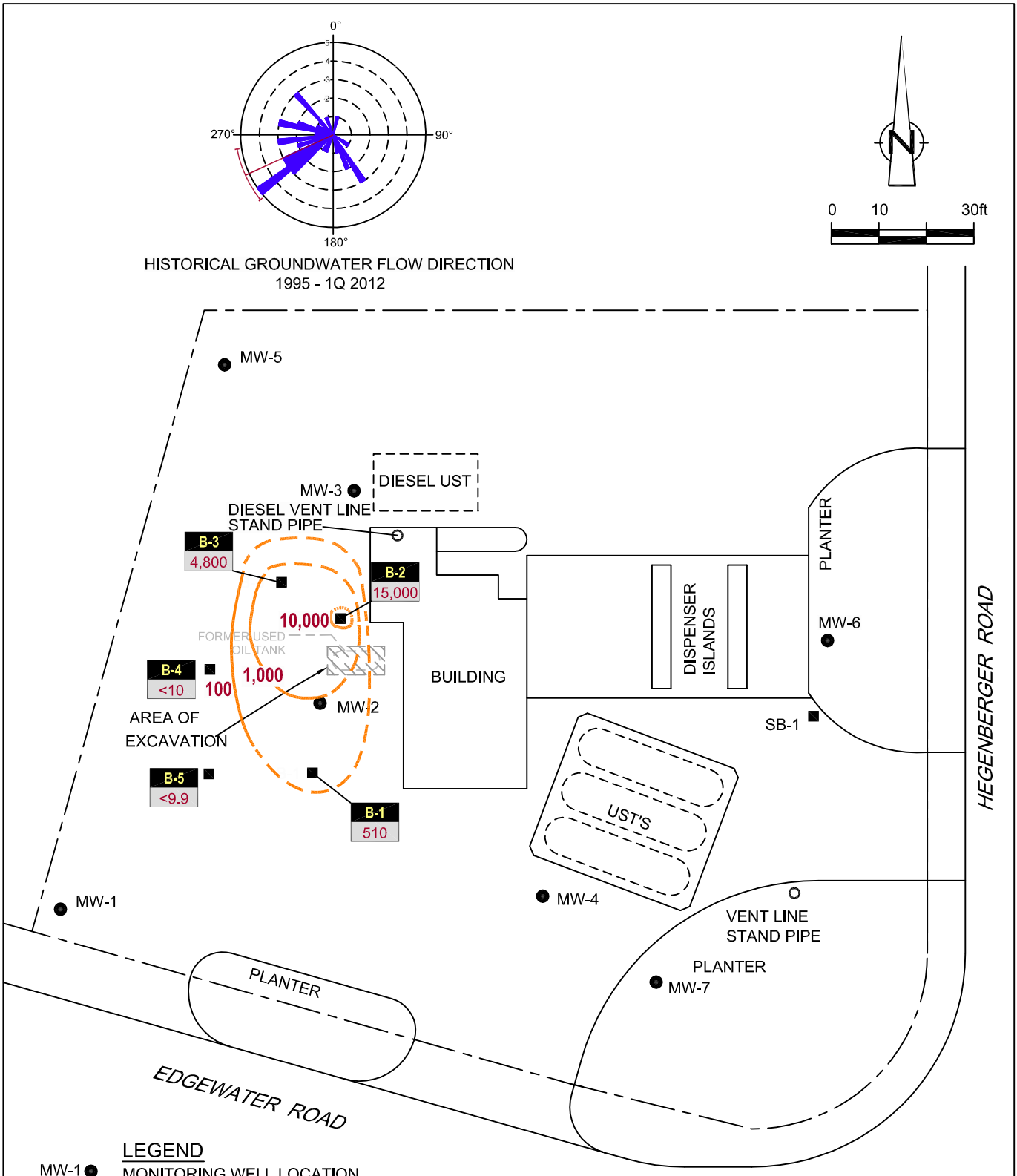

Figure 3

TPHmo SOIL CONCENTRATIONS @ 5 FBG
CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD
Oakland, California

311976-95(016) GN-EM003 MAY 8/2012

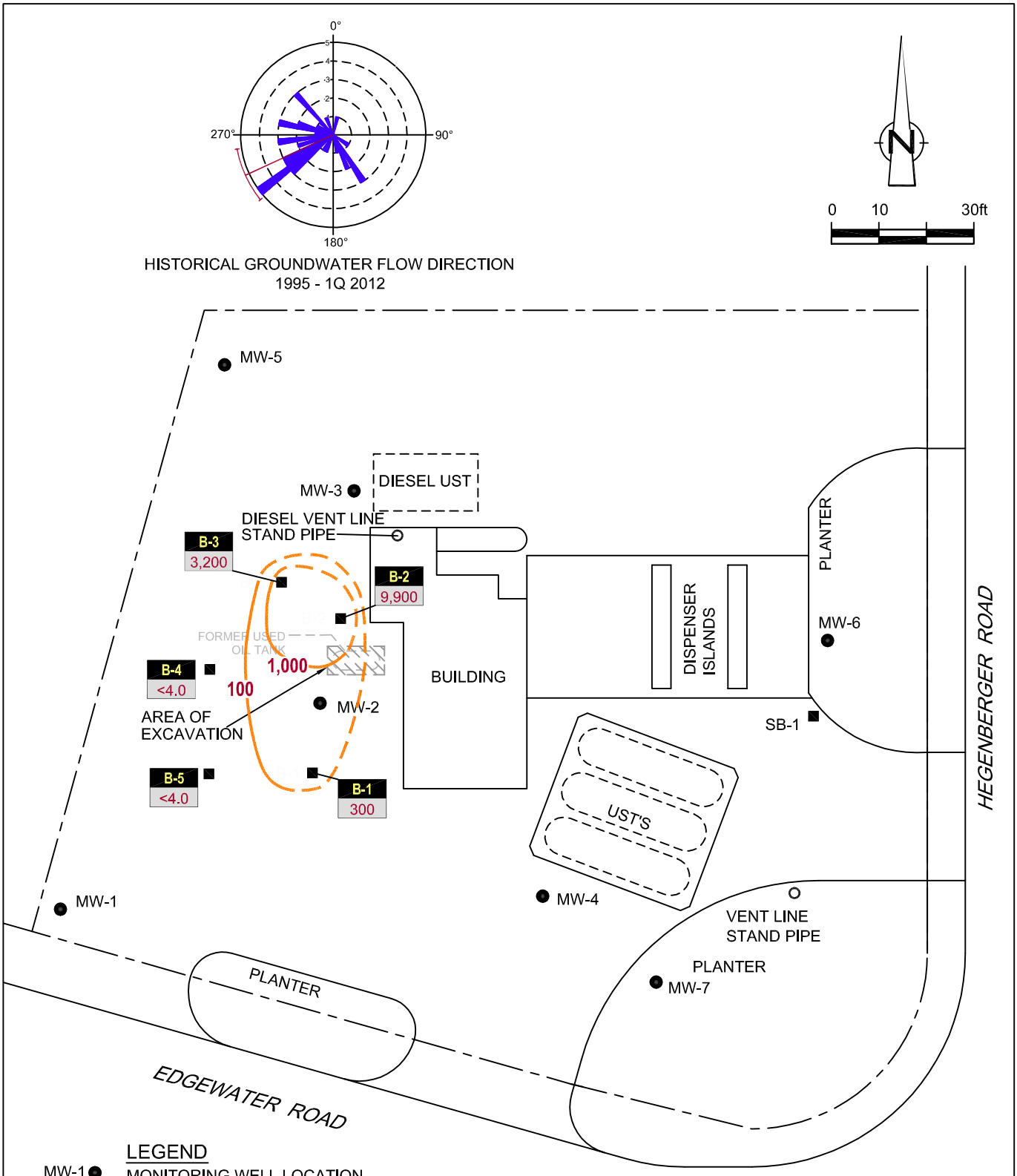

Figure 4

TPHd SOIL CONCENTRATIONS @ 5 FBG
CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD
Oakland, California

