



**CONESTOGA-ROVERS
& ASSOCIATES**

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

April 29, 2010

Reference No. 311972

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

RECEIVED

9:35 am, Apr 30, 2010

Alameda County
Environmental Health

Re: Second Semi-Annual 2009 Monitoring Report and Annual Update
Chevron Service Station 9-9708
5910 MacArthur Boulevard
Oakland, California
Fuel Leak Case No. RO0000124

Dear Mr. Mark Detterman

Conestoga-Rovers & Associates (CRA) is submitting this *Second Semi-Annual 2009 Groundwater Monitoring Report and Annual Update* on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. On March 16, 2009, June 15, 2009, and November 30, 2009, Gettler-Ryan, Inc. (G-R) of Dublin, California monitored and sampled the site wells. Groundwater monitoring data is being submitted in accordance with the reporting requirements of 23CCR2652d. Presented below are the site background, current monitoring and sampling results, CRA's conclusions, and anticipated future activities.

SITE BACKGROUND

Site Description

The site is located at the east corner of the intersection of MacArthur Boulevard and Seminary Avenue in a commercial and residential section of Oakland, California (Figure 1). The site is a Chevron retail gasoline service station consisting of a station building, three 10,000-gallon underground storage tanks (USTs) and four fuel dispenser islands (Figure 2). The USTs share a common tank pit in the southwest corner of the site. The site is approximately 100 feet above mean sea level with surrounding topography sloping toward the southwest. A summary of previous investigations conducted to date at the site is presented as Attachment A.

Equal
Employment Opportunity
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Site Geology

Sediments in this region consist of “late Pleistocene alluvium consisting of weakly consolidated slightly weathered poorly sorted irregular interbedded clay, silt, sand, and gravel”.¹ Soils beneath the site consist primarily of sandy clay interbedded with clayey gravel, underlain by a low-permeability clay and interbedded silty sands and sandy silts to total depth explored of 41.5 feet below grade (fbg).

Hydrogeology

The site is located in the East Bay sub-basin, which occupies an elongated, northwest trending flat alluvial plain. The basin is bounded by San Francisco Bay to the west, San Pablo Bay to the north, the Hayward Fault to the east, and the southern boundary is defined by the northern extent of the Alameda County Water District. Groundwater in this region has been identified as having potential beneficial agricultural, municipal, domestic, and industrial uses. Groundwater occurs principally in unconsolidated sediments of Quaternary age.² Groundwater beneath the site has been monitored quarterly from May 1997 to June 2009 and semi-annually from November 2009 to date. There are currently three onsite and three offsite wells. Historical depth to groundwater ranges between 8.37 fbg (MW-6) to 15.35 fbg (MW-2). Groundwater flows consistently toward the northwest.

RESULTS OF 2009 MONITORING EVENTS

Groundwater Monitoring

On March 16, 2009, June 15, 2009, and November 30, 2009, G-R gauged and sampled wells MW-1 through MW-6. Depth to groundwater ranged from 9.51 (MW-6, March 2009) to 15.28 fbg (MW-2, June 2009). Groundwater consistently flowed toward the northwest at a gradient ranging from 0.01 to 0.05. G-R’s first and second quarter *Groundwater Monitoring and Sampling Reports* were previously submitted to Alameda County Environmental Health and uploaded to Geotracker. G-R’s December 17, 2009 *Groundwater Monitoring and Sampling Report* is included as Attachment B. The most recent total petroleum hydrocarbons as gasoline (TPHg), benzene and methyl tertiary butyl ether (MTBE) concentrations are included on Figure 2.

¹ *Flatland Deposits of the San Francisco Bay Region, California: U.S. Geological Survey Professionals Paper 943;* E.J. Helley and others. 1979.

² Table 2-2 Existing and Potential Beneficial Uses in Groundwater in Identified Basins; *Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin;* California Regional Water Quality Control Board- San Francisco Bay Region, January 18, 2007.



Current hydrocarbon concentrations are presented and compared to environmental screening levels (ESLs) where groundwater is a potential source of drinking water³ in Table A. TPHg, benzene, toluene, ethylbenzene, xylenes (BTEX), and MTBE concentrations are within historical ranges and consistent with seasonal fluctuations.

TABLE A. HYDROCARBONS IN GROUNDWATER							
	<i>Date</i>	<i>TPHg</i>	<i>Benzene</i>	<i>Toluene</i>	<i>Ethylbenzene</i>	<i>Xylenes</i>	<i>MTBE</i>
<i>Groundwater ESLs (Table F-1a)</i>		100	1	40	30	20	5
		<i>concentrations in micrograms per liter (µg/L)</i>					
MW-1	3/16/2009	68	<0.5	<0.5	<0.5	<0.5	19
	6/15/2009	210	3	<0.5	<0.5	<0.5	21
	11/30/2009	61	<0.5	<0.5	<0.5	<0.5	21
MW-2	3/16/2009	<50	<0.5	<0.5	<0.5	<0.5	6
	6/15/2009	1,500	29	1	5	4	12
	11/30/2009	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3	3/16/2009	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	6/15/2009	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	11/30/2009	<50	<0.5	<0.5	<0.5	<1.0	<0.5
MW-4	3/16/2009	<50	<0.5	<0.5	<0.5	<0.5	1
	6/15/2009	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	11/30/2009	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	3/16/2009	720	<0.5	<0.5	<0.5	<0.5	4
	6/15/2009	490	<0.5	<0.5	<0.5	<0.5	2
	11/30/2009	330	<0.5	<0.5	<0.5	<0.5	3
MW-6	3/16/2009	<50	<0.5	<0.5	<0.5	<0.5	2
	6/15/2009	<50	<0.5	<0.5	<0.5	<0.5	0.5
	11/30/2009	<50	<0.5	<0.5	<0.5	<0.5	0.8

³ *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Prepared by California Regional Water Quality Control Board San Francisco Bay Region, Interim Final - November 2007, (Revised May 2008), Table F-1a-Groundwater Screening Levels-Current or Potential Drinking Water Resource.



Dissolved Hydrocarbon Delineation

The extent of hydrocarbons in groundwater is adequately defined given the low source area concentrations detected and based on the steadily decreasing hydrocarbon concentrations trends.

CONCLUSIONS

The 2009 sampling results indicate:

- Dissolved hydrocarbon concentrations continue to decrease since monitoring began in 1997.
- For 2009, dissolved hydrocarbons in groundwater were below ESLs in 88.8 percent of the monitoring well samples.
- The dissolved hydrocarbon plume is adequately defined and concentrations are decreasing in all wells, indicating that the plume has reached its maximum extent and is decreasing in size and mass due to natural attenuation.

ANTICIPATED FUTURE ACTIVITIES

Semi-Annual Groundwater Sampling

G-R will gauge and sample site wells during second and fourth quarters 2010. G-R will submit a first semi-annual 2010 report within 60 days of the sampling date. CRA will prepare a summary of 2010 site conditions and submit the second semi-annual sampling report with additional recommendations within 60 days of the sampling date.

Low-Risk Case Closure Review

Based on over 17 years of groundwater data and declining concentrations, CRA will review this site for low-risk case closure.



**CONESTOGA-ROVERS
& ASSOCIATES**

April 29, 2010

Reference No. 311972

- 5 -

We appreciate the opportunity to work with you on this project. Please contact Kiersten Hoey at (510) 420-3347, if you have any questions or comments regarding this report.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in black ink, appearing to read 'David Grunat', written in a cursive style.

David Grunat

A handwritten signature in black ink, appearing to read 'N. Scott MacLeod', written in a cursive style.

N. Scott MacLeod, P.G. #5747

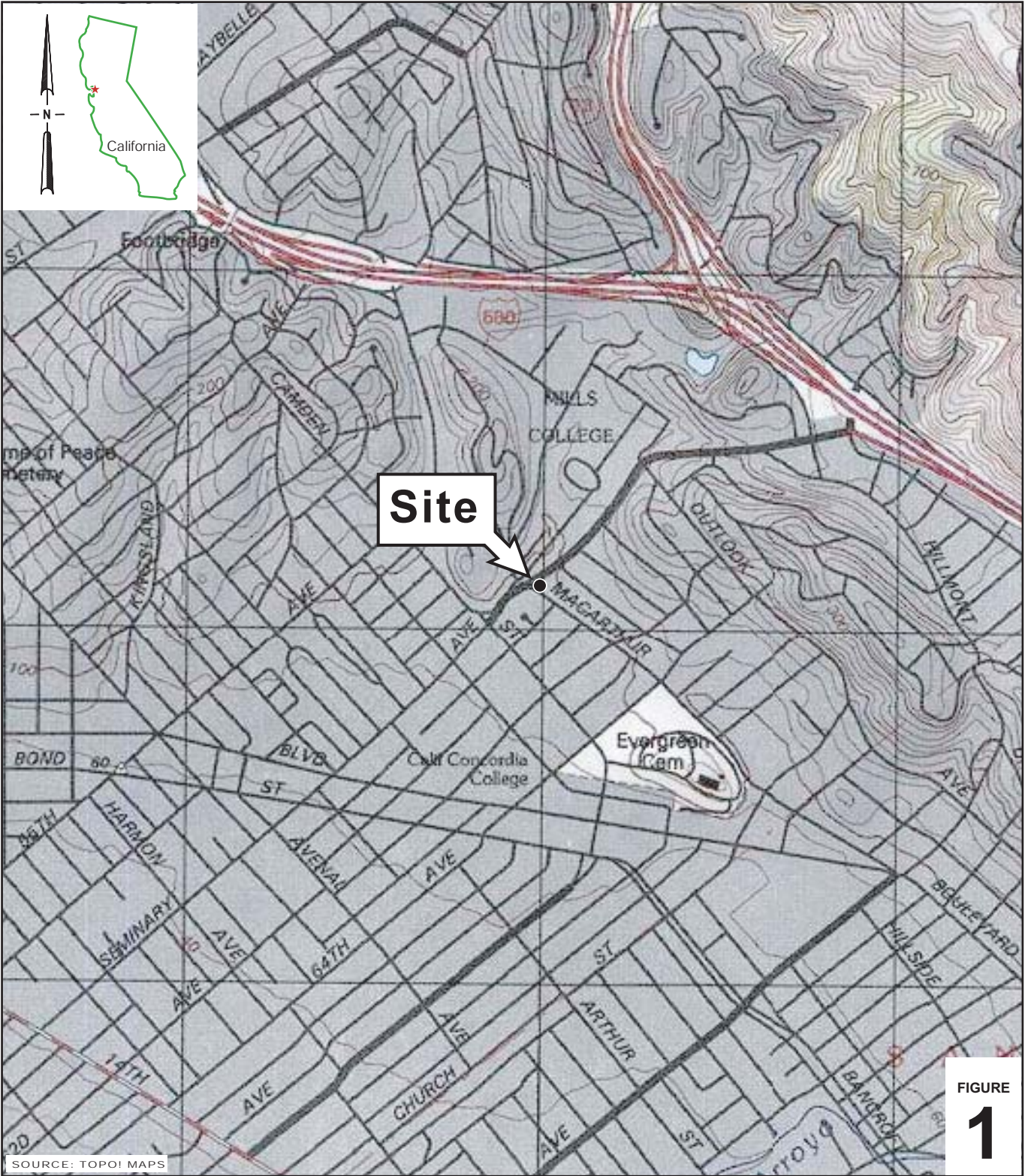


DG/doh/3
Encl.