311976-95(016) GN-EM004 MAY 8/2012

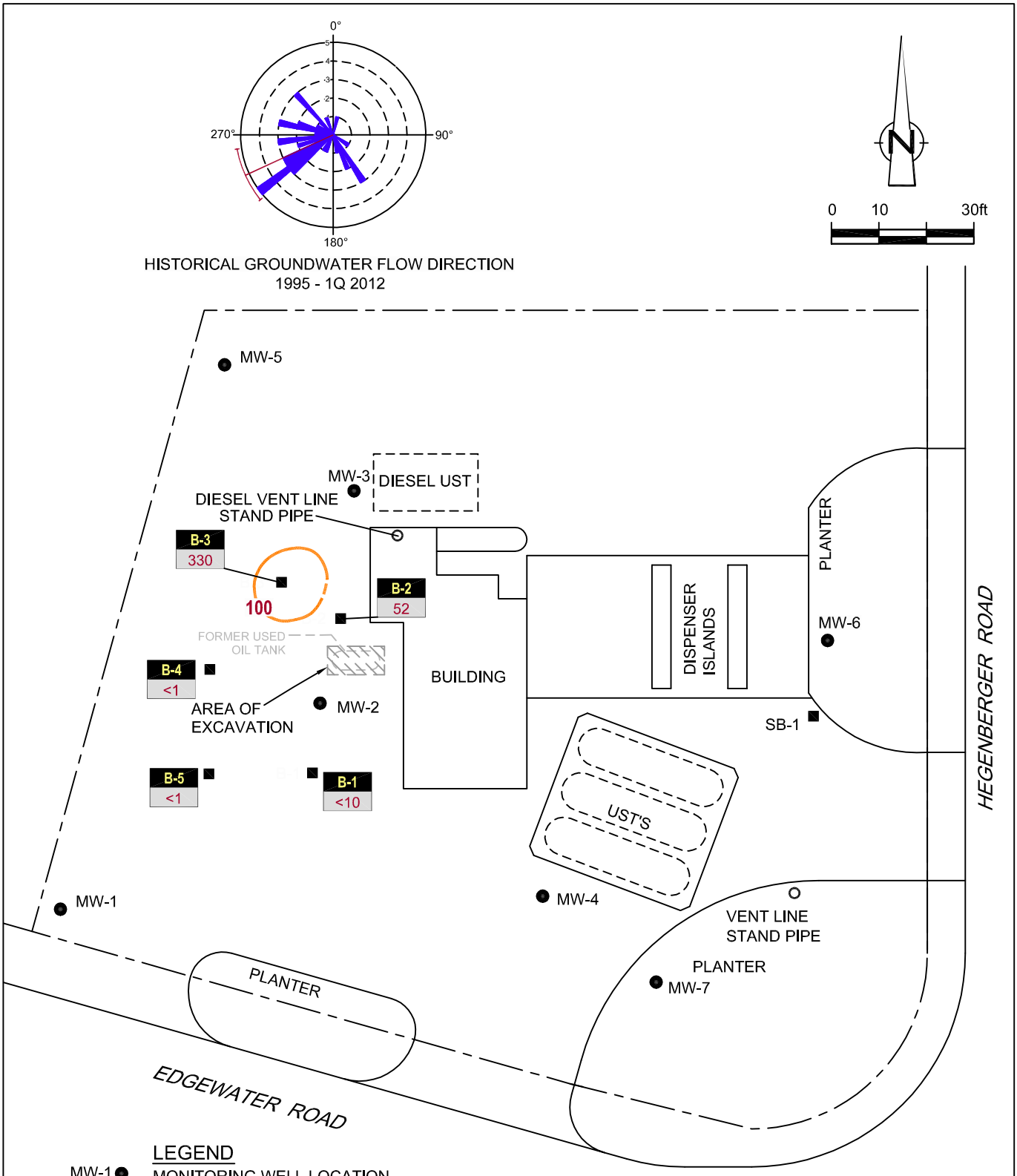

Figure 5

TPHg SOIL CONCENTRATIONS @ 5 FBG
CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD
Oakland, California

311976-95(016) GN-EM005 MAY 8/2012

TABLES

TABLE 1

SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91851
451 HEGENBERGER DRIVE
OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TOG*	*TPHmo*	*TPHd*	*TPHd with Silica gel*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*	*VOCs*	*HVOCs*	*Methanol*	*MEK*	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*
			Reported in milligrams per kilogram (mg/kg)																							
ESL (Table G), Soil Leaching to Drinking Water Resource			**410**		**83**	**83**	**83**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**0.075**	**NE**	**NE**	**NE**								**750**		
ESL (Table K-3), Construction/Trench Worker Exporsure			**NE**	**12,000**	**4,200**	**4,200**	**4,200**	**12**	**650**	**210**	**420**	**2,800**	**320,000**	**NE**	**NE**	**NE**								**750**		
2012 CRA Soil Borings																										
B-1-5	3/26/2012	5	--	510	--	**300**	<10	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-1-10	3/26/2012	10	--	<9.8	--	7.6	<1.0	<0.0005	<0.001	<0.001	<0.001	0.001	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-1-15	3/26/2012	15	--	<10	--	10	1.1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-1-19.5	3/26/2012	19.5	--	34	--	22	4.3	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-2-5	3/26/2012	5	--	**15,000**	--	**9,900**	52	0.016	0.002	0.006	0.041	0.002	<0.019	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-2-10	3/26/2012	10	--	<9.9	--	5.0	<0.9	0.021	<0.001	<0.001	<0.001	0.009	<0.021	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-2-15	3/26/2012	15	--	<9.8	--	8.4	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-2-19.5	3/26/2012	19.5	--	<9.9	--	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-3-5	3/26/2012	5	--	4,800	--	**3,200**	**330**	<0.026	<0.053	<0.053	<0.053	<0.026	<1.1	<0.053	<0.053	<0.053	--	--	--	--	--	--	--	--	--	--
B-3-10	3/26/2012	10	--	<10	--	9.4	<1	0.002	<0.001	<0.001	<0.001	0.005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-3-15	3/26/2010	15	--	<9.9	--	4.5	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-3-19.5	3/26/2012	19.5	--	<9.8	--	<3.9	<1.1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-4-5	3/27/2012	5	--	<10	--	<4.0	<1	<0.0005	<0.001	<0.001	<0.001	0.003	<0.021	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-4-10	3/27/2012	10	--	<9.9	--	4.0	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-4-15	3/27/2012	15	--	<10	--	4.1	<0.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-4-19.5	3/27/2012	19.5	--	<10	--	4.7	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-5-5	3/27/2012	5	--	<9.9	--	<4.0	<1	<0.0005	<0.001	<0.001	0.001	0.0009	<0.021	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-5-10	3/27/2012	10	--	<10	--	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	0.0005	<0.019	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-5-15	3/27/2012	15	--	<10	--	4.1	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
B-5-19.5	3/27/2012	19.5	--	<10	--	5.1	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--
2001 Delta Monitoring Well Installation and Groundwater Sampling Results - Revised																										
MW-5-4	10/17/2000	4	--	--	--	--	<1.0	<0.005	<0.005	<0.005	<0.005	**0.147**	<10.0	<0.1	<0.1	<0.1	<150	--	--	--	--	--	--	--	--	--
MW-6-4.5	10/17/2000	4.5	--	--	--	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.1	<10.0	<0.1	<0.1	<0.1	<150	--	--	--	--	--	--	--	--	--
MW-7-6.0	10/17/2000	6	--	--	--	--	<1.0	<0.005	<0.005	<0.005	<0.005	<0.1	<10.0	<0.1	<0.1	<0.1	<150	--	--	--	--	--	--	--	--	--
MW-7-9.0	10/17/2000	9	--	--	--	--	<1.0	<0.005	<0.005	<0.005	<0.005	**0.172**	<10.0	<0.1	<0.1	<0.1	<150	--	--	--	--	--	--	--	--	--
1998 Geo-Logic Report of Soil Sampling below Waste Oil Tank and Fuel Dispensers																										
WO-E	12/17/1998	5	**240***	--	<0.1**	--	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1***	--	--	--	--	--	--	<0.5	--	--	**0.89**	**1.2**	**2**	**14**	**39**
Disp NW	12/17/1998	2	--	--	--	--	**200**	<0.005	<0.005	**27**	**14**	<0.1***	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Disp NE	12/17/1998	2	--	--	--	--	**2,700**	**200**	**64**	**310**	**290**	<0.1***	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Disp SW	12/17/1998	2	--	--	--	--	**120**	<0.005	**27**	**41**	**33**	<0.1***	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Disp SE	12/17/1998	2	--	--	--	--	**3,800**	**170**	**93**	**240**	**270**	<0.1***	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1995 Gettler-Ryan Preliminary Investigation																										
SB1-5.5	10/12/1995	5.5	--	--	--	--	<1	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW1-4	10/12/1995	4	--	--	--	--	<1	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW2-5.5	10/12/1995	5.5	**2,100**	--	**77**	--	**8.4**	<0.005	<0.0050	**0.0097**	**0.025**	--	--	--	--	--	--	--	**9.2a**	--	--	--	--	--	--	--
MW3-5	10/12/1995	5	--	--	--	--	<1	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--	ND	--	<1.0	<0.20	--	--	--	--	--
MW4-5	10/12/1995	5	--	--	--	--	<1	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 1

SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91851
451 HEGENBERGER DRIVE
OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TOG*	*TPHmo*	*TPHd*	*TPHd with Silica gel*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*	*VOCs*	*HVOCs*	*Methanol*	*MEK*	*Cd*	*Cr*	*Pb*	*Ni*	*Zn*
		Reported in milligrams per kilogram (mg/kg)																								

Notes:

Total oil and grease (TOG) by EPA Standard Method 5520E&F unless otherwise noted
Total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) by EPA Method 8015M unless otherwise noted
Benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA Method 8020 prior to year 2000, by EPA Method 8260 after year 1998
Methyl tertiary butyl ether (MTBE) by EPA Method 8260 unless otherwise noted
Tertiary butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tert-amyl methyl ether (TAME) and ethanol by EPA Method 8260
Volatile organic compounds (VOCs) by EPA Method 8240 unless otherwise noted
Halogenated volatile organic compounds (HVOCs) by EPA Method 8010 unless otherwise noted
Methanol by EPA Method 8015
Methyl ethyl ketone (MEK) by EPA Method 8015
Cadmium (Cd), chromium (Cr), lead (Pb), nickel (Ni), zinc (Zn) by EPA 7000 Series Methods
fbg = Feet below grade
-- = Not analyzed
<x = Not detected above laboratory method detection limit x
NE = Not Established
* = TOG analyzed by EPA Method 8020
** = TPHd analyzed by EPA Method 8020
*** = MTBE analyzed by EPA Method 8020
ND = No compounds detected above various detection limits
a = 9.2 mg/kg chloroform, no other analyzed HVOCs detected

TABLE 2

GRAB-GROUNDWATER ANALYTICAL DATA
FORMER CHEVRON STATION 91851
451 HEGENBERGER DRIVE
OAKLAND, CALIFORNIA

		TPHmo	*TPHd With Silica Gel*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*
Final Groundwater Screening Levels - Current or Potential Drinking Water Resource (ug/L) Table F-1a		100	100	100	1	40	30	20	5	12	NE	NE	NE
Sample ID	***Date***	***Reported in micrograms per liter (µg/L)***											
B-1-W	3/26/2012	**1,900,000**	**2,300,00**	**2,300**	0.6	<0.5	<0.5	<0.5	**5**	3	<0.5	<0.5	1
B-2-W	3/26/2012	**650,000**	**460,000**	**1,800**	**100**	8	10	**52**	**24**	6	<0.5	<0.5	9
B-3-W	3/26/2012	**190,000**	**140,000**	**850**	0.6	<0.5	<0.5	<0.5	**18**	**33**	<0.5	<0.5	2
B-5-W	3/27/2012	<200	<160	<50	<0.5	<0.5	<0.5	<0.5	**6**	2	<0.5	<0.5	<0.5

Notes:

Total petroleum hydrocarbons as motor oil (TPHmo), diesel (TPHd) and gasoline (TPHg) by EPA Method 8015B Modified

Benzene, toluene, ethylbenzene and total xylenes by EPA Method 8260B

Methyl tertiary butyl ether (MTBE), t-Butyl alcohol (TBA), di-Isopropyl ether (DIPE), Ethyl t-butyl ether (ETBE), t-Amyl methyl ether (TAME) by EPA Method 8260B

<x = Not detected above laboratory method detection limit x

Bold = Exceded ESL

APPENDIX A

WORK PLAN APPROVAL LETTER FROM ACEH

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

November 3, 2011

Mr. David Patton
Chevron Corporation
6111 Bollinger Canyon Road
San Ramon, CA 94583
(sent via electronic mail to drpatten@chevron.com)

Mr. Mark Gomez
City of Oakland
250 Frank Ogawa Plaza,
Suite 5301
Oakland, CA, 9461

Simgas LLC
655 Montgomery St #1900
San Francisco, CA 94111

Gurinder Grewal & Singh Navdeep
349 Brianne Ct.
Pleasanton, CA 94566

Subject: Approval of Modified Work Plan Addendum; Fuel Leak Case No. RO0000464; (Global ID # T0600102238); Chevron #9-1851, 451 Hegenberger Road, Oakland, CA 94612

Dear Ladies and Gentlemen:

Alameda County Environmental Health Department (ACEH) staff has reviewed the case file, including the *Work Plan for Soil Borings Addendum,* dated July 1, 2011, the *Second Quarter 2011 Groundwater Monitoring and Sampling Report,* dated August 18, 2011 and the *Modified Work Plan Addendum,* dated September 16, 2011. These reports were prepared and submitted on your behalf by Conestoga-Rovers & Associates (CRA). Thank you for submitting the reports. The addendum proposes the installation of five soil bores, four around the former waste oil UST location to define the lateral extent of free-phase waste oil, and one downgradient of well MW-4 to further delineate the gasoline dissolved-phase hydrocarbon plume in the downgradient direction. At the request of the August 15, 2011, ACEH directive letter, the modified work plan addendum proposed the installation of two additional bores near or in the two known source areas at the site.

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

TECHNICAL COMMENTS

1. **Gasoline Source Area Bore and Existing Request for Vertical Delineation –** Based on existing reporting the source area of fuel hydrocarbons is understood to be in proximity to the southern end of the eastern dispenser. Consequently a source area vertical delineation of soil should be closely associated with that location. ACEH requests a bore location proximal to, but downgradient of the dispenser location. ACEH understands that product piping and other underground utilities may exist in that area, and that care must be

exercised in selecting such a bore location; however, believes choices exist within those constraints. By the date identified below, please submit a subsurface investigation report.

2. **Semi-Annual Groundwater Monitoring –** In reviewing recent groundwater monitoring reports it appears appropriate to sample all wells on a semi-annual basis. Wells MW-1 and MW-4 have been previously monitored on a quarterly interval in order to provide downgradient compliance for the TPHmo analyte found as free phase product in well MW-2. The referenced groundwater monitoring report has incorporated silica gel cleanup in to the extractable range analytes, and have documented a significant decrease in decrease in extractable hydrocarbons attributed to motor oil (1,100 µg/l to 85 µg/l TPHmo). Please monitor the site on a semi-annual basis using the first and third quarters of a year.

TECHNICAL REPORT REQUEST

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

- **December 2, 2011 –** Third Quarter Semi-Annual Groundwater Monitoring Report
- **January 16, 2012 -** Subsurface Investigation Report
- **May 25, 2012 –** First Quarter Semi-Annual Groundwater Monitoring Report

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

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

Sincerely,

Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, o, ou, email, c=US
Date: 2011.11.03 11:13:39 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

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

cc: Nathan Lee, Conestoga-Rovers & Assoc., 5900 Hollis Street, Suite A, Emeryville, CA 94608 (sent via electronic mail to NLee@craworld.com)

Donna Drogos (sent via electronic mail to donna.drogos@acgov.org)
Mark Detterman (sent via electronic mail to mark.detterman@acgov.org)
Case Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is 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.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

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

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

REQUIREMENTS

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

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

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

APPENDIX B

SITE ENVIRONMENTAL HISTORY

SUMMARY OF PREVIOUS ENVIRONMENTAL HISTORY
FORMER CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD OAKLAND, CALIFORNIA

1995 Preliminary Site Assessment

In October 1995, Gettler-Ryan (G-R) performed a preliminary site assessment to assess the presence and extent of petroleum hydrocarbon in soil and groundwater. Soil boring, SB-1 and monitoring wells MW-1 through MW-4 were completed. Additional information is available in G-R's *Preliminary Site Assessment* dated December 29, 1995.

1997 Site Evaluation

In September 1997, Pacific Environmental Group, Inc. (PEG) submitted an evaluation of the potential impacts of methyl tert-butyl ether (MTBE) in groundwater, including a file review, well survey, utility survey, and a sensitive receptor survey. Additional information is available in PEG's *Site Evaluation for Potential MtBE Impacts* dated September 30, 1997.

1998 Soil Borings

In April 1998, hand auger soil borings GW-2 through GW-5 were advanced, and grab ground water samples were taken at each location. Additional information is available in PEG's *Groundwater Investigation* dated May 21, 1998

1998 UST Removal and Dispenser Sampling

In December 1998, Geo-Logic (G-L) removed a 1,000-gallon used oil UST. Free product was noted on the groundwater during the removal. Additional information is available in G-L's *Report of Soil Sampling Below Waste Oil Tank and Fuel Dispensers* dated December 23, 1998.

2000 Monitoring Well Installation

In October 2000, Delta Environmental Consultants, Inc. (Delta) installed monitoring wells MW-5, MW-6 and MW-7. Additional information is available in Delta's *Monitoring Well Installation and Groundwater Sampling Results – Revised* dated January 25, 2001.

2001 – 2005 Groundwater Overpurging

Delta conducted eight overpurging events from May 3, 2001 to October 31, 2002. From May 20, 2003 to October 13, 2005, Cambria Environmental Technology, Inc. (Cambria) conducted five overpurging events. In November 2005 Cambria ceased the overpurge events based on diminishing concentrations of MTBE and TPHg. Additional information is available in Cambria's *Interim Corrective Action Overpurge Results* dated November 7, 2005.

APPENDIX C

DRILLING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

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

Application Approved on: 01/23/2012 By jamesy

Permit Numbers: W2012-0079
Permits Valid from 02/09/2012 to 02/10/2012

Application Id: 1326831100382 **City of Project Site:** Oakland
Site Location: 451 Hegenberger Dr. Oakland
Project Start Date: 02/09/2012 **Completion Date:** 02/10/2012
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Conestoga Rovers and Associates - Sequoia Patterson
5900 Hollis Street, Suite A, Emeryville, CA 94608 **Phone:** 510-420-3305

Property Owner: LLC Sigmas
655 Montgomery Street #1190, San Francisco, CA 94111 **Phone:** --

Client: Environrmental Mangament Company Chevron
6101 Bollinger Canyon Road, San Ramon, CA 94583 **Phone:** 925-790-6491

Total Due: $265.00
Receipt Number: WR2012-0028 **Total Amount Paid:** $265.00
Payer Name : Conestoga Rovers and Associates Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 8 Boreholes
Driller: Vapor Tech Services - Lic #: 916085 - Method: Hand **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2012-0079	01/23/2012	05/09/2012	8	2.00 in.	9.00 ft

Specific Work Permit Conditions

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

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

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

4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

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

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

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

APPENDIX D

BORING LOGS

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

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	B-1
JOB/SITE NAME	Former Chevron Service Station 91851	**DRILLING STARTED**	26-Mar-12
LOCATION	451 Hegenberger Road	**DRILLING COMPLETED**	26-Mar-12
PROJECT NUMBER	311976	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services C-57 # 916085	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Direct Push	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-Inch	**SCREENED INTERVALS**	NA
LOGGED BY	S. Patterson	**DEPTH TO WATER (First Encountered)**	5.00 fbg (26-Mar-12)
REVIEWED BY	N. Lee, PG# 8486	**DEPTH TO WATER (Static)**	NA
REMARKS	Utility cleared by hand auger to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					ML		**ASPHALT** **SILT:** Light Brown; dry; clay and fine gravel; low estimated plasticity.	0.2	
					SM		**Silty SAND:** Dark grey; dry; fine sand.	3.0	
					CL		**CLAY:** Dark grey; wet; moderate estimated plasticity.	4.0	
20		B-1 @ 5		5	ML		**Gravelly SILT:** Black; wet; medium grained gravel; no estimated plasticity. ▽	5.0	
					CL		**CLAY:** Dark grey; wet; moderate estimated plasticity.	7.0	
4		B-1 @ 10		10	ML		**Gravelly SILT:** Dark grey; wet; medium grained gravel; no estimated plasticity.	9.5	Portland Type I/II
					CL		**CLAY:** Dark grey; wet; moderate estimated plasticity.	10.5	
1		B-1 @ 15		15			@ 17 fbg: Tan; increase fine grain sand		
2		B-1 @ 19.5		20				20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) I:\CHEVRON\3119--\311976 9-1851 OAKLAND\311976-BORING LOGS\311976-BORING LOGS.GPJ DEFAULT.GDT 5/4/12