Figure 1	Site Vicinity Map
Figure 2	Hydrocarbon Concentrations in Groundwater - November 30, 2009
Attachment A	Summary of Previous Environmental Work
Attachment B	December 28, 2009 G-R <i>Groundwater Monitoring and Sampling Report</i>

cc: Mr. Ian Robb, Chevron

FIGURES



I:\Chevron\3119--1311972_9-9708 Oakland\311972 Pre September 2008\Figures\9-9708_VICINITY_MAP_A1

SOURCE: TOPOI MAPS

FIGURE 1

0 1/8 1/4 1/2 1
SCALE : 1" = 1/4 MILE

Chevron Service Station 9-9708
5910 Mac Arthur Boulevard
Oakland, California



CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

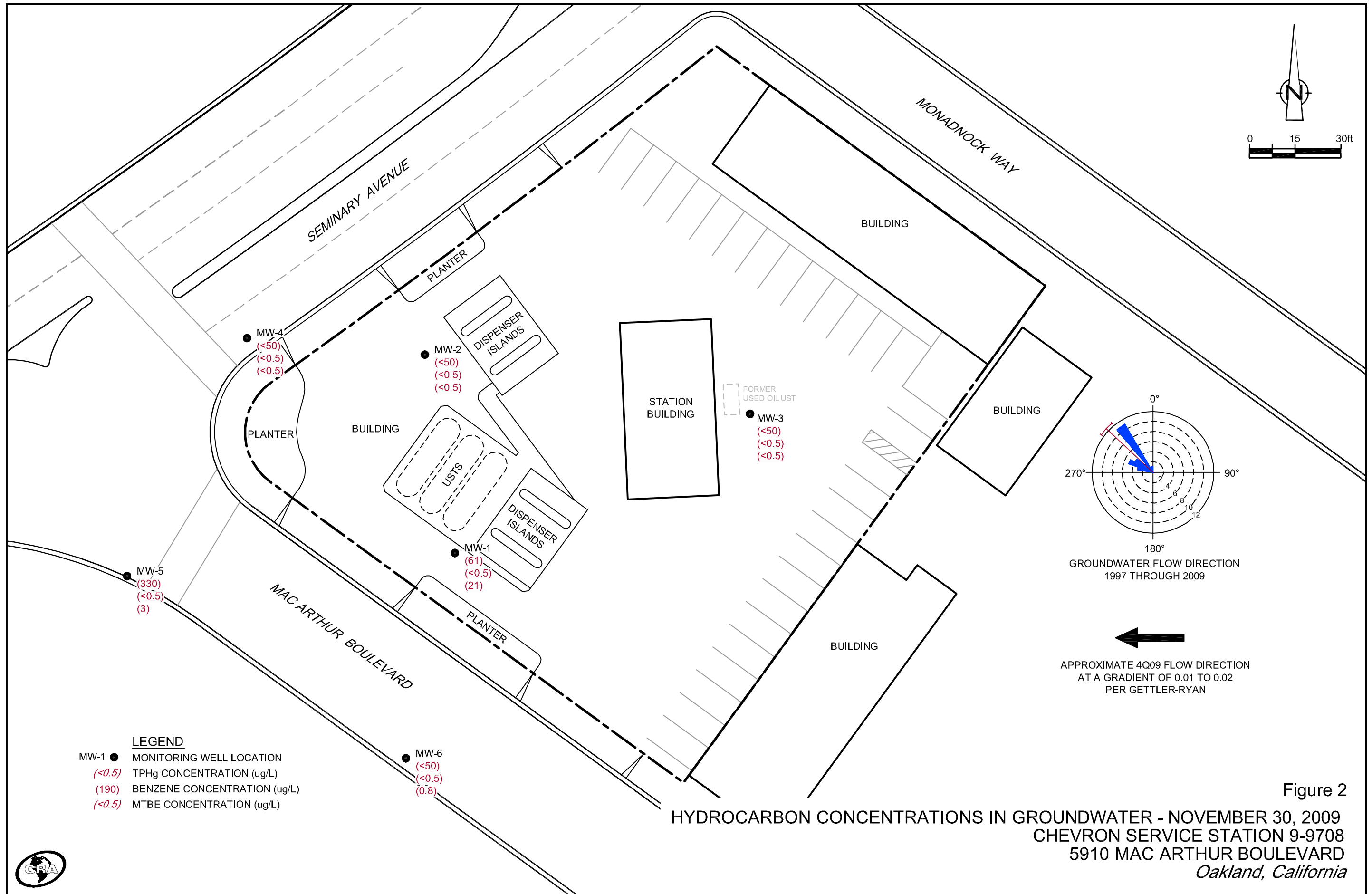


Figure 2
 HYDROCARBON CONCENTRATIONS IN GROUNDWATER - NOVEMBER 30, 2009
 CHEVRON SERVICE STATION 9-9708
 5910 MAC ARTHUR BOULEVARD
 Oakland, California



ATTACHMENT A

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK
CHEVRON SERVICE STATION 9-9708

May 1997 Monitoring Well Installation

Gettler-Ryan, Inc. (G-R) installed onsite monitoring wells MW-1, MW-2 and MW-3 to 41.5 feet below grade (fbg) as part of a real estate transaction. Hydrocarbons were detected in soil from depths between 11 and 16 fbg. Total petroleum hydrocarbons as gasoline (TPHg), benzene and methyl tertiary butyl ether (MTBE) were detected in soil samples from MW-1 and MW-2. Total oil and grease was detected in soil samples collected from MW-3. TPHg, benzene and MTBE were detected in groundwater samples from MW-1 and MW-2. Total petroleum hydrocarbons as diesel (TPHd) were detected in groundwater samples collected from MW-3. Additional information is available in G-R's June 27, 1997 *Subsurface Investigation Report*.

April 1999 Monitoring Well Installation

G-R installed offsite monitoring well MW-4 to 20 fbg to delineate the downgradient extent of MTBE in groundwater. One soil sample was collected at 11.5 fbg, just above the groundwater table. No TPHg, benzene or MTBE were detected in soil. TPHg was detected in a groundwater sample at 140 micrograms per liter ($\mu\text{g/L}$). No benzene, MTBE or other oxygenates were detected in groundwater. Additional information is available in G-R's June 8, 1999 *Monitoring Well Installation Report*.

June 2000 Interim Corrective Action Plan

Delta Environmental Consultants, Inc. (Delta) prepared an Interim Corrective Action Plan which included proposing two additional downgradient monitoring wells, conducting a sensitive receptor survey and overpurguing MW-1 periodically. Additional information is available in Delta's June 30, 2000 *Interim Corrective Action Plan*.

December 2000 Sensitive Receptor Survey

Delta reviewed Department of Water Resources records and identified two cathodic protection wells and one irrigation well within 2,000 feet of the site. Delta also surveyed potential sensitive receptors in the site vicinity. No domestic or municipal supply wells or basements were identified in the search area. Utility vaults and major utilities were located and several were identified as potential pathways for dissolved and vapor-phase hydrocarbon migration. The nearest surface water bodies were located 1,000 feet south (downgradient) and 2,500 feet northeast (upgradient) of the site. Additional information is available in Delta's August 1, 2001 *Sensitive Receptor Survey Report*.

August 2001 Overpurge Event

Delta extracted a total of 50 gallons of groundwater from MW-1 and MW-2. Post-purge analytical results indicated that overpurging did not reduce dissolved hydrocarbon concentrations in MW-1 and MW-2. Based on the lack of water quality improvement, cost and slow recharge rates, Delta recommended discontinuing overpurge events. Additional information is available in Delta's January 2, 2002 *Interim Corrective Action Evaluation*.

January 2002 Monitoring Well Installation

G-R installed monitoring wells MW-5 and MW-6 to 20 fbg to further delineate the extent of dissolved hydrocarbons south of MW-1 and MW-4. No benzene or MTBE were detected in the four soil samples collected. TPHg and TEX constituents were detected in soil samples collected from 10 fbg, but not in shallower samples. Hydrocarbons detected in groundwater include up to 4,900 µg/L TPHg, 18 µg/L benzene, and 290 µg/L MTBE. Additional information is available in G-R's April 11, 2002 *Monitoring Well Installation Results Report*.

ATTACHMENT B

DECEMBER 28, 2009 G-R *GROUNDWATER MONITORING AND SAMPLING REPORT*



TRANSMITTAL

December 28, 2009

G-R #386395

TO: Ms. Charlotte Evans
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608
(VIA PDF)

CC: Mr. Ian Robb
Chevron Environmental
Management Company
6111 Bollinger Canyon Road
Room 3612
San Ramon, California 94583
(NO COPY)

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: **Chevron Service Station**
#9-9708
5910 MacArthur Boulevard
Oakland, California
RO 0000124

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	December 17, 2009	Groundwater Monitoring and Sampling Report Second Semi-Annual Event of November 30, 2009

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced items for **your use and distribution (including PDF submittal of the entire report to GeoTracker)**:

- Mr. Steven Plunkett, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577 **(Distributed by CRA via PDF)**
- Mr. Nisson Saidion, 5910 MacArthur Boulevard, Oakland, CA 94605

Enclosures

trans/9-9708-IR



Ian Robb
Project Manager
Marketing Business Unit

Chevron Environmental
Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel: (925) 842-9496
Fax: (925) 842-8370
ianrobb@chevron.com

December 28, 2009

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

RE: Chevron Service Station# 9-9708

Address 5910 MacArthur Blvd., Oakland, California

I have reviewed the attached routine groundwater monitoring report dated December 28, 2009.

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 Gettler-Ryan Inc., upon whose assistance and advice I have relied.