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

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	B-2
JOB/SITE NAME	Former Chevron Service Station 91851	**DRILLING STARTED**	26-Mar-12
LOCATION	451 Hegenberger Road	**DRILLING COMPLETED**	26-Mar-12
PROJECT NUMBER	311976	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services C-57 # 916085	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Direct Push	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-Inch	**SCREENED INTERVALS**	NA
LOGGED BY	S. Patterson	**DEPTH TO WATER (First Encountered)**	5.00 fbg (26-Mar-12)
REVIEWED BY	N. Lee, PG# 8486	**DEPTH TO WATER (Static)**	NA
REMARKS	Utility cleared by hand auger to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	DEPTH (fbg)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
				GM	**ASPHALT** **Silty GRAVEL:** Tan; dry; fine gravel.	0.2 1.0
				ML	**Gravelly SILT:** Yellow-brown; moist; fine grained gravel; low estimated plasticity.	2.0
				ML	**Sandy SILT:** Green-grey; moist; fine grained sand.	3.0
				SM	**Silty SAND:** Red-brown; moist; coarse grained.	4.5
23		B-2 @ 5	5	ML	**SILT With Gravel:** Dark grey; wet; low estimated plasticity. ▽	6.0
				SP	**SAND with Gravel:** Black; wet; poorley graded coarse grained sand.	7.0
				ML	**SILT:** Dark grey; wet; trace clay, moderate estimated plasticity.	8.0
				OL	**ORGANIC:** Black; wet; peat moss.	8.5
0		B-2 @ 10	10	ML	**SILT:** Black; wet; trace clay, high estimated plasticity. @ 12 fbg: Dark grey; moist; increase clay, moderated estimated plasticity.	
0		B-2 @ 15	15		@ 16 fbg: Light grey-green @ 18 fbg: Light brown mottling	
0		B-2 @ 19.5	20			20.0

WELL DIAGRAM: Portland Type I/II

Bottom of Boring @ 20 fbg

WELL LOG (PID) I:\CHEVRON\3119--\311976 9-1851 OAKLAND\311976-BORING LOGS\311976-BORING LOGS.GPJ DEFAULT.GDT 5/4/12

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

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	B-3
JOB/SITE NAME	Former Chevron Service Station 91851	**DRILLING STARTED**	26-Mar-12
LOCATION	451 Hegenberger Road	**DRILLING COMPLETED**	26-Mar-12
PROJECT NUMBER	311976	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services C-57 # 916085	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Direct Push	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-Inch	**SCREENED INTERVALS**	NA
LOGGED BY	S. Patterson	**DEPTH TO WATER (First Encountered)**	5.00 fbg (26-Mar-12)
REVIEWED BY	N. Lee, PG# 8486	**DEPTH TO WATER (Static)**	NA
REMARKS	Utility cleared by hand auger to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.2	
					ML		**Sandy SILT:** Tan; dry; fine grained, no estimated plasticity.	3.0	
							SILT: Light grey; dry; trace clay; moderate estimated plasticity.		
269		B-3 @ 5		5			@ 5 fbg: Wet		
							@ 8.5 fbg: black; decrease in clay, high estimated plasticity.		
16		B-3 @ 10		10	ML		@ 11 fbg: Light grey; increase clay; moderate estimated plasticity		Portland Type I/II
1.7		B-3 @ 15		15			@ 16 fbg: Light brown / grey; moist		
2		B-3 @ 19.5		20				20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) I:\CHEVRON\3119--\311976 9-1851 OAKLAND\311976-BORING LOGS\311976-BORING LOGS.GPJ DEFAULT.GDT 5/4/12

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

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	B-4
JOB/SITE NAME	Former Chevron Service Station 91851	**DRILLING STARTED**	27-Mar-12
LOCATION	451 Hegenberger Road	**DRILLING COMPLETED**	27-Mar-12
PROJECT NUMBER	311976	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services C-57 # 916085	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Direct Push	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-Inch	**SCREENED INTERVALS**	NA
LOGGED BY	S. Patterson	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	N. Lee, PG# 8486	**DEPTH TO WATER (Static)**	NA
REMARKS	Utility cleared by hand auger to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.2	
							FILL	1.5	
					SM		**Silty SAND:** Grey-green; dry; medium sand.	4.5	
0		B-4 @ 5		5	ML		**Sandy SILT:** Grey-green; moist; fine grained sand; moderate estimated plasticity.	6.0	
					ML		**SILT:** Black; moist, some clay, moderate to high estimated plasticity.	7.5	
					OL		**ORGANIC:** Black; moist; peat moss.	8.0	
0		B-4 @ 10		10	ML		**SILT:** Black, moist, trace clay, moderate estimated plasticity. @ 13 fbg: Grey, increase in clay.		Portland Type I/II
0		B-4 @ 15		15	ML		**Sandy SILT:** Light brown, dry, trace clay, fine sand, low estimated plasticity. @ 17 fbg: Black mottling. @ 18 fbg: Moist. @19 fbg: Dry, brown.	15.0	
0		B-4 @ 19.5		20				20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) I:\CHEVRON\3119--\311976 9-1851 OAKLAND\311976-BORING LOGS\311976-BORING LOGS.GPJ DEFAULT.GDT 5/4/12

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

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	**BORING/WELL NAME**	B-5
JOB/SITE NAME	Former Chevron Service Station 91851	**DRILLING STARTED**	27-Mar-12
LOCATION	451 Hegenberger Road	**DRILLING COMPLETED**	27-Mar-12
PROJECT NUMBER	311976	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vapor Tech Services C-57 # 916085	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Direct Push	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-Inch	**SCREENED INTERVALS**	NA
LOGGED BY	S. Patterson	**DEPTH TO WATER (First Encountered)**	5.00 fbg (27-Mar-12)
REVIEWED BY	N. Lee, PG# 8486	**DEPTH TO WATER (Static)**	NA
REMARKS	Utility cleared by hand auger to 8 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.2	
							FILL Material	1.5	
					SM		**Silty SAND:** Grey; dry, gravel present.	4.5	
0		B-5 @ 5		5	ML		**Sandy SILT with gravel:** Grey; moist; trace clay; no estimated plasticity. ▽ @ 5 fbg: Wet	9.0	
0		B-5 @ 10		10	ML		**Sandy SILT:** Grey, wet, trace clay, low estimated plasticity.	11.0	Portland Type I/II
0		B-5 @ 15		15	ML		**SILT:** Black; moist; trace clay; moderate estimated plasticity. @ 13 fbg: Grey; increase clay @ 14 fbg: Light grey @ 15 fbg: Light brown; dry; low to moderate plasticity. @ 16 fbg: Light brown with grey mottling	19.0	
0		B-5 @ 19.5		20	SM		**Silty SAND:** Brown; moist.	20.0	Bottom of Boring @ 20 fbg

WELL LOG (PID) I:\CHEVRON\3119--\311976 9-1851 OAKLAND\311976-BORING LOGS\311976-BORING LOGS.GPJ DEFAULT.GDT 5/4/12

APPENDIX E

DUAL TUBE SOIL BORING SOP

STANDARD FIELD PROCEDURES FOR ENVIROCORE® SAMPLING

This document describes Conestoga-Rovers & Associates' (CRA's) standard field methods for Envirocore® or similar soil and groundwater sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

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

Soil Classification/Logging

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

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

Soil Sampling

The Envirocore® (dual-tube) system consists of a segmented casing with an internal sampler which is driven hydraulically into the subsurface. The casing and the sampler are driven simultaneously in three-foot increments. Continuous sample cores are collected by the sampler in 1.5-inch diameter sample tubes which are either 6-inch long stainless steel or 3-foot long butyrate. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Drilling and sampling equipment is steam-cleaned or washed prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate, Alconox® or an equivalent EPA-approved detergent, and double rinsed with de-ionized water.

Hydrocarbon Field Screening

When hydrocarbons are a chemical of concern, soil samples are field screened for the presence of hydrocarbon vapors. After a soil sample has been collected, soil from the remaining tubing is placed inside a sealed plastic bag and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable GasTech® or photoionization detector measures volatile

hydrocarbon vapor concentrations in the bag's headspace, extracting the vapor through a slit in the plastic bag. The measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Soil Sample Storage, Handling and Transport

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

Grab Groundwater Sampling

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

Duplicates and Blanks

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

Grouting

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

APPENDIX F

SOIL LABORATORY ANALYYTICAL REPORT

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

April 17, 2012

Project: 91851

Submittal Date: 03/31/2012
Group Number: 1299281
PO Number: 0015074399
Release Number: PATTEN
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
B-1-S-5-120326 Grab Soil	6600721
B-1-S-10-120326 Grab Soil	6600722
B-1-S-15-120326 Grab Soil	6600723
B-1-S-19.5-120326 Grab Soil	6600724
B-2-S-5-120326 Grab Soil	6600725
B-2-S-10-120326 Grab Soil	6600726
B-2-S-15-120326 Grab Soil	6600727
B-2-S-19.5-120326 Grab Soil	6600728
B-3-S-5-120326 Grab Soil	6600729
B-3-S-10-120326 Grab Soil	6600730
B-3-S-15-120326 Grab Soil	6600731
B-3-S-19.5-120326 Grab Soil	6600732
B-4-S-5-120327 Grab Soil	6600733
B-4-S-10-120327 Grab Soil	6600734
B-4-S-15-120327 Grab Soil	6600735
B-4-S-19.5-120327 Grab Soil	6600736
B-5-S-5-120327 Grab Soil	6600737
B-5-S-10-120327 Grab Soil	6600738
B-5-S-15-120327 Grab Soil	6600739
B-5-S-19.5-120327 Grab Soil	6600740

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

ELECTRONIC Chevron Attn: CRA EDD

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COPY TO
ELECTRONIC CRA Attn: Nathan Lee
COPY TO
ELECTRONIC CRA Attn: Sequoia Patterson
COPY TO

Respectfully Submitted,

Natalie R. Luciano
Specialist

(717) 556-7258

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Analysis Report

Sample Description: B-1-S-5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600721
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 09:10 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO1-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.0008	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	10	10	256.67
	Reporting limits were raised due to sample foaming.					
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	510	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	510	9.9	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	300	7.9	24	2
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 14:34	Emily R Styer	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:01	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:01	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-1-S-5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600721
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 09:10 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO1-5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	3	201209227219	04/01/2012 00:01	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	4	201209227219	04/01/2012 00:01	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	5	201209227219	04/01/2012 00:01	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	6	201209227219	04/01/2012 00:01	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 20:52	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	2	201209227219	03/31/2012 20:51	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	3	201209227219	03/31/2012 20:53	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	4	201209227219	03/31/2012 20:53	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 18:46	Marie D John	256.67
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 20:57	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	03/31/2012 20:56	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	3	201209227219	03/31/2012 20:55	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	4	201209227219	03/31/2012 20:54	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	5	201209227219	03/31/2012 20:57	Scott W Freisher	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	6	201209227219	03/31/2012 20:58	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 00:20	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 20:39	Glorines Suarez-Rivera	2
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: B-1-S-10-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600722
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 10:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO110

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.01
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.01
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.01
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.001	0.0005	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.08
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.8	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.8	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	7.6	3.9	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 14:56	Emily R Styer	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-1-S-10-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600722
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 10:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO110

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:03	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 20:34	Marie D John	25.08
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:02	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 01:32	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/09/2012 20:41	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-1-S-15-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600723
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 10:50 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1.1	1.0	1.0	25.67
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	10	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 15:18	Emily R Styer	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-1-S-15-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600723
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 10:50 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO115

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:12	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 21:11	Marie D John	25.67
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:11	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 01:56	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/09/2012 21:44	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-1-S-19.5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600724
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 10:55 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO119

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.01
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.01
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.01
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	4.3	1.0	1.0	25.61
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	34	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	34	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	22	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 15:41	Emily R Styer	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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Analysis Report

Sample Description: B-1-S-19.5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # SW 6600724
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 10:55 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO119

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:18	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 21:47	Marie D John	25.61
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:17	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 02:20	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/09/2012 22:06	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-2-S-5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600725
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 13:45 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO2-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.95
10237	Benzene	71-43-2	0.016	0.0005	0.005	0.95
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.095	0.95
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.95
10237	Ethylbenzene	100-41-4	0.006	0.001	0.005	0.95
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.002	0.0005	0.005	0.95
10237	Toluene	108-88-3	0.002	0.001	0.005	0.95
10237	Xylene (Total)	1330-20-7	0.041	0.001	0.005	0.95
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	52	21	21	514.4
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	15,000	500	1,500	50
02516	TPH Motor Oil C16-C36	n.a.	15,000	500	1,500	50
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. Due to the dilution of the sample extract, capric acid recovery can not be determined.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	9,900	99	300	25
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 16:03	Emily R Styer	0.95
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-2-S-5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600725
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 13:45 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO2-5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:27	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 06:50	Marie D John	514.4
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:25	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 22:45	Heather E Williams	50
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 22:14	Glorines Suarez-Rivera	25
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: **B-2-S-10-120326 Grab Soil**
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600726
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:25 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO210

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.03
10237	Benzene	71-43-2	0.021	0.0005	0.005	1.03
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.03
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.03
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.009	0.0005	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.03

The sample was re-analyzed outside of the method required holding time, and internal standard areas are within the QC acceptance limits. Since the hold time had expired prior to the second analysis all results are reported from the original trial. Similar results were obtained in both trials.

GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	23.67
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
The reverse surrogate, capric acid, is present at <1%.

GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	5.0	4.0	12	1

The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 16:26	Emily R Styer	1.03

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

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Analysis Report

Sample Description: B-2-S-10-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600726
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:25 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO210

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:34	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 11:32	Marie D John	23.67
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:33	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 02:44	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/09/2012 22:28	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: **B-2-S-15-120326 Grab Soil**
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600727
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:35 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO215

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

The sample was re-analyzed outside of the method required holding time, and internal standard areas are within the QC acceptance limits. Since the hold time had expired prior to the second analysis all results are reported from the original trial. Similar results were obtained in both trials.

GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.85
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.8	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.8	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
The reverse surrogate, capric acid, is present at <1%.

GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	8.4	3.9	12	1

The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 16:48	Emily R Styer	0.99

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

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Analysis Report

Sample Description: B-2-S-15-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600727
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:35 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO215

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:41	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 23:00	Marie D John	24.85
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:40	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 03:08	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/09/2012 23:19	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-2-S-19.5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600728
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:42 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO219

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.02
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.02
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	26.12
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 17:10	Emily R Styer	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-2-S-19.5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # SW 6600728
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:42 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO219

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:45	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 23:36	Marie D John	26.12
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:45	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 03:32	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/09/2012 23:40	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: B-3-S-5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600729
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 15:30 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO3-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.053	0.26	52.63
10237	Benzene	71-43-2	N.D.	0.026	0.26	52.63
10237	t-Butyl alcohol	75-65-0	N.D.	1.1	5.3	52.63
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.053	0.26	52.63
10237	Ethylbenzene	100-41-4	N.D.	0.053	0.26	52.63
10237	di-Isopropyl ether	108-20-3	N.D.	0.053	0.26	52.63
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.026	0.26	52.63
10237	Toluene	108-88-3	N.D.	0.053	0.26	52.63
10237	Xylene (Total)	1330-20-7	N.D.	0.053	0.26	52.63
	Reporting limits were raised due to interference from the sample matrix.					
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	330	74	74	1846.72
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	4,800	200	590	20
02516	TPH Motor Oil C16-C36	n.a.	4,800	200	590	20
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. Due to the dilution of the sample extract, capric acid recovery can not be determined.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	3,200	99	300	25
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	R120951AA	04/04/2012 17:00	Lauren C Temple	52.63
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-3-S-5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600729
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 15:30 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO3-5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:53	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 07:26	Marie D John	1846.72
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 21:53	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 21:56	Heather E Williams	20
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 21:51	Glorines Suarez-Rivera	25
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: B-3-S-10-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600730
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 15:55 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO310

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.98
10237	Benzene	71-43-2	0.002	0.0005	0.005	0.98
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.098	0.98
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.98
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.98
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.005	0.0005	0.005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.98
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.98
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.93
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	9.4	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 17:32	Emily R Styer	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-3-S-10-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600730
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 15:55 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO310

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:38	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 01:24	Marie D John	24.93
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:37	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 20:20	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 00:02	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-3-S-15-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600731
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 16:05 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO315

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.97
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.97
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.097	0.97
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.97
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.97
	The sample was re-analyzed outside of the method required holding time, and internal standard areas are within the QC acceptance limits. Since the hold time had expired prior to the second analysis all results are reported from the original trial. Similar results were obtained in both trials.					
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.15
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	4.5	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 17:54	Emily R Styer	0.97

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

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Analysis Report

Sample Description: B-3-S-15-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600731
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 16:05 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO315

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:02	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:41	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 02:01	Marie D John	25.15
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:42	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 05:08	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 00:24	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-3-S-19.5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600732
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 16:10 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO319

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.1	1.1	26.32
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.8	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.8	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	3.9	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 18:16	Emily R Styer	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:03	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:03	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-3-S-19.5-120326 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # SW 6600732
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/26/2012 16:10 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO319

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:47	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 02:37	Marie D John	26.32
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:48	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 05:32	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 00:45	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-4-S-5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600733
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:10 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO4-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.04
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.04
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.04
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.003	0.0005	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.9
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 18:39	Emily R Styer	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:03	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:03	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-4-S-5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600733
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:10 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO4-5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:53	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 03:13	Marie D John	24.9
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:52	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 05:56	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 01:07	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-4-S-10-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600734
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:35 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO410

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.98
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.98
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.098	0.98
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.98
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.98
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.98
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.98
	The GC/MS volatile internal standard peak areas were outside the QC limits. A re-analysis was performed, and the matrix effect was confirmed.					
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.78
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	4.0	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 19:01	Emily R Styer	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:03	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-4-S-10-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600734
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:35 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO410

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:03	Scott W Freisher	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:59	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/02/2012 18:01	Marie D John	24.78
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 22:58	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 06:20	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 01:28	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: B-4-S-15-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600735
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:42 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO415

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.9	0.9	23.43
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	4.1	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 19:23	Emily R Styer	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-4-S-15-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600735
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:42 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO415