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

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Ian Robb

Attachment: Report

WELL CONDITION STATUS SHEET

Client/Facility #: Chevron #9-9708
 Site Address: 5910 Macarthur Blvd.
 City: Oakland, CA

Job # 386395
 Event Date: 11-30-09
 Sampler: Joe

WELL ID	Vault Frame Condition	Gasket/O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	O.K	O-ring (m)	O.K	O.K	O.K	O.K	O.K	N	N	8" Boart/L.13	No
MW-2	↓	O-ring (m)	↓	All (3) S	↓	↓	O.K	↓	↓	"	↓
MW-3	↓	O.K	↓	All (3) S	↓	↓	TOC extends too far	↓	↓	"	↓
MW-4	↓	↓	↓	O.K	↓	↓	O.K	↓	↓	6" Morrison/2	↓
MW-5	↓	↓	↓	↓	↓	↓	↓	↓	↓	8" Morrison/2	↓
MW-6	↓	↓	↓	↓	↓	↓	↓	↓	↓	"	↓

Comments MW-3 TOC extends too far; touches bottom of box cover. Plug^{and padlock} can't be secured properly.
MW-5 box is below grade due to the new asphaltting.



GETTLER - RYAN Inc.



December 17, 2009
G-R Job #386395

Mr. Ian Robb
Chevron Environmental Management Company
6111 Bollinger Canyon Road, Room 3612
San Ramon, CA 94583

RE: Second Semi-Annual Event of November 30, 2009
Groundwater Monitoring & Sampling Report
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

Dear Mr. Robb:


This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached. All groundwater and decontamination water generated during sampling activities was removed from the site, per the Standard Operating Procedure.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,


Deanna L. Harding
Project Coordinator


Douglas J. Lee
Senior Geologist, P.G. No. 6882

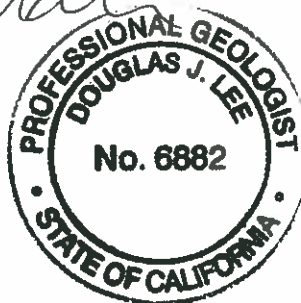
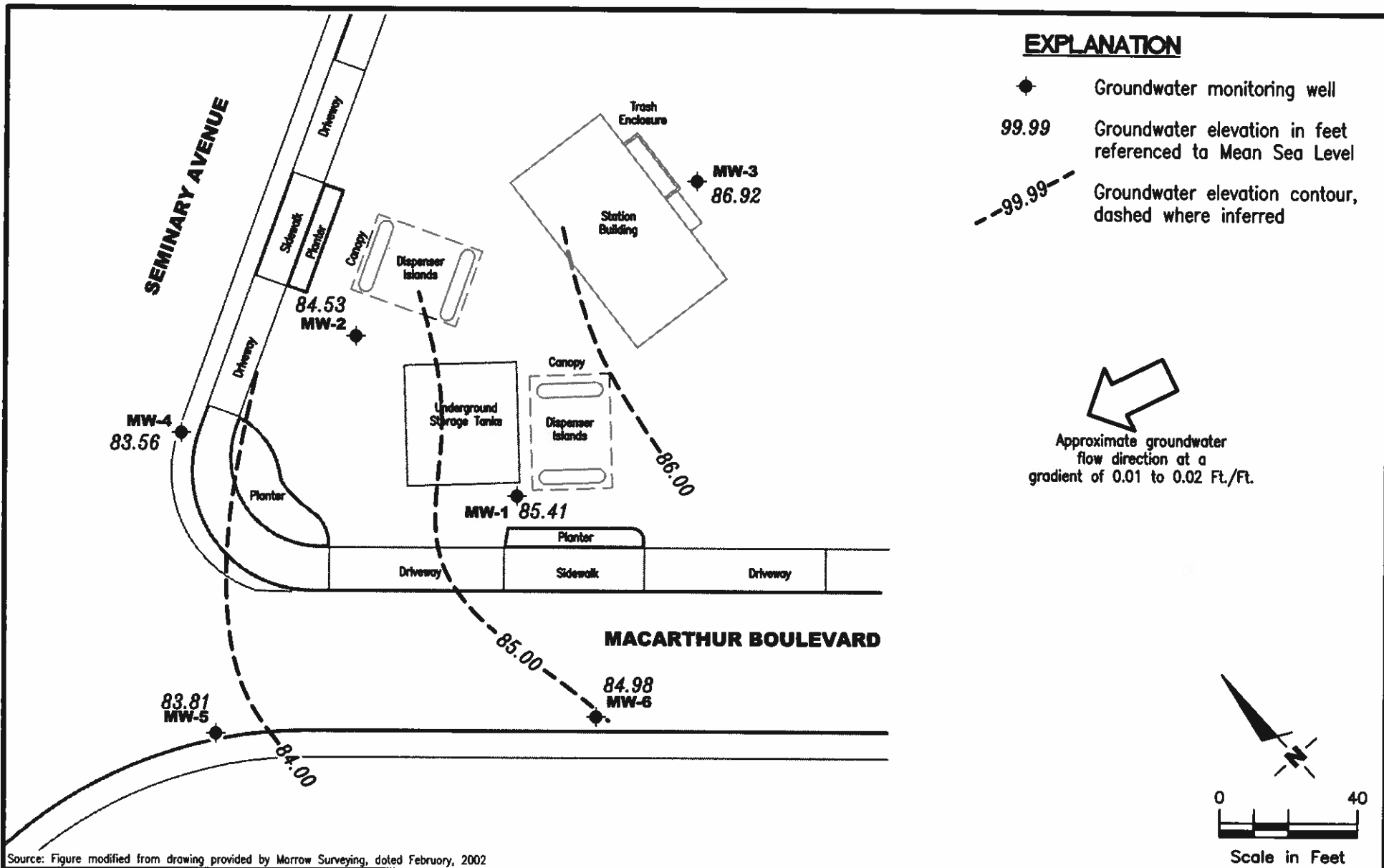


Figure 1: Potentiometric Map
Table 1: Groundwater Monitoring Data and Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



Source: Figure modified from drawing provided by Morrow Surveying, dated February, 2002

GETTLER - RYAN INC.
 6747 Sierra Court, Suite J
 Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
 Chevron Service Station #9-9708
 5910 MacArthur Boulevard
 Oakland, California