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:04	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 03:49	Marie D John	23.43
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:03	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 06:44	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 01:50	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Analysis Report

Sample Description: **B-4-S-19.5-120327 Grab Soil**
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600736
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:50 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO419

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.01
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.01
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1.01
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	25.23
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	4.7	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 19:46	Emily R Styer	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-4-S-19.5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-4

LLI Sample # SW 6600736
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 09:50 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO419

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:09	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 04:25	Marie D John	25.23
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:11	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 07:08	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 02:12	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-5-S-5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600737
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 10:19 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO5-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.07
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.07
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.11	1.07
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.07
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.07
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.07
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.0009	0.0005	0.005	1.07
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.07
10237	Xylene (Total)	1330-20-7	0.001	0.001	0.005	1.07
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.2
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120951AA	04/04/2012 20:08	Emily R Styer	1.07
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-5-S-5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600737
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 10:19 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO5-5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:16	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 05:01	Marie D John	24.2
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:16	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 07:32	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 02:33	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-5-S-10-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600738
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 10:55 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO510

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	0.96
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.96
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.096	0.96
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.0005	0.0005	0.005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.96
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	26.12
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120961AA	04/05/2012 20:21	Emily R Styer	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:05	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:04	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-5-S-10-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600738
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 10:55 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO510

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:25	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 05:37	Marie D John	26.12
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:24	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 07:56	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 02:55	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-5-S-15-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600739
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 11:00 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO515

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.10	1
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.3
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	4.1	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120961AA	04/05/2012 18:26	Emily R Styer	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:05	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:05	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-5-S-15-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600739
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 11:00 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO515

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:29	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12093A34A	04/03/2012 06:13	Marie D John	24.3
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:28	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 08:20	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 03:17	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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Analysis Report

Sample Description: B-5-S-19.5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600740
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 11:07 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO519

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.005	1.03
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.03
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	0.10	1.03
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.005	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.03
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.03
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.68
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	5.1	4.0	12	1
	The reverse surrogate, capric acid, is present at <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
10237	BTEX + 5 Oxygenates 8260 Soil	SW-846 8260B	1	B120961AA	04/05/2012 18:48	Emily R Styer	1.03
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	04/01/2012 00:05	Scott W Freisher	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201209227219	04/01/2012 00:05	Scott W Freisher	n.a.

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

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Analysis Report

Sample Description: B-5-S-19.5-120327 Grab Soil
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # SW 6600740
LLI Group # 1299281
Account # 10880

Project Name: 91851

Collected: 03/27/2012 11:07 by GW

Submitted: 03/31/2012 09:35
Reported: 04/17/2012 12:06

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HO519

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:34	Scott W Freisher	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	12100A34A	04/09/2012 17:48	Laura M Krieger	24.68
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201209227219	03/31/2012 23:33	Scott W Freisher	n.a.
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	120930009A	04/10/2012 08:44	Heather E Williams	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	120930008A	04/10/2012 03:38	Glorines Suarez-Rivera	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	120930008A	04/03/2012 03:15	Sherry L Morrow	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	120930009A	04/03/2012 03:15	Sherry L Morrow	1

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

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Quality Control Summary

Client Name: ChevronTexaco Group Number: 1299281
Reported: 04/17/12 at 12:06 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B120951AA	Sample number(s): 6600721-6600728,6600730-6600737								
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	97	95	56-137	2	30
Benzene	N.D.	0.0005	0.005	mg/kg	90	88	80-120	3	30
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	96	93	60-149	3	30
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	96	96	70-122	1	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	96	91	80-120	5	30
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	99	97	73-121	2	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	97	95	74-121	3	30
Toluene	N.D.	0.001	0.005	mg/kg	93	88	80-120	5	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	91	88	80-120	4	30
Batch number: B120961AA	Sample number(s): 6600738-6600740								
t-Amyl methyl ether	N.D.	0.001	0.005	mg/kg	98	95	56-137	3	30
Benzene	N.D.	0.0005	0.005	mg/kg	91	88	80-120	3	30
t-Butyl alcohol	N.D.	0.020	0.10	mg/kg	90	87	60-149	3	30
Ethyl t-butyl ether	N.D.	0.001	0.005	mg/kg	99	95	70-122	4	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	94	92	80-120	2	30
di-Isopropyl ether	N.D.	0.001	0.005	mg/kg	100	97	73-121	2	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	98	95	74-121	3	30
Toluene	N.D.	0.001	0.005	mg/kg	90	90	80-120	0	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	91	89	80-120	2	30
Batch number: R120951AA	Sample number(s): 6600729								
t-Amyl methyl ether	N.D.	0.050	0.25	mg/kg	93	93	56-137	0	30
Benzene	N.D.	0.025	0.25	mg/kg	94	95	80-120	0	30
t-Butyl alcohol	N.D.	1.0	5.0	mg/kg	82	83	60-149	1	30
Ethyl t-butyl ether	N.D.	0.050	0.25	mg/kg	90	92	70-122	3	30
Ethylbenzene	N.D.	0.050	0.25	mg/kg	85	86	80-120	1	30
di-Isopropyl ether	N.D.	0.050	0.25	mg/kg	91	92	73-121	2	30
Methyl Tertiary Butyl Ether	N.D.	0.025	0.25	mg/kg	96	96	74-121	0	30
Toluene	N.D.	0.050	0.25	mg/kg	94	94	80-120	1	30
Xylene (Total)	N.D.	0.050	0.25	mg/kg	87	87	80-120	0	30
Batch number: 12093A34A	Sample number(s): 6600721-6600739								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	94		67-119		
Batch number: 12100A34A	Sample number(s): 6600740								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	89	94	67-119	5	30
Batch number: 120930009A	Sample number(s): 6600721-6600740								
Total TPH	N.D.	10.	30	mg/kg	106		64-122		
TPH Motor Oil C16-C36	N.D.	10.	30	mg/kg					
Batch number: 120930008A	Sample number(s): 6600721-6600740								
TPH-DRO soil C10-C28 w/Si Gel	N.D.	4.0	12	mg/kg	95		50-143		

*- 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: 1299281
Reported: 04/17/12 at 12:06 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
Batch number: 12093A34A	Sample number(s): 6600721-6600739 UNSPK: 6600721								
TPH-GRO N. CA soil C6-C12	153*	135*	39-118	13	30				
Batch number: 120930009A	Sample number(s): 6600721-6600740 UNSPK: 6600721 BKG: 6600721								
Total TPH	250*		10-168			510	1,300	84*	20
TPH Motor Oil C16-C36						510	1,300	84*	20
Batch number: 120930008A	Sample number(s): 6600721-6600740 UNSPK: 6600721 BKG: 6600721								
TPH-DRO soil C10-C28 w/Si Gel	414*		30-159			300	680	77*	20

Surrogate Quality Control

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

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: B120951AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6600721	106	100	113	94
6600722	109	115	100	105
6600723	103	101	103	105
6600724	102	94	103	93
6600725	106	100	113	91
6600726	106	110	112	86
6600727	107	114	99	108
6600728	106	111	100	102
6600730	106	113	101	103
6600731	107	110	100	101
6600732	103	97	103	96
6600733	104	97	114	82
6600734	108	110	103	97
6600735	103	106	100	96
6600736	101	94	104	98
6600737	103	96	103	95
Blank	105	101	102	100
LCS	106	102	104	106
LCSD	106	99	105	106
Limits:	50-141	54-135	52-141	50-131

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: B120961AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6600738	110	116	101	99

*- 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: 1299281
Reported: 04/17/12 at 12:06 PM

Surrogate Quality Control

6600739	109	116	99	101
6600740	106	109	100	100
Blank	103	100	103	100
LCS	105	106	102	105
LCSD	104	104	104	105
Limits:	50-141	54-135	52-141	50-131

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: R120951AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6600729	78	79	75	114
Blank	87	92	84	75
LCS	84	84	81	73
LCSD	83	84	82	75
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 12093A34A

	Trifluorotoluene-F
6600721	102
6600722	63
6600723	69
6600724	70
6600725	76
6600726	65
6600727	67
6600728	71
6600729	80
6600730	64
6600731	77
6600732	68
6600733	63
6600734	71
6600735	69
6600736	71
6600737	70
6600738	67
6600739	71
Blank	76
LCS	82
MS	94
MSD	97
Limits:	61-122

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 12100A34A

	Trifluorotoluene-F
6600740	70
Blank	81
LCS	81
LCSD	86

*- 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: 1299281
Reported: 04/17/12 at 12:06 PM

Surrogate Quality Control

Limits: 61-122

Analysis Name: TPH-DRO soil C10-C28 w/Si Gel
Batch number: 120930008A

	Orthoterphenyl
6600721	91
6600722	95
6600723	96
6600724	91
6600725	42*
6600726	86
6600727	93
6600728	87
6600729	20*
6600730	93
6600731	94
6600732	87
6600733	84
6600734	82
6600735	85
6600736	89
6600737	88
6600738	88
6600739	82
6600740	89
Blank	101
DUP	83
LCS	105
MS	90

Limits: 50-143

Analysis Name: TPH Fuels by GC (Soils)
Batch number: 120930009A

	Chlorobenzene	Orthoterphenyl
6600721	90	86
6600722	107	102
6600723	88	87
6600724	100	99
6600725	96	299*
6600726	108	97
6600727	104	100
6600728	102	96
6600729	115	124
6600730	92	86
6600731	88	84
6600732	88	80
6600733	88	76
6600734	85	74
6600735	85	78
6600736	84	79
6600737	89	78
6600738	90	80
6600739	90	74
6600740	111	103