FIGURE

1

PROJECT NUMBER
 386395

REVIEWED BY

DATE
 November 30, 2009

REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC* (μL)	GWE (msl)	DTW (ft)	TPH-DRO ($\mu\text{g/L}$)	TPH-GRO ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)	1,2-DCB♦ ($\mu\text{g/L}$)	1,2-DCA♦ ($\mu\text{g/L}$)	HVOCs♦ ($\mu\text{g/L}$)
MW-1														
05/29/97	96.61	84.41	12.20	--	--	--	--	--	--	--	--	--	--	--
06/04/97	96.61	84.40	12.21	--	380	58	1.2	5.4	40	85	--	--	--	--
09/16/97	96.61	83.84	12.77	--	420	120	<0.5	19	2.7	28	--	--	--	--
12/17/97	96.61	85.43	11.18	--	210 ¹	43	0.61	11	0.61	69	--	--	--	--
03/18/98	96.61	84.59	12.02	--	210 ¹	47	<0.5	8.2	<0.5	92	--	--	--	--
06/28/98	96.61	83.99	12.62	--	<50	<0.5	<0.5	<0.5	<0.5	66	--	--	--	--
09/07/98	96.61	82.32	14.29	--	<50	6.7	<0.5	<0.5	<0.5	92	--	--	--	--
12/29/98	96.61	83.18	13.43	--	<100	<1.0	<1.0	2.24	1.14	278	--	--	--	--
03/11/99	96.61	83.80	12.81	--	110	<1.0	<1.0	7.95	<1.0	418	--	--	--	--
05/04/99	96.61	83.85	12.76	--	--	--	--	--	--	--	--	--	--	--
06/29/99	96.61	84.06	12.55	--	352	34.6	<2.5	51	<2.5	780	--	--	--	--
09/29/99	96.61	83.21	13.40	--	647	167	<2.5	58.6	14.8	1,570	--	--	--	--
12/08/99	96.61	85.70	10.91	--	481	121	1.16	17.9	11	3,910	--	--	--	--
03/01/00	96.61	85.46	11.15	--	2,580	481	6.84	86.6	41.9	5,460	--	--	--	--
06/23/00	96.61	83.68	12.93	--	900 ⁴	120	<5.0	22	6.7	5,400	--	--	--	--
09/30/00	96.61	83.07	13.54	--	1,300 ⁴	450	5.5	170	11	2,000	--	--	--	--
12/08/00	96.61	83.63	12.98	--	<1,000	41.7	<10.0	11.5	<10.0	6,030	--	--	--	--
03/01/01	96.61	84.94	11.67	--	340 ⁷	36.6	<0.500	10.1	<0.500	3,360	--	--	--	--
06/19/01	96.61	83.94	12.67	--	610 ⁴	110	<5.0	9.2	<5.0	110	--	--	--	--
09/18/01	96.61	83.48	13.13	--	200	32	0.55	3.0	<1.5	1,600	--	--	--	--
12/26/01	96.61	85.14	11.47	--	140	9.1	<0.50	1.2	<1.5	1,900	--	--	--	--
03/06/02	97.52	86.38	11.14	--	93	7.0	<0.50	0.72	<1.5	1,000	--	--	--	--
06/21/02	97.52	84.92	12.60	--	93	8.2	<0.50	1.2	<1.5	1,300	--	--	--	--
09/27/02	97.52	84.38	13.14	--	78	1.5	<0.50	<0.50	<1.5	1,200	--	--	--	--
12/26/02	97.52	87.74	9.78	--	86	1.7	<0.50	<0.50	<1.5	600	--	--	--	--
03/28/03	97.52	85.96	11.56	--	190	24	<0.50	2.4	<1.5	1,200	--	--	--	--
06/16/03 ¹¹	97.52	85.96	11.56	--	<50	3	<0.5	<0.5	<0.5	220	--	--	--	--
09/15/03 ¹¹	97.52	85.21	12.31	--	53	3	<0.5	<0.5	<0.5	580	<50	--	--	--
12/15/03 ¹¹	97.52	86.35	11.17	--	<50	<0.5	0.7	<0.5	0.8	410	<50	--	--	--
03/05/04 ¹¹	97.52	86.09	11.43	--	760	110	2	12	2	460	<50	--	--	--
06/18/04 ¹¹	97.52	85.40	12.12	--	1,400	200	3	7	2	740	<50	--	--	--
09/17/04 ¹¹	97.52	85.12	12.40	--	920	48	<0.5	<0.5	<0.5	340	<50	--	--	--
12/17/04 ¹¹	97.52	86.78	10.74	--	190	9	<0.5	<0.5	<0.5	110	<50	--	--	--
03/14/05 ¹¹	97.52	87.67	9.85	--	120	5	<0.5	<0.5	<0.5	130	<50	--	--	--
06/13/05 ¹¹	97.52	85.61	11.91	--	110	6	<0.5	<0.5	<0.5	130	<50	--	--	--
09/12/05 ¹¹	97.52	85.31	12.21	--	290	10	<0.5	<0.5	<0.5	90	<50	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	ETHANOL (µg/L)	1,2-DCB♦ (µg/L)	1,2-DCA♦ (µg/L)	HVOCs♦ (µg/L)
MW-1 (cont)														
12/12/05 ¹¹	97.52	86.50	11.02	--	150	1	<0.5	<0.5	0.8	53	<50	--	--	--
03/13/06 ¹¹	97.52	87.97	9.55	--	82	0.8	<0.5	<0.5	<0.5	66	<50	--	--	--
06/12/06 ¹¹	97.52	86.52	11.00	--	140	4	<0.5	<0.5	<0.5	65	<50	--	--	--
09/11/06 ¹¹	97.52	85.99	11.53	--	210	3	<0.5	<0.5	<0.5	32	<50	--	--	--
12/15/06 ¹¹	97.52	88.13	9.39	--	190	1	<0.5	<0.5	<0.5	31	<50	--	--	--
03/16/07 ¹¹	97.52	86.02	11.50	--	99	0.8	<0.5	<0.5	<0.5	41	<50	--	--	--
06/15/07 ¹¹	97.52	86.46	11.06	--	210	10	<0.5	<0.5	<0.5	49	<50	--	--	--
09/14/07 ¹¹	97.52	85.14	12.38	--	270	6	<0.5	<0.5	<0.5	35	<50	--	--	--
12/07/07 ¹¹	97.52	84.88	12.64	--	90	0.7	<0.5	<0.5	<0.5	43	<50	--	--	--
03/07/08 ¹¹	97.52	85.54	11.98	--	110	<0.5	<0.5	<0.5	<0.5	32	<50	--	--	--
06/06/08 ¹¹	97.52	86.18	11.34	--	180	0.7	<0.5	<0.5	<0.5	29	<50	--	--	--
09/05/08 ¹¹	97.52	85.39	12.13	--	200	1	<0.5	<0.5	<0.5	20	<50	--	--	--
12/15/08 ¹¹	97.52	85.31	12.21	--	150	<0.5	<0.5	<0.5	<0.5	19	<50	--	--	--
03/16/09 ¹¹	97.52	87.60	9.92	--	68	<0.5	<0.5	<0.5	<0.5	19	<50	--	--	--
06/15/09 ¹¹	97.52	85.97	11.55	--	210	3	<0.5	<0.5	<0.5	21	<50	--	--	--
11/30/09 ¹¹	97.52	85.41	12.11	--	61	<0.5	<0.5	<0.5	<0.5	21	<50	--	--	--
MW-2														
05/29/97	96.91	83.85	13.06	--	--	--	--	--	--	--	--	--	--	--
06/04/97	96.91	83.96	12.95	--	1,600	120	5.9	32	15	2,100	--	--	--	--
09/16/97	96.91	83.92	12.99	--	1,100	23	3.2	7.0	2.5	1,200	--	--	--	--
12/17/97	96.91	84.73	12.18	--	7,100 ¹	650	69	610	69	4,700/2,600 ²	--	--	--	--
03/18/98	96.91	84.21	12.70	--	5,900 ¹	250	<50	98	<50	12,000/7,100 ²	--	--	--	--
06/28/98	96.91	83.98	12.93	--	4,300	400	<10	<10	<10	3,000/4,000 ²	--	--	--	--
09/07/98	96.91	83.94	12.97	--	3,700	220	5.1	38	7.6	1,300/1,400 ²	--	--	--	--
12/29/98	96.91	83.99	12.92	--	6,500	573	26.8	131	33.9	2,660	--	--	--	--
03/11/99	96.91	84.04	12.87	--	4,970	651	30.8	60.3	<5.0	2,600	--	--	--	--
05/04/99	96.91	84.05	12.86	--	--	--	--	--	--	--	--	--	--	--
06/29/99	96.91	83.98	12.93	--	2,030	238	11.6	8.98	<5.0	540	--	--	--	--
09/29/99	96.91	84.02	12.89	--	2,000	320	10.4	16.5	20.3	642	--	--	--	--
12/08/99	96.91	86.18	10.73	--	96.8	2.74	<0.5	<0.5	<0.5	<2.5	--	--	--	--
03/01/00	96.91	84.31	12.60	--	<50	6.92	<0.5	<0.5	<0.5	254	--	--	--	--
06/23/00	96.91	83.98	12.93	--	1,700 ⁴	490	7.5	<5.0	7.7	770	--	--	--	--
09/30/00	96.91	83.95	12.96	--	2,000 ⁴	420	14	<10	<10	380	--	--	--	--
12/08/00	96.91	83.98	12.93	--	984	54.9	<2.50	4.15	<2.50	306	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC* (<i>fl.</i>)	GWE (<i>msl</i>)	DTW (<i>fl.</i>)	TPH-DRO (<i>µg/L</i>)	TPH-GRO (<i>µg/L</i>)	B (<i>µg/L</i>)	T (<i>µg/L</i>)	E (<i>µg/L</i>)	X (<i>µg/L</i>)	MTBE (<i>µg/L</i>)	ETHANOL (<i>µg/L</i>)	1,2-DCB♦ (<i>µg/L</i>)	1,2-DCA♦ (<i>µg/L</i>)	HVOCs♦ (<i>µg/L</i>)
MW-2 (cont)														
03/01/01	96.91	84.15	12.76	--	<50.0	4.16	<0.500	<0.500	<0.500	245	--	--	--	--
06/19/01	96.91	83.23	13.68	--	1,700 ⁴	250	9.2	<5.0	6.9	410	--	--	--	--
09/18/01	96.91	83.96	12.95	--	1,700	42	1.9	2.0	2.9	280	--	--	--	--
12/26/01	96.91	83.88	13.03	--	<50	0.50	<0.50	<0.50	<1.5	120	--	--	--	--
03/06/02	97.81	84.82	12.99	--	670	170	2.5	<0.50	<1.5	410	--	--	--	--
06/21/02	97.81	84.10	13.71	--	1,800	120	7.3	2.0	3.1	440	--	--	--	--
09/27/02	97.81	82.51	15.30	--	180	11	1.0	<0.50	<1.5	4,700	--	--	--	--
12/26/02	97.81	84.81	13.00	--	<50	<0.50	<0.50	<0.50	<1.5	160	--	--	--	--
03/28/03	97.81	84.46	13.35	--	580	88	2.2	22	12	280	--	--	--	--
06/16/03 ¹¹	97.81	83.10	14.71	--	200	1	29	<0.5	<0.5	1,400	--	--	--	--
09/15/03 ¹¹	97.81	82.78	15.03	--	130	<1	<1	<1	<1	2,400	<130	--	--	--
12/15/03 ¹¹	97.81	84.84	12.97	--	<50	<0.5	<0.5	<0.5	<0.5	63	<50	--	--	--
03/05/04 ¹¹	97.81	84.79	13.02	--	<50	0.8	<0.5	<0.5	<0.5	49	<50	--	--	--
06/18/04 ¹¹	97.81	82.72	15.09	--	60	<0.5	<0.5	<0.5	<0.5	1,900	<50	--	--	--
09/17/04 ¹¹	97.81	82.46	15.35	--	66	<1	<1	<1	<1	2,100	<130	--	--	--
12/17/04 ¹¹	97.81	84.61	13.20	--	120	7	<0.5	<0.5	0.7	91	<50	--	--	--
03/14/05 ¹¹	97.81	84.79	13.02	--	390	69	0.8	10	2	74	<50	--	--	--
06/13/05 ¹¹	97.81	82.87	14.94	--	<50	6	<0.5	<0.5	<0.5	10	<50	--	--	--
09/12/05 ¹¹	97.81	82.62	15.19	--	77	<1	<1	<1	<1	1,400	<100	--	--	--
12/12/05 ¹¹	97.81	84.32	13.49	--	14,000	1,500	1,100	660	3,500	82	<250	--	--	--
03/13/06 ¹¹	97.81	84.97	12.84	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/12/06 ¹¹	97.81	83.19	14.62	--	<50	<0.5	<0.5	<0.5	<0.5	81	<50	--	--	--
09/11/06 ¹¹	97.81	82.59	15.22	--	73	<0.5	<0.5	<0.5	<0.5	170	<50	--	--	--
12/15/06 ¹¹	97.81	84.86	12.95	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	--	--	--
03/16/07 ¹¹	97.81	84.41	13.40	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/17/07 ¹¹	97.81	83.14	14.67	--	<50	0.9	<0.5	<0.5	<0.5	46	<50	--	--	--
09/14/07 ¹¹	97.81	82.70	15.11	--	<50	0.7	<0.5	<0.5	<0.5	170	<50	--	--	--
12/07/07 ¹¹	97.81	82.46	15.35	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
03/07/08 ¹¹	97.81	83.90	13.91	--	<50	<0.5	<0.5	<0.5	<0.5	3	<50	--	--	--
06/06/08 ¹¹	97.81	83.01	14.80	--	<50	3	<0.5	<0.5	<0.5	78	<50	--	--	--
09/05/08 ¹¹	97.81	82.78	15.03	--	<50	<0.5	<0.5	<0.5	<0.5	130	<50	--	--	--
12/15/08 ¹¹	97.81	82.63	15.18	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
03/16/09 ¹¹	97.81	84.36	13.45	--	<50	<0.5	<0.5	<0.5	<0.5	6	<50	--	--	--
06/15/09 ¹¹	97.81	82.53	15.28	--	1,500	29	1	5	4	12	<50	--	--	--
11/30/09 ¹¹	97.81	84.53	13.28	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC* (<i>l</i>)	GWE (<i>msl</i>)	DTW (<i>l</i>)	TPH-DRO (<i>µg/L</i>)	TPH-GRO (<i>µg/L</i>)	B (<i>µg/L</i>)	T (<i>µg/L</i>)	E (<i>µg/L</i>)	X (<i>µg/L</i>)	MTBE (<i>µg/L</i>)	ETHANOL (<i>µg/L</i>)	1,2-DCB♦ (<i>µg/L</i>)	1,2-DCA♦ (<i>µg/L</i>)	HVOCs♦ (<i>µg/L</i>)
MW-3														
05/29/97	97.86	86.41	11.45	--	--	--	--	--	--	--	--	--	--	--
06/04/97 ³	97.86	86.58	11.28	1200	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	1.0	--
09/16/97	97.86	85.67	12.19	2,700 ¹	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--
12/17/97	97.86	87.06	10.80	1,200 ¹	<50	0.9	0.53	<0.5	<0.5	<2.5	--	--	--	--
03/18/98	97.86	86.98	10.88	820 ¹	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
06/28/98	97.86	86.26	11.60	1,100 ¹	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	0.99	ND	<0.5-<5.0
09/07/98	97.86	85.64	12.22	1,100 ¹	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	0.79	0.54	--
12/29/98	97.86	86.06	11.80	1,760 ¹	185	<0.5	<0.5	<0.5	0.669	<2.0	--	1.04	0.578	<0.5-<5.0
03/11/99	97.86	86.83	11.03	1440	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--	<1.0	<1.0	<1.0-<20
05/04/99	97.86	86.43	11.43	--	--	--	--	--	--	--	--	--	--	--
06/29/99	97.86	85.71	12.15	690 ¹	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	0.754	<0.5	<0.5-<5.0
09/29/99	97.86	INACCESSIBLE			--	--	--	--	--	--	--	--	--	--
12/08/99	97.86	88.43	9.43	1,000 ¹	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	0.66	<0.5-<5.0
03/01/00	97.86	87.16	10.70	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	0.821	0.984	<0.5-<5.0
06/23/00	97.86	85.96	11.90	2,600 ⁵	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	<2.0	<2.0	<0.5-<2.0
09/30/00	97.86	85.45	12.41	1,100 ⁵	<50	<0.50	0.61	<0.50	0.82	2.7	--	<2.0	<2.0	<0.50-<2.0
12/08/00	97.86	85.78	12.08	870 ⁵	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	<2.0	<2.0	<0.50-<10
03/01/01	97.86	87.09	10.77	1,060 ⁶	60.9 ⁷	<0.500	<0.500	<0.500	<0.500	<2.50	--	0.545	0.528	<0.500-<5.00
06/19/01	97.86	85.87	11.99	120 ⁵	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	<1.2	<1.6	<0.50-<2.0
09/18/01	97.86	85.19	12.67	4,800	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<2 ⁸	<1-<2 ⁸
12/26/01	97.86	86.92	10.94	5,000	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<2 ⁸	<1-<2.0 ⁸
03/06/02	98.78	87.20	11.58	30,000	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<2 ⁸	<1-<2.0 ⁸
06/21/02	98.78	86.23	12.55	3,800 ¹⁰	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<2 ⁸	<1-<2.0 ⁸
09/27/02	98.78	85.93	12.85	2,000	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<2 ⁸	<1-<2.0 ⁸
12/26/02	98.78	87.87	10.91	3,600	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<2 ⁸	<1-<2.0 ⁸
03/28/03	98.78	86.77	12.01	2,100	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1 ⁸	<1 ⁸	<0.8-<2 ⁸
06/16/03 ¹¹	98.78	86.79	11.99	2,400	<50	<0.5	<0.5	<0.5	<1	<0.5	--	<1 ⁸	0.8 ⁸	<0.5-<2 ⁸
09/15/03 ¹¹	98.78	86.07	12.71	4,300	<50	<0.5	<0.5	<0.5	<1	<0.5	<50	<1 ⁸	0.8 ⁸	<0.8-<2 ⁸
12/15/03 ¹¹	98.78	87.23	11.55	3,200	<50	<0.5	0.7	<0.5	0.7	<0.5	<50	<1 ⁸	0.8 ⁸	<0.8-<2 ⁸
03/05/04 ¹¹	98.78	87.66	11.12	8,000	<50	<0.5	0.6	<0.5	0.7	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-<2 ⁸
06/18/04 ¹¹	98.78	86.21	12.57	3,100	<50	<0.5	<0.5	<0.5	<1	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-<2 ⁸
09/17/04 ¹¹	98.78	85.92	12.86	3,200	<50	<0.5	<0.7	<0.8	<1.6	<0.5	<50	<1 ⁸	<1 ⁸	<0.8-<2 ⁸
12/17/04 ¹¹	98.78	87.63	11.15	2,800	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-<2 ⁸
03/14/05 ¹¹	98.78	88.21	10.57	1,300	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-<2 ⁸
06/13/05 ¹¹	98.78	86.45	12.33	2,700	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-<2 ⁸
09/12/05 ¹¹	98.78	85.89	12.89	2,000 ¹²	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-<2 ⁸