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

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1299281
Reported: 04/17/12 at 12:06 PM

Surrogate Quality Control

Blank	94	104
DUP	81	84
LCS	94	109
MS	80	87
Limits:	49-125	59-129

*- 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

246126

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 6600721-40 SCR#:

Ø33Ø12-Ø1 P1 70F7

G# 1299281

Facility #: CHEVRON 91851
Site Address: 451 HEGENBERGER ROAD, OAKLAND
Chevron PM: HORNE Lead Consultant: CRA
Consultant/Office: CRA / EMERYVILLE
Consultant Prj. Mgr.: LEE
Consultant Phone #: 510 420 0700 Fax #: 510 420 9170
Sampler: GW
Service Order #: ☐ Non SAR:

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

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 10 gram	8260 full scan	Oxygenates	Lead 7420 ☐ 7421 ☐	TPH mo 8015 10g silica gel	Dipe, ETBE, TAME, TBA by 8260				
B-1	S		5	12 03 26	0910		X		1	X	X	X				X	X				
B-1	S		10	12 03 26	1040		X		1	X	X	X				X	X				
B-1	S		15	12 03 26	1050		X		1	X	X	X				X	X				
B-1	S		19.5	12 03 26	1055		X		1	X	X	X				X	X				
B-2	S		5	12 03 26	1345		X		1	X	X	X				X	X				
B-2	S		10	12 03 26	1425		X		1	X	X	X				X	X				
B-2	S		15	12 03 26	1435		X		1	X	X	X				X	X				
B-2	S		~~20~~ 19.5	12 03 26	1442		X		1	X	X	X				X	X				
B-3	S		5	12 03 26	1530		X		1	X	X	X				X	X				
B-3	S		10	12 03 26	1555		X		1	X	X	X				X	X				
B-3	S		15	12 03 26	1605		X		1	X	X	X				X	X				
B-3	S		19.5	12 03 26	1610		X		1	X	X	X				X	X				

Comments / Remarks

email results and edf to

nlee@craworld

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
	03 26 12	1815	Secure location CRA	03 26 12	1815
Relinquished by: SECURE LOCATION CRA	3/30/12	1130		3/30/12	1130
Relinquished by:	3/30/12	1240	A. Auger 36	30MAR12	1240
Relinquished by ~~Commercial Carrier:~~ ~~UPS~~ ~~FedEx~~ Other A. Auger 30MAR12 1634			Received by: FEDEX	Date	Time
Temperature Upon Receipt 1.1-4.4 C°			Custody Seals Intact? (Yes) No		

313012 0735

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
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246128

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 6600721-40 SCR#: ____________

Ø33Ø12-Ø1 P. 5 OF 7

C# 1299281

Facility #: CHEVRON 91851
Site Address: 451 HEGENBERGER, OAKLAND
Chevron PM: HORNIG Lead Consultant: CRA
Consultant/Office: CRA / EMERYVILLE
Consultant Prj. Mgr.: LEE
Consultant Phone #: 510 420 0700 Fax #: 510 420 9170
Sampler: GW
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 10 gram	8260 full scan	Oxygenates	Lead 7420 ☐ 7421 ☐	TPHmo 8015 10g silica gel	DIPE, ETBE, TAME, TBA, by 8260			
B-4	S		5	12 03 27	0910		X		1	X	X	X				X	X			
B-4	S		10	12 03 27	0935		X		1	X	X	X				X	X			
B-4	S		15	12 03 27	0942		X		1	X	X	X				X	X			
B-4	S		19.5	12 03 27	0950		X		1	X	X	X				X	X			
B-5	S		5	12 03 27	1019		X		1	X	X	X				X	X			
B-5	S		10	12 03 27	1055		X		1	X	X	X				X	X			
B-5	S		15	12 03 27	1100		X		1	X	X	X				X	X			
B-5	S		19.5	12 03 27	1107		X		1	X	X	X				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

report, email results + EDF to nlee@craworld.com

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) circled 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
[signature]	032712	1402	SECURE LOCATION CRA	032712	1402
SECURE LOCATION CRA	3/30/12	1130	[signature]	3/30/12	1130
[signature]	3/30/12	1240	A. Aulgur [signature]	30 MAR 12	1240
Relinquished by ~~Commercial Carrier:~~ A. Aulgur ~~UPS~~ ~~FedEx~~ Other 30 MAR 12 1635			FEDEX		
Temperature Upon Receipt 1.1-4.4 C°			Custody Seals Intact? (Yes) No		

[signature] 3/31/12 0935

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300 3460 Rev. 10/04/01
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

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Explanation of Symbols and Abbreviations

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

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

< less than - The number following the sign is the 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. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

APPENDIX G

WATER LABORATORY ANALYYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

April 11, 2012

Project: 91851

Submittal Date: 03/31/2012
Group Number: 1299276
PO Number: 0015074399
Release Number: PATTEN
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
B-1-W-120326 Grab Water	6600707
B-2-W-120326 Grab Water	6600708
B-3-W-120326 Grab Water	6600709
B-5-W-120327 Grab Water	6600710

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: Nathan Lee

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

Respectfully Submitted,

Natalie R. Luciano
Specialist

(717) 556-7258

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

Analysis Report

Sample Description: B-1-W-120326 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # WW 6600707
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/26/2012 09:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10943	t-Amyl methyl ether	994-05-8	1	0.5	1	1
10943	Benzene	71-43-2	0.6	0.5	1	1
10943	t-Butyl alcohol	75-65-0	3	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	5	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 4.					
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,300	250	500	5
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
02216	TPH-DRO water C10-C28 w/Si Gel	n.a.	2,300,000	16,000	50,000	50
	The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B modified**		**ug/l**	**ug/l**	**ug/l**	
10006	Motor Oil C16-C36 w/Si Gel	n.a.	1,900,000	40,000	120,000	100
10006	Total TPH w/Si Gel	n.a.	1,900,000	40,000	120,000	100
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. Due to the dilution of the sample extract, capric acid recovery can not be determined.					

General Sample Comments

State of California Lab Certification No. 2501
Trip blank vials were not received by the laboratory for this sample group.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	F120981AA	04/08/2012 00:02	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F120981AA	04/08/2012 00:02	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12093D20A	04/03/2012 22:44	Laura M Krieger	5

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

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Analysis Report

Sample Description: B-1-W-120326 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-1

LLI Sample # WW 6600707
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/26/2012 09:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	12093D20A	04/03/2012 22:44	Laura M Krieger	5
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	120930004A	04/11/2012 10:50	Tracy A Cole	50
10006	TPH Fuels water w/Si Gel	SW-846 8015B modified	1	120930006A	04/06/2012 13:59	Heather E Williams	100
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	120930004A	04/02/2012 22:00	Elaine F Stoltzfus	1
11195	TPH w/ Silica Gel Waters Ext.	SW-846 3510C	1	120930006A	04/02/2012 22:00	Elaine F Stoltzfus	1

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Analysis Report

Sample Description: B-2-W-120326 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # WW 6600708
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:00 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10943	t-Amyl methyl ether	994-05-8	9	0.5	1	1
10943	Benzene	71-43-2	100	0.5	1	1
10943	t-Butyl alcohol	75-65-0	6	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	10	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	24	0.5	1	1
10943	Toluene	108-88-3	8	0.5	1	1
10943	Xylene (Total)	1330-20-7	52	0.5	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.					
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	1,800	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
02216	TPH-DRO water C10-C28 w/Si Gel	n.a.	460,000	3,200	10,000	10
	The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B modified**		**ug/l**	**ug/l**	**ug/l**	
10006	Motor Oil C16-C36 w/Si Gel	n.a.	650,000	16,000	48,000	40
10006	Total TPH w/Si Gel	n.a.	650,000	16,000	48,000	40
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. Due to the dilution of the sample extract, capric acid recovery can not be determined.					

General Sample Comments

State of California Lab Certification No. 2501
Trip blank vials were not received by the laboratory for this sample group.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	F120981AA	04/08/2012 00:24	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F120981AA	04/08/2012 00:24	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12093D20A	04/03/2012 17:33	Laura M Krieger	1

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

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Analysis Report

Sample Description: B-2-W-120326 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-2

LLI Sample # WW 6600708
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/26/2012 14:00 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	12093D20A	04/03/2012 17:33	Laura M Krieger	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	120930004A	04/11/2012 10:04	Tracy A Cole	10
10006	TPH Fuels water w/Si Gel	SW-846 8015B modified	1	120930006A	04/06/2012 14:23	Heather E Williams	40
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	120930004A	04/02/2012 22:00	Elaine F Stoltzfus	1
11195	TPH w/ Silica Gel Waters Ext.	SW-846 3510C	1	120930006A	04/02/2012 22:00	Elaine F Stoltzfus	1

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Analysis Report

Sample Description: B-3-W-120326 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # WW 6600709
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/26/2012 16:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10943	t-Amyl methyl ether	994-05-8	2	0.5	1	1
10943	Benzene	71-43-2	0.6	0.5	1	1
10943	t-Butyl alcohol	75-65-0	33	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	18	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 4.					
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	850	50	100	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 4.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
02216	TPH-DRO water C10-C28 w/Si Gel	n.a.	140,000	1,600	5,000	5
	The reverse surrogate, capric acid, is present at <1%.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B modified**		**ug/l**	**ug/l**	**ug/l**	
10006	Motor Oil C16-C36 w/Si Gel	n.a.	190,000	8,000	24,000	20
10006	Total TPH w/Si Gel	n.a.	190,000	8,000	24,000	20
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. Due to the dilution of the sample extract, capric acid recovery can not be determined.					

General Sample Comments

State of California Lab Certification No. 2501
Trip blank vials were not received by the laboratory for this sample group.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	F120981AA	04/08/2012 00:46	Kevin A Sposito	1

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

Sample Description: B-3-W-120326 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-3

LLI Sample # WW 6600709
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/26/2012 16:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F120981AA	04/08/2012 00:46	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12093D20A	04/03/2012 21:02	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12093D20A	04/03/2012 21:02	Laura M Krieger	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	120930004A	04/11/2012 10:27	Tracy A Cole	5
10006	TPH Fuels water w/Si Gel	SW-846 8015B modified	1	120930006A	04/06/2012 12:23	Heather E Williams	20
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	120930004A	04/02/2012 22:00	Elaine F Stoltzfus	1
11195	TPH w/ Silica Gel Waters Ext.	SW-846 3510C	1	120930006A	04/02/2012 22:00	Elaine F Stoltzfus	1

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Analysis Report

Sample Description: B-5-W-120327 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # WW 6600710
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/27/2012 10:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1	1
10943	Benzene	71-43-2	N.D.	0.5	1	1
10943	t-Butyl alcohol	75-65-0	2	2	5	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	6	0.5	1	1
10943	Toluene	108-88-3	N.D.	0.5	1	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 4.					
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
02216	TPH-DRO water C10-C28 w/Si Gel	n.a.	N.D.	160	500	1
	The reverse surrogate, capric acid, is present at <1%. Reporting limits were raised due to interference from the sample matrix.					
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B modified**		**ug/l**	**ug/l**	**ug/l**	
10006	Motor Oil C16-C36 w/Si Gel	n.a.	N.D.	200	600	1
10006	Total TPH w/Si Gel	n.a.	N.D.	200	600	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons. Reporting limits were raised due to interference from the sample matrix.					
	The reverse surrogate, capric acid, is present at <1%.					

General Sample Comments

State of California Lab Certification No. 2501
Trip blank vials were not received by the laboratory for this sample group.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	F120981AA	04/08/2012 01:07	Kevin A Sposito	1

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

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Analysis Report

Sample Description: B-5-W-120327 Grab Water
Facility# 91851 CRAW
451 Hegenberger-Oakland T0600102238 B-5

LLI Sample # WW 6600710
LLI Group # 1299276
Account # 10880

Project Name: 91851

Collected: 03/27/2012 10:40 by GW

Submitted: 03/31/2012 09:35
Reported: 04/11/2012 19:53

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

HRO05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F120981AA	04/08/2012 01:07	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12093D20A	04/03/2012 18:17	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12093D20A	04/03/2012 18:17	Laura M Krieger	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	120930004A	04/10/2012 16:08	Tracy A Cole	1
10006	TPH Fuels water w/Si Gel	SW-846 8015B modified	1	120930006A	04/05/2012 21:24	Heather E Williams	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	120930004A	04/02/2012 22:00	Elaine F Stoltzfus	1
11195	TPH w/ Silica Gel Waters Ext.	SW-846 3510C	1	120930006A	04/02/2012 22:00	Elaine F Stoltzfus	1

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1299276
Reported: 04/11/12 at 07:53 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F120981AA	Sample number(s): 6600707-6600710								
t-Amyl methyl ether	N.D.	0.5	1	ug/l	78		66-120		
Benzene	N.D.	0.5	1	ug/l	88		77-121		
t-Butyl alcohol	N.D.	2.	5	ug/l	86		68-125		
Ethyl t-butyl ether	N.D.	0.5	1	ug/l	82		66-120		
Ethylbenzene	N.D.	0.5	1	ug/l	85		79-120		
di-Isopropyl ether	N.D.	0.5	1	ug/l	80		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	78		68-121		
Toluene	N.D.	0.5	1	ug/l	90		79-120		
Xylene (Total)	N.D.	0.5	1	ug/l	87		77-120		
Batch number: 12093D20A	Sample number(s): 6600707-6600710								
TPH-GRO N. CA water C6-C12	N.D.	50.	100	ug/l	100	100	75-135	0	30
Batch number: 120930004A	Sample number(s): 6600707-6600710								
TPH-DRO water C10-C28 w/Si Gel	N.D.	32.	100	ug/l	69		50-124		
Batch number: 120930006A	Sample number(s): 6600707-6600710								
Motor Oil C16-C36 w/Si Gel	N.D.	40.	120	ug/l					
Total TPH w/Si Gel	N.D.	40.	120	ug/l	73	75	50-129	3	20

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: F120981AA	Sample number(s): 6600707-6600710 UNSPK: P599674								
t-Amyl methyl ether	77	75	65-117	3	30				
Benzene	92	90	72-134	2	30				
t-Butyl alcohol	82	85	67-119	4	30				
Ethyl t-butyl ether	83	81	74-122	2	30				
Ethylbenzene	87	87	71-134	0	30				
di-Isopropyl ether	82	81	70-129	1	30				
Methyl Tertiary Butyl Ether	80	78	72-126	3	30				
Toluene	92	92	80-125	0	30				
Xylene (Total)	89	89	79-125	1	30				
Batch number: 120930004A	Sample number(s): 6600707-6600710 UNSPK: P600673								
TPH-DRO water C10-C28 w/Si Gel	80	67	19-173	18	20				

*- 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: 1299276
Reported: 04/11/12 at 07:53 PM

Surrogate Quality Control

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

Analysis Name: UST VOCs by 8260B - Water
Batch number: F120981AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6600707	88	99	98	92
6600708	85	97	97	91
6600709	87	100	98	97
6600710	90	102	97	88
Blank	89	102	97	87
LCS	88	101	97	91
MS	88	103	96	91
MSD	87	99	97	91
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 12093D20A

	Trifluorotoluene-F
6600707	93
6600708	95
6600709	92
6600710	94
Blank	93
LCS	116
LCSD	121
Limits:	63-135

Analysis Name: TPH-DRO water C10-C28 w/Si Gel
Batch number: 120930004A

	Orthoterphenyl
6600707	194*
6600708	161*
6600709	84
6600710	66
Blank	81
LCS	79
MS	87
MSD	74
Limits:	50-154

Analysis Name: TPH Fuels water w/Si Gel
Batch number: 120930006A

	Chlorobenzene	Orthoterphenyl
6600707	0*	189*
6600708	72	214*
6600709	64	82

*- 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.

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Quality Control Summary

Client Name: ChevronTexaco Group Number: 1299276
Reported: 04/11/12 at 07:53 PM

Surrogate Quality Control

6600710	44	53
Blank	52	81
LCS	44	83
LCSD	66	85
Limits:	28-152	52-131

*- 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.

246125

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 6600707-10 SCR#:

Ø33Ø12-Ø1 P. 6 OF 7

C# 1299276

Facility #: CHEVRON 91851
Site Address: 431 HEGENBERGER, OAKLAND
Chevron PM: HORNE Lead Consultant: CRA
Consultant/Office: CRA / EMERYVILLE
Consultant Prj. Mgr.: LEE
Consultant Phone #: 5104200700 Fax #: 5104209170
Sampler: GW
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 10 bran	8260 full scan	___ Oxygenates	Lead 7420 ☐ 7421 ☐	TPH mo 8015 10g Silica gel	DIPE, ETBE, TAME, TBA / By 8260			
B-1-W	W			12 03 26	0940		X		7	X	X	+				X	+			
B-2-W	W			12 03 26	1400		X		7	X	X	+				X	+			
B-3-W	W			12 03 26	1640		X		7	X	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
Email results and EDF to nlee@craworld.com

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

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
[signature]	032612	1815	SECURE LOCATION CRA	032612	1815
SECURE LOCATION CRA	3/30/12	1130	[signature]	3/30/12	1130
[signature]	3/30/12	1240	A. Salyer	30 MAR12	1240
Relinquished by ~~Commercial Carrier~~: A. Salyer 30 MAR12 ~~UPS~~ ~~FedEx~~ ~~Other~~			FEDEX		

Temperature Upon Receipt 1.1-1.4 C°
Custody Seals Intact? (Yes) No
[signature] 3/31/12 0935

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories *Where quality is a science.*

246127

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 6600707-10 SCR#:

Ø33Ø12-Ø1 P.2OF7

G# 1299276

Facility #: CHEVRON 91851
Site Address: 451 HEGENBERGER, OAKLAND
Chevron PM: HORNE Lead Consultant: CRA
Consultant/Office: CRA / EMERYVILLE
Consultant Prj. Mgr.: LEE
Consultant Phone #: 510 420 0700 Fax #: 510 420 9170
Sampler: GW
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 10 Gram	8260 full scan	Oxygenates	Lead 7420 ☐ 7421 ☐	TPHmo 8015 10g silica gel	DIPE, ETBE, TAME, TBA By 8260		
B-5-W	W			12 03 27	1040		X		7	X	X	X				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
report, email results & EDF to nlee@craworld.com

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) circled; 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
[signature]	03 27 12	1400	SECURE LOCATION CRA	03 27 12	1400
SECURE LOCATION CRA	3/30/12	1130	[signature]	3/30/12	1130
[signature]	3/30/12	1240	C. Salyer	30 MAR12	1240
Relinquished by ~~Commercial Carrier~~: C. Salyer; ~~UPS~~ ~~FedEx~~ ~~Other~~ 30MAR12 1630			FEDEX		

Temperature Upon Receipt 1.1-4.4 C°
Custody Seals Intact? (Yes) No
[signature] 3/31/12 0935

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Explanation of Symbols and Abbreviations

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

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

< less than - The number following the sign is the 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. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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