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC* (μ L)	GWE (msl)	DTW (ft.)	TPH-DRO (μ g/L)	TPH-GRO (μ g/L)	B (μ g/L)	T (μ g/L)	E (μ g/L)	X (μ g/L)	MTBE (μ g/L)	ETHANOL (μ g/L)	1,2-DCB♦ (μ g/L)	1,2-DCA♦ (μ g/L)	HVOCs♦ (μ g/L)
MW-3 (cont)														
12/12/05 ¹¹	98.78	87.40	11.38	3,900 ¹²	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
03/13/06 ¹¹	98.78	88.43	10.35	2,800	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
06/12/06 ¹¹	98.78	87.05	11.73	3,600	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
09/11/06 ¹¹	98.78	86.42	12.36	4,000	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
12/15/06 ¹¹	98.78	86.91	11.87	3,100	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
03/16/07 ¹¹	98.78	87.55	11.23	1,800	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
06/15/07 ¹¹	98.78	86.97	11.81	2,000	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<2 ⁸	<0.5 ⁸	<0.8-2 ⁸
09/14/07 ¹¹	98.78	86.31	12.47	1,600	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
12/07/07 ¹¹	98.78	86.02	12.76	2,200	<50	<0.5	<0.5	<0.5	<1.0	<0.5	330	<1 ⁸	<0.5 ⁸	<0.8-2 ^{8,13}
03/07/08 ¹¹	98.78	86.95	11.83	6,500	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
06/06/08 ¹¹	98.78	86.51	12.27	2,800	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
09/05/08 ¹¹	98.78	86.13	12.65	2,400	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
12/15/08 ¹¹	98.78	86.12	12.66	8,700	<50	<0.5	<0.5	<0.5	<1.0	<0.5	230	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
03/16/09 ¹¹	98.78	86.42	12.36	4,900	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
06/15/09 ¹¹	98.78	86.33	12.45	5,900	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
11/30/09 ¹¹	98.78	86.92	11.86	4,400	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<1 ⁸	<0.5 ⁸	<0.8-2 ⁸
MW-4														
05/04/99	96.25	83.66	12.59	--	140	<0.5	0.62	0.67	2.6	<2.5	--	--	--	--
06/29/99	96.25	83.64	12.61	--	183	<0.5	<0.5	1.1	<0.5	<5.0	--	--	--	--
09/29/99	96.25	83.70	12.55	--	64.3	<0.5	<0.5	<0.5	1.18	<2.5	--	--	--	--
12/08/99	96.25	83.81	12.44	--	91.2	0.589	<0.5	0.52	<0.5	86	--	--	--	--
03/01/00	96.25	84.55	11.70	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
06/23/00	96.25	84.12	12.13	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--
09/30/00	96.25	84.30	11.95	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--
12/08/00	96.25	83.85	12.40	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--	--	--
03/01/01	96.25	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
06/19/01	96.25	82.83	13.42	--	210 ⁷	7.6	1.4	<0.50	<0.50	10	--	--	--	--
09/18/01	96.25	83.17	13.08	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
12/26/01	96.25	83.36	12.89	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
03/06/02	97.14	84.06	13.08	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
06/21/02	97.14	83.63	13.51	--	<50	<0.50	12	<0.50	<1.5	<2.5	--	--	--	--
09/27/02	97.14	83.47	13.67	--	110	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
12/26/02	97.14	84.12	13.02	--	<50	<0.50	2.6	<0.50	<1.5	<2.5	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC* (μL)	GWE (msl)	DTW (ft)	TPH-DRO ($\mu\text{g/L}$)	TPH-GRO ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	ETHANOL ($\mu\text{g/L}$)	1,2-DCB♦ ($\mu\text{g/L}$)	1,2-DCA♦ ($\mu\text{g/L}$)	HVOCs♦ ($\mu\text{g/L}$)
MW-4 (cont)														
03/28/03	97.14	83.71	13.43	--	<50	<0.50	<0.50	<0.50	<1.5	18	--	--	--	--
06/16/03 ¹¹	97.14	83.10	14.04	--	250	<0.5	31	<0.5	<0.5	<0.5	--	--	--	--
09/15/03 ¹¹	97.14	82.93	14.21	--	220	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
12/15/03 ¹¹	97.14	84.30	12.84	--	310	<0.5	21	<0.5	1	<0.5	<50	--	--	--
03/05/04 ¹¹	97.14	84.00	13.14	--	<50	<0.5	0.7	<0.5	0.6	5	<50	--	--	--
06/18/04 ¹¹	97.14	83.14	14.00	--	220	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
09/17/04 ¹¹	97.14	83.06	14.08	--	97	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
12/17/04 ¹¹	97.14	83.77	13.37	--	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	--	--	--
03/14/05 ¹¹	97.14	83.69	13.45	--	<50	<0.5	0.8	<0.5	<0.5	1	<50	--	--	--
06/13/05 ¹¹	97.14	83.53	13.61	--	<50	<0.5	<0.5	<0.5	<0.5	2	<50	--	--	--
09/12/05 ¹¹	97.14	83.34	13.80	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
12/12/05 ¹¹	97.14	83.54	13.60	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
03/13/06 ¹¹	97.14	83.95	13.19	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/12/06 ¹¹	97.14	83.27	13.87	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
09/11/06 ¹¹	97.14	82.98	14.16	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
12/15/06 ¹¹	97.14	83.96	13.18	--	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	--	--	--
03/16/07 ¹¹	97.14	83.44	13.70	--	<50	<0.5	<0.5	<0.5	<0.5	0.6	<50	--	--	--
06/15/07 ¹¹	97.14	83.23	13.91	--	<50	<0.5	<0.5	<0.5	<0.5	0.6	<50	--	--	--
09/14/07 ¹¹	97.14	83.12	14.02	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
12/07/07 ¹¹	97.14	82.91	14.23	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
03/07/08 ¹¹	97.14	83.22	13.92	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/06/08 ¹¹	97.14	83.23	13.91	--	<50	<0.5	<0.5	<0.5	<0.5	0.5	<50	--	--	--
09/05/08 ¹¹	97.14	83.12	14.02	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
12/15/08 ¹¹	97.14	83.05	14.09	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	--	--	--
03/16/09 ¹¹	97.14	83.58	13.56	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/15/09 ¹¹	97.14	83.05	14.09	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
11/30/09 ¹¹	97.14	83.56	13.58	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
MW-5														
03/06/02 ⁹	95.71	84.31	11.40	--	4,900	18	2.7	29	9.8	290	--	--	--	--
06/21/02	95.71	83.29	12.42	--	1,400	3.6	1.4	<0.50	1.6	190	--	--	--	--
09/27/02	95.71	83.00	12.71	--	540	1.3	<0.50	<0.50	<1.5	190	--	--	--	--
12/26/02	95.71	85.55	10.16	--	2,600	5.0	0.86	3.6	3.7	170	--	--	--	--
03/28/03	95.71	84.25	11.46	--	920	3.8	<0.50	2.1	1.7	160	--	--	--	--
06/16/03 ¹¹	95.71	83.92	11.79	--	600	3	0.9	0.7	0.9	150	--	--	--	--

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Oakland, California

WELL ID/ DATE	TOC* (<i>l</i>)	GWE (<i>msl</i>)	DTW (<i>l</i>)	TPH-DRO (<i>µg/L</i>)	TPH-GRO (<i>µg/L</i>)	B (<i>µg/L</i>)	T (<i>µg/L</i>)	E (<i>µg/L</i>)	X (<i>µg/L</i>)	MTBE (<i>µg/L</i>)	ETHANOL (<i>µg/L</i>)	1,2-DCB♦ (<i>µg/L</i>)	1,2-DCA♦ (<i>µg/L</i>)	HVOCs♦ (<i>µg/L</i>)
MW-5 (cont)														
09/15/03 ¹¹	95.71	83.28	12.43	--	760	<0.5	<0.5	<0.5	<0.5	180	<50	--	--	--
12/15/03 ¹¹	95.71	85.01	10.70	--	1,200	0.7	0.5	0.6	0.8	120	<50	--	--	--
03/05/04 ¹¹	95.71	84.65	11.06	--	1,800	2	0.7	0.7	2	60	<50	--	--	--
06/18/04 ¹¹	95.71	83.54	12.17	--	1,700	<0.5	<0.5	<0.5	<0.5	77	<50	--	--	--
09/17/04 ¹¹	95.71	83.35	12.36	--	1,900	<0.5	<0.5	<0.5	0.6	73	<50	--	--	--
12/17/04 ¹¹	95.71	84.91	10.80	--	1,200	1	<0.5	<0.5	0.6	41	<50	--	--	--
03/14/05 ¹¹	95.71	85.26	10.45	--	1,400	9	<0.5	<0.5	<0.5	19	<50	--	--	--
06/13/05 ¹¹	95.71	83.82	11.89	--	760	<0.5	<0.5	<0.5	<0.5	16	<50	--	--	--
09/12/05 ¹¹	95.71	83.43	12.28	--	610	<0.5	<0.5	<0.5	<0.5	22	<50	--	--	--
12/12/05 ¹¹	95.71	84.63	11.08	--	630	<0.5	<0.5	<0.5	<0.5	13	63	--	--	--
03/13/06 ¹¹	95.71	85.45	10.26	--	1,100	1	<0.5	<0.5	0.5	9	<50	--	--	--
06/12/06 ¹¹	95.71	83.91	11.80	--	460	<0.5	<0.5	<0.5	<0.5	10	<50	--	--	--
09/11/06 ¹¹	95.71	83.30	12.41	--	510	<0.5	<0.5	<0.5	<0.5	10	<50	--	--	--
12/15/06 ¹¹	95.71	85.21	10.50	--	1,000	0.7	<0.5	<0.5	<0.5	6	<50	--	--	--
03/16/07 ¹¹	95.71	84.71	11.00	--	430	<0.5	<0.5	<0.5	<0.5	8	<50	--	--	--
06/15/07 ¹¹	95.71	83.83	11.88	--	420	<0.5	<0.5	<0.5	<0.5	5	<50	--	--	--
09/14/07 ¹¹	95.71	83.39	12.32	--	380	<0.5	<0.5	<0.5	<0.5	6	<50	--	--	--
12/07/07 ¹¹	95.71	83.14	12.57	--	420	<0.5	<0.5	<0.5	<0.5	3	<50	--	--	--
03/07/08 ¹¹	95.71	84.20	11.51	--	400	<0.5	<0.5	<0.5	<0.5	4	<50	--	--	--
06/06/08 ¹¹	95.71	83.51	12.20	--	400	<0.5	<0.5	<0.5	<0.5	4	<50	--	--	--
09/05/08 ¹¹	95.71	83.33	12.38	--	470	<0.5	<0.5	<0.5	<0.5	6	<50	--	--	--
12/15/08 ¹¹	95.71	83.25	12.46	--	<50	<0.5	<0.5	<0.5	<0.5	3	<50	--	--	--
03/16/09 ¹¹	95.71	85.11	10.60	--	720	<0.5	<0.5	<0.5	<0.5	4	<50	--	--	--
06/15/09 ¹¹	95.71	83.25	12.46	--	490	<0.5	<0.5	<0.5	<0.5	2	<50	--	--	--
11/30/09 ¹¹	95.71	83.81	11.90	--	330	<0.5	<0.5	<0.5	<0.5	3	<50	--	--	--
MW-6														
03/06/02 ⁹	95.84	85.67	10.17	--	220	<0.50	<0.50	<0.50	<1.5	53	--	--	--	--
06/21/02	95.84	84.86	10.98	--	<50	<0.50	<0.50	<0.50	<1.5	15	--	--	--	--
09/27/02	95.84	84.61	11.23	--	<50	<0.50	<0.50	<0.50	<1.5	11	--	--	--	--
12/26/02	95.84	87.47	8.37	--	57	<0.50	<0.50	<0.50	<1.5	19	--	--	--	--
03/28/03	95.84	85.53	10.31	--	<50	<0.50	<0.50	<0.50	<1.5	11	--	--	--	--
06/16/03 ¹¹	95.84	85.50	10.34	--	<50	<0.5	0.6	<0.5	<0.5	5	--	--	--	--
09/15/03 ¹¹	95.84	84.84	11.00	--	<50	<0.5	<0.5	<0.5	<0.5	6	<50	--	--	--
12/15/03 ¹¹	95.84	86.49	9.35	--	<50	<0.5	<0.5	<0.5	<0.5	4	<50	--	--	--

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WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	ETHANOL (µg/L)	1,2-DCB♦ (µg/L)	1,2-DCA♦ (µg/L)	HVOCs♦ (µg/L)
MW-6 (cont)														
03/05/04 ¹¹	95.84	87.04	8.80	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
06/18/04 ¹¹	95.84	85.04	10.80	--	<50	<0.5	<0.5	<0.5	<0.5	2	<50	--	--	--
09/17/04 ¹¹	95.84	84.84	11.00	--	<50	<0.5	<0.5	<0.5	<0.5	2	<50	--	--	--
12/17/04 ¹¹	95.84	86.32	9.52	--	<50	<0.5	<0.5	<0.5	<0.5	2	<50	--	--	--
03/14/05 ¹¹	95.84	86.94	8.90	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	--	--	--
06/13/05 ¹¹	95.84	85.37	10.47	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
09/12/05 ¹¹	95.84	85.16	10.68	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
12/12/05 ¹¹	95.84	86.15	9.69	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
03/13/06 ¹¹	95.84	87.16	8.68	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/12/06 ¹¹	95.84	85.03	10.81	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
09/11/06 ¹¹	95.84	84.80	11.04	--	<50	<0.5	<0.5	<0.5	<0.5	0.6	<50	--	--	--
12/15/06 ¹¹	95.84	86.82	9.02	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
03/16/07 ¹¹	95.84	86.06	9.78	--	<50	<0.5	<0.5	<0.5	<0.5	1	<50	--	--	--
06/15/07 ¹¹	95.84	84.99	10.85	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
09/14/07 ¹¹	95.84	85.71	10.13	--	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	--	--	--
12/07/07 ¹¹	95.84	85.39	10.45	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
03/07/08 ¹¹	95.84	85.75	10.09	--	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	--	--	--
06/06/08 ¹¹	95.84	84.79	11.05	--	<50	<0.5	<0.5	<0.5	<0.5	0.7	<50	--	--	--
09/05/08 ¹¹	95.84	84.66	11.18	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	--	--	--
12/15/08 ¹¹	95.84	84.58	11.26	--	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	--	--	--
03/16/09 ¹¹	95.84	86.33	9.51	--	<50	<0.5	<0.5	<0.5	<0.5	2	<50	--	--	--
06/15/09 ¹¹	95.84	84.82	11.02	--	<50	<0.5	<0.5	<0.5	<0.5	0.5	<50	--	--	--
11/30/09 ¹¹	95.84	84.98	10.86	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	--	--	--
TRIP BLANK														
06/04/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--
09/16/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--
12/17/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
03/18/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
06/28/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
09/07/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
09/07/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
12/29/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--
03/11/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--
05/04/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--

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WELL ID/ DATE	TOC* (μ L)	GWE (msl)	DTW (ft.)	TPH-DRO (μ g/L)	TPH-GRO (μ g/L)	B (μ g/L)	T (μ g/L)	E (μ g/L)	X (μ g/L)	MTBE (μ g/L)	ETHANOL (μ g/L)	1,2-DCB♦ (μ g/L)	1,2-DCA♦ (μ g/L)	HVOCs♦ (μ g/L)
TRIP BLANK (cont)														
06/29/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--
09/29/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
12/08/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
03/01/00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	--	--
06/23/00	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--
09/30/00	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--
12/08/00	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--	--	--
03/01/01	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--	--	--
06/19/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--
09/18/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
QA														
12/26/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
03/06/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
06/21/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
09/27/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
12/26/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
03/28/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	--	--	--
06/16/03 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
09/15/03 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/15/03 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
03/05/04 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
06/18/04 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
09/17/04 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/17/04 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
03/14/05 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
06/13/05 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
09/12/05 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/12/05 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
03/13/06 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
06/12/06 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
09/11/06 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/15/06 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
03/16/07 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
06/15/07 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
09/14/07 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

WELL ID/ DATE	TOC ⁺ (<i>ft.</i>)	GWE (<i>msl</i>)	DTW (<i>ft.</i>)	TPH-DRO (<i>µg/L</i>)	TPH-GRO (<i>µg/L</i>)	B (<i>µg/L</i>)	T (<i>µg/L</i>)	E (<i>µg/L</i>)	X (<i>µg/L</i>)	MTBE (<i>µg/L</i>)	ETHANOL (<i>µg/L</i>)	1,2-DCB [◆] (<i>µg/L</i>)	1,2-DCA [◆] (<i>µg/L</i>)	HVOCs [◆] (<i>µg/L</i>)
QA (cont)														
12/07/07 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
03/07/08 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
06/06/08 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
09/05/08 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/15/08 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
03/16/09 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
06/15/09 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/30/09 ¹¹	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-9708
5910 MacArthur Boulevard
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to June 23, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing (ft.) = Feet	GRO = Gasoline Range Organics	1,2-DCA = 1,2-Dichloroethane
GWE = Groundwater Elevation (msl) = Mean sea level	B = Benzene	(µg/L) = Micrograms per liter
DTW = Depth to Water	T = Toluene	(ppb) = Parts per billion
TPH = Total Petroleum Hydrocarbons	E = Ethylbenzene	HVOC = Halogenated Volatile Organic Compounds
DRO = Diesel Range Organics	X = Xylenes	ND = Not Detected
	MTBE = Methyl Tertiary Butyl Ether	-- = Not Measured/Not Analyzed
	1,2-DCB = 1,2-Dichlorobenzene	QA = Quality Assurance/Trip Blank

* TOC elevations were surveyed in February 2002, by Morrow Surveying. Elevations are based on City of Oakland Benchmark; a standard city of Oakland disc stamped "SEC 50 STA F" set under a standard casting on the monument line of Camden Street and 72 feet westerly of the monument at Seminary and Camden, (Elevation = 90.63 feet).

◆ Analysis by EPA Method 8010.

NOTE: All other VOC concentrations were below detection limits.

- ¹ Chromatogram pattern indicates an unidentified hydrocarbon.
- ² Confirmation run.
- ³ Sample also analyzed for the following: Total Oil & Grease by EPA Method 5520F was ND; Semivolatile Organics by EPA Method 8270B were ND; Volatile Organics by EPA Method 8010B were ND.
- ⁴ Laboratory report indicates gasoline C6-C12.
- ⁵ Laboratory report indicates unidentified hydrocarbons >C16.
- ⁶ Laboratory report indicates unidentified hydrocarbons C9-C24.
- ⁷ Laboratory report indicates unidentified hydrocarbons C6-C12.
- ⁸ Volatile Organic Compounds (VOCs) by EPA Method 8260.
- ⁹ Well development performed.
- ¹⁰ Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil.
- ¹¹ BTEX and MTBE analyzed by EPA Method 8260.
- ¹² Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.
- ¹³ Laboratory report indicates Chloroform at 7 ppb.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by IWM to Chemical Waste Management located in Kettleman Hills, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-9708 Job Number: 386395
 Site Address: 5910 Macarthur Blvd. Event Date: 11-30-09 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-1
 Well Diameter: 2 in.
 Total Depth: 20.24 ft.
 Depth to Water: 12.11 ft.

Date Monitored: 11-30-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge ((Height of Water Column x 0.20) + DTW): 13.73
 $8.13 \times VF 0.17 = 1.38$ x3 case volume = Estimated Purge Volume: 4.5 gal.

Purge Equipment:

Disposable Bailer ✓
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer ✓
 Pressure Bailer _____
 Discrete Bailer _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 0950 Weather Conditions: clear
 Sample Time/Date: 1025 11-30-09 Water Color: clear Odor: Y1(N)
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 12.64

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1000</u>	<u>1.5</u>	<u>6.84</u>	<u>797</u>	<u>17.9</u>	_____	_____
<u>1005</u>	<u>3</u>	<u>6.86</u>	<u>815</u>	<u>18.6</u>	_____	_____
<u>1011</u>	<u>4.5</u>	<u>6.80</u>	<u>820</u>	<u>18.5</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX+MTBE(8260)/ETHANOL (8260)</u>
	x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>HVOC's (8260)</u>
	x 500ml ambers	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-DRO (8015)</u>

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-9708 Job Number: 386395
 Site Address: 5910 Macarthur Blvd. Event Date: 11-30-09 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-2
 Well Diameter: 2 in.
 Total Depth: 20.25 ft.
 Depth to Water: 13.28 ft.

Date Monitored: 11-30-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

6.97 xVF 0.17 = 1.18 x3 case volume = Estimated Purge Volume: 4 gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.67

Purge Equipment:

Disposable Bailer
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer
 Pressure Bailer _____
 Discrete Bailer _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: _____ ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Water Removed: _____
 Product Transferred to: _____

Start Time (purge): 1035 Weather Conditions: clear
 Sample Time/Date: 1105 11-30-09 Water Color: clear Odor: Y / N
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 14.02

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - 25)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1042</u>	<u>1</u>	<u>7.10</u>	<u>910</u>	<u>18.4</u>	_____	_____
<u>1047</u>	<u>25</u>	<u>6.92</u>	<u>851</u>	<u>18.2</u>	_____	_____
<u>1053</u>	<u>4</u>	<u>6.86</u>	<u>857</u>	<u>18.6</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTX+MTBE(8260)/ETHANOL (8260)
	x voa vial	YES	HCL	LANCASTER	HVOC's (8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO (8015)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-9708 Job Number: 386395
 Site Address: 5910 Macarthur Blvd. Event Date: 11-30-09 (inclusive)
 City: Oakland, CA Sampler: Ja

Well ID: MW-3
 Well Diameter: 2 in.
 Total Depth: 20.15 ft.
 Depth to Water: 11.86 ft.

Date Monitored: 11-30-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

8.29 xVF 0.17 = 1.41 x3 case volume = Estimated Purge Volume: 4.5 gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.51

Purge Equipment:

Disposable Bailer
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer
 Pressure Bailer _____
 Discrete Bailer _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: _____ ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Water Removed: _____
 Product Transferred to: _____

Start Time (purge): 1115 Weather Conditions: clear
 Sample Time/Date: 1150 11-30-09 Water Color: clear Odor: 0 N Moderate
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 12.13

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm -US)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1122</u>	<u>1.5</u>	<u>6.55</u>	<u>691</u>	<u>18.0</u>	_____	_____
<u>1130</u>	<u>3</u>	<u>6.62</u>	<u>710</u>	<u>18.2</u>	_____	_____
<u>1136</u>	<u>4.5</u>	<u>6.66</u>	<u>716</u>	<u>18.2</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX+MTBE(8260)/ETHANOL (8260)</u>
	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>HVOC's (8260)</u>
	<u>2</u> x 500ml ambers	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-DRO (8015)</u>

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-9708 Job Number: 386395
 Site Address: 5910 Macarthur Blvd. Event Date: 11-30-09 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-4
 Well Diameter: 2 in.
 Total Depth: 19.65 ft.
 Depth to Water: 13.58 ft.

Date Monitored: 11-30-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.79
 $0.07 \times VF 0.17 = 1.03 \times 3 \text{ case volume} = \text{Estimated Purge Volume: } 3.5 \text{ gal.}$

Purge Equipment:

Disposable Bailer
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer
 Pressure Bailer _____
 Discrete Bailer _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 0805 Weather Conditions: clear
 Sample Time/Date: 0840 11-30-09 Water Color: clear Odor: Y
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 14.15

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - 25°C)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
<u>0815</u>	<u>1</u>	<u>7.42</u>	<u>897</u>	<u>18.6</u>	_____	_____
<u>0820</u>	<u>2</u>	<u>7.52</u>	<u>865</u>	<u>18.1</u>	_____	_____
<u>0825</u>	<u>3.5</u>	<u>7.47</u>	<u>866</u>	<u>18.4</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX+MTBE(8260)/ETHANOL (8260)</u>
	x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>HVOC's (8260)</u>
	x 500ml ambers	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-DRO (8015)</u>

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-9708 Job Number: 386395
 Site Address: 5910 Macarthur Blvd. Event Date: 11-30-09 (inclusive)
 City: Oakland, CA Sampler: Jas

Well ID: MW-5
 Well Diameter: 2 in.
 Total Depth: 18.73 ft.
 Depth to Water: 11.90 ft.
6.83 xVF $\phi = 0.17 = 1.16$

Date Monitored: 11-30-09

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.26
 x3 case volume = Estimated Purge Volume: 3.5 gal.

Purge Equipment:

Disposable Bailer
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer
 Pressure Bailer _____
 Discrete Bailer _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 0900 Weather Conditions: clear
 Sample Time/Date: 0935 11-30-09 Water Color: clear Odor: 01N moderate
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 12.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - QS)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>0900</u>	<u>1</u>	<u>6.75</u>	<u>699</u>	<u>18.1</u>	_____	_____
<u>0914</u>	<u>2</u>	<u>6.80</u>	<u>715</u>	<u>17.9</u>	_____	_____
<u>0920</u>	<u>3.5</u>	<u>6.84</u>	<u>711</u>	<u>17.8</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX+MTBE(8260)/ETHANOL (8260)</u>
	x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>HVOC's (8260)</u>
	x 500ml ambers	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-DRO (8015)</u>

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-9708 Job Number: 386395
 Site Address: 5910 Macarthur Blvd. Event Date: 11-30-09 (inclusive)
 City: Oakland, CA Sampler: SM

Well ID: MW-6
 Well Diameter: 2 in.
 Total Depth: 18.87 ft.
 Depth to Water: 10.86 ft.

Date Monitored: 11-30-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.46
 $8.01 \times VF 0.17 = 1.36 \times 3 \text{ case volume} = \text{Estimated Purge Volume: } 4.5 \text{ gal.}$

Purge Equipment:

Disposable Bailer
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer
 Pressure Bailer _____
 Discrete Bailer _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 0710 Weather Conditions: clear
 Sample Time/Date: 0745 11-30-09 Water Color: clear Odor: Y10
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 11.31

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>0718</u>	<u>1.5</u>	<u>7.31</u>	<u>984</u>	<u>18.3</u>	_____	_____
<u>0723</u>	<u>3</u>	<u>7.30</u>	<u>973</u>	<u>18.0</u>	_____	_____
<u>0730</u>	<u>4.5</u>	<u>7.26</u>	<u>963</u>	<u>17.6</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)/ETHANOL (8260)
	x voa vial	YES	HCL	LANCASTER	HVOC's (8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO (8015)

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-658-2681 • www.lancasterlabs.com

RECEIVED

ANALYTICAL RESULTS

DEC 14 2009

Prepared for:

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

GETTLER-RYAN INC.
GENERAL CONTRACTORS

925-842-8582

Prepared by:

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

December 13, 2009

Project: 99708

Samples arrived at the laboratory on Tuesday, December 01, 2009. The PO# for this group is 0015039978 and the release number is ROBB. The group number for this submittal is 1173055.

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
QA-T-091130 NA Water	5850857
MW-1-W-091130 Grab Water	5850858
MW-2-W-091130 Grab Water	5850859
MW-3-W-091130 Grab Water	5850860
MW-4-W-091130 Grab Water	5850861
MW-5-W-091130 Grab Water	5850862
MW-6-W-091130 Grab Water	5850863

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

ELECTRONIC COPY TO CRA c/o Gettler-Ryan

Attn: Cheryl Hansen



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17603-2425 • 717-656-2300 Fax: 717-656-2661 • www.lancasterlabs.com

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

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Christine Dulaney".

Christine Dulaney
Senior Specialist

Sample Description: QA-T-091130 NA Water
 Facility# 99708 Job# 386395 GRD
 5910 Macarthur-Oakland T0600102093 QA

LLI Sample # WW 5850857
 LLI Group # 1173055
 CA

Project Name: 99708

Collected: 11/30/2009

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310

Discard: 01/13/2010

San Ramon CA 94583

MAOQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	SW-846 8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	Z093364AA	12/03/2009 01:02	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z093364AA	12/03/2009 01:02	Michael A Ziegler	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009 15:26	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009 15:26	Matthew S Woods	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17805-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-1-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-1

LLI Sample # WW 5850858
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 10:25 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310

Discard: 01/13/2010

San Ramon CA 94583

MAOM1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles			ug/l	ug/l	
06067	Benzene	71-43-2	N.D.	0.5	1
06067	Ethanol	64-17-5	N.D.	50	1
06067	Ethylbenzene	100-41-4	N.D.	0.5	1
06067	Methyl Tertiary Butyl Ether	1634-04-4	21	0.5	1
06067	Toluene	108-88-3	N.D.	0.5	1
06067	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles			ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	61	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06067	BTEX, MTBE, ETOH	SW-846 8260B	1	P093371AA	12/03/2009 11:54	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P093371AA	12/03/2009 11:54	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009 18:00	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009 18:00	Matthew S Woods	1



Analysis Report

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

Page 1 of 1

Sample Description: MW-2-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-2

LLI Sample # WW 5850859
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 11:05 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310

Discard: 01/13/2010

San Ramon CA 94583

MAOM2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
06067	Benzene	71-43-2	N.D.	0.5	1
06067	Ethanol	64-17-5	N.D.	50	1
06067	Ethylbenzene	100-41-4	N.D.	0.5	1
06067	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06067	Toluene	106-88-3	N.D.	0.5	1
06067	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B			ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Triel#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06067	BTEX, MTBE, ETOH	SW-846 8260B	1	P093371AA	12/03/2009 12:15	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P093371AA	12/03/2009 12:15	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009 18:26	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009 18:26	Matthew S Woods	1



Analysis Report

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

Sample Description: MW-3-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-3

LLI Sample # WW 5850860
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 11:50 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25
Reported: 12/13/2009 at 14:34
Discard: 01/13/2010

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

MAOM3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
05382	Benzene	71-43-2	N.D.	0.5	1
05382	Bromodichloromethane	75-27-4	N.D.	1	1
05382	Bromoform	75-25-2	N.D.	1	1
05382	Bromomethane	74-83-9	N.D.	1	1
05382	Carbon Tetrachloride	56-23-5	N.D.	1	1
05382	Chlorobenzene	108-90-7	N.D.	0.8	1
05382	Chloroethane	75-00-3	N.D.	1	1
05382	Chloroform	67-66-3	N.D.	0.8	1
05382	Chloromethane	74-87-3	N.D.	1	1
05382	Dibromochloromethane	124-48-1	N.D.	1	1
05382	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
05382	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
05382	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
05382	1,1-Dichloroethane	75-34-3	N.D.	1	1
05382	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
05382	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
05382	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
05382	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
05382	1,2-Dichloropropane	78-87-5	N.D.	1	1
08202	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
08202	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
08202	Ethanol	64-17-5	N.D.	50	1
05382	Ethylbenzene	100-41-4	N.D.	0.5	1
08202	Freon 113	76-13-1	N.D.	2	1
08202	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
05382	Methylene Chloride	75-09-2	N.D.	2	1
05382	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
05382	Tetrachloroethene	127-18-4	N.D.	0.8	1
05382	Toluene	108-88-3	N.D.	0.5	1
05382	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
05382	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
05382	Trichloroethene	79-01-6	N.D.	1	1
05382	Trichlorofluoromethane	75-69-4	N.D.	2	1
05382	Vinyl Chloride	75-01-4	N.D.	1	1
05382	m+p-Xylene	179601-23-1	N.D.	0.5	1
05382	o-Xylene	95-47-6	N.D.	0.5	1
GC Volatiles SW-846 8015B			ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Extractable TPH SW-846 8015B			ug/l	ug/l	
06609	TPH-DRO CA C10-C28	n.a.	4,400	50	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.					



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-856-2300 Fax: 717-856-2681 • www.lancasterlabs.com

Sample Description: MW-3-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-3

LLI Sample # WW 5850860
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 11:50 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310

Discard: 01/13/2010

San Ramon CA 94583

MAOM3

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		Analyst	Dilution Factor
					Date	Time		
08202	EPA SW 846/8260 - Water	SW-846 8260B	1	W093371AA	12/03/2009	06:29	Holly Berry	1
05382	EPA SW846/8260 (water)	SW-846 8260B	1	W093371AA	12/03/2009	06:29	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W093371AA	12/03/2009	06:29	Holly Berry	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009	18:51	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009	18:51	Matthew S Woods	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	093350035A	12/03/2009	13:20	Sarah M Snyder	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	093350035A	12/02/2009	09:15	Karen R Rettew	1



Analysis Report

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

Sample Description: MW-4-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-4

LLI Sample # WW 5850861
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 08:40 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Discard: 01/13/2010

MAOM4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
06067	Benzene	71-43-2	N.D.	0.5	1
06067	Ethanol	64-17-5	N.D.	50	1
06067	Ethylbenzene	100-41-4	N.D.	0.5	1
06067	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06067	Toluene	108-88-3	N.D.	0.5	1
06067	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	SW-846 8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06067	BTEX, MTBE, ETOH	SW-846 8260B	1	P093371AA	12/03/2009 13:20	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P093371AA	12/03/2009 13:20	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009 19:17	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009 19:17	Matthew S Woods	1



Analysis Report

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

Sample Description: MW-5-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-5

LLI Sample # WW 5850862
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 09:35 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Discard: 01/13/2010

MAOM5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles			ug/l	ug/l	
06067	Benzene	71-43-2	N.D.	0.5	1
06067	Ethanol	64-17-5	N.D.	50	1
06067	Ethylbenzene	100-41-4	N.D.	0.5	1
06067	Methyl Tertiary Butyl Ether	1634-04-4	3	0.5	1
06067	Toluene	108-88-3	N.D.	0.5	1
06067	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles			ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	330	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06067	BTEX, MTBE, ETOH	SW-846 8260B	1	P093371AA	12/03/2009 13:42	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P093371AA	12/03/2009 13:42	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009 19:43	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009 19:43	Matthew S Woods	1



Analysis Report

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

Sample Description: MW-6-W-091130 Grab Water
Facility# 99708 Job# 386395 GRD
5910 Macarthur-Oakland T0600102093 MW-6

LLI Sample # WW 5850863
LLI Group # 1173055
CA

Project Name: 99708

Collected: 11/30/2009 07:45 by JA

Account Number: 10904

Submitted: 12/01/2009 09:25

Chevron

Reported: 12/13/2009 at 14:34

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Discard: 01/13/2010

MAOM6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles			ug/l	ug/l	
06067	Benzene	71-43-2	N.D.	0.5	1
06067	Ethanol	64-17-5	N.D.	50	1
06067	Ethylbenzene	100-41-4	N.D.	0.5	1
06067	Methyl Tertiary Butyl Ether	1634-04-4	0.8	0.5	1
06067	Toluene	108-88-3	N.D.	0.5	1
06067	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles			ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06067	BTEX, MTBE, ETOH	SW-846 8260B	1	P093371AA	12/03/2009 14:04	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P093371AA	12/03/2009 14:04	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09337A07A	12/03/2009 20:08	Matthew S Woods	1
01146	GC VOA Water Prep	SW-846 5030B	1	09337A07A	12/03/2009 20:08	Matthew S Woods	1

Quality Control Summary

 Client Name: Chevron
 Reported: 12/13/09 at 02:34 PM

Group Number: 1173055

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P093371AA		Sample number(s): 5850858-5850859, 5850861-5850863						
Benzene	N.D.	0.5	ug/l	94		79-120		
Ethanol	N.D.	50.	ug/l	90		40-158		
Ethylbenzene	N.D.	0.5	ug/l	89		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	96		76-120		
Toluene	N.D.	0.5	ug/l	93		79-120		
Xylene (Total)	N.D.	0.5	ug/l	90		80-120		
Batch number: W093371AA		Sample number(s): 5850860						
Benzene	N.D.	0.5	ug/l	103	102	79-120	1	30
Bromodichloromethane	N.D.	1.	ug/l	92	92	80-120	0	30
Bromoform	N.D.	1.	ug/l	82	82	61-120	0	30
Bromomethane	N.D.	1.	ug/l	65	66	40-137	2	30
Carbon Tetrachloride	N.D.	1.	ug/l	87	84	75-123	3	30
Chlorobenzene	N.D.	0.8	ug/l	105	105	80-120	0	30
Chloroethane	N.D.	1.	ug/l	68	71	49-129	3	30
Chloroform	N.D.	0.8	ug/l	98	97	77-122	2	30
Chloromethane	N.D.	1.	ug/l	93	94	60-129	2	30
Dibromochloromethane	N.D.	1.	ug/l	90	90	80-120	0	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	104	103	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	103	104	80-120	0	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	104	102	80-120	1	30
1,1-Dichloroethane	N.D.	1.	ug/l	98	99	79-120	0	30
1,2-Dichloroethane	N.D.	0.5	ug/l	95	95	70-130	0	30
1,1-Dichloroethene	N.D.	0.8	ug/l	96	94	74-123	2	30
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	99	96	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	98	98	80-120	1	30
1,2-Dichloropropane	N.D.	1.	ug/l	104	103	78-120	1	30
cis-1,3-Dichloropropene	N.D.	1.	ug/l	98	98	80-120	0	30
trans-1,3-Dichloropropene	N.D.	1.	ug/l	100	100	79-120	0	30
Ethanol	N.D.	50.	ug/l	120	119	40-158	1	30
Ethylbenzene	N.D.	0.5	ug/l	104	103.	79-120	1	30
Freon 113	N.D.	2.	ug/l	91	89	69-128	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	94	94	76-120	1	30
Methylene Chloride	N.D.	2.	ug/l	95	96	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	108	109	71-120	0	30
Tetrachloroethene	N.D.	0.8	ug/l	102	99	80-121	2	30
Toluene	N.D.	0.5	ug/l	107	107	79-120	0	30
1,1,1-Trichloroethane	N.D.	0.8	ug/l	96	94	75-127	2	30
1,1,2-Trichloroethane	N.D.	0.8	ug/l	106	107	80-120	1	30
Trichloroethene	N.D.	1.	ug/l	101	99	80-120	2	30
Trichlorofluoromethane	N.D.	2.	ug/l	91	88	64-129	2	30
Vinyl Chloride	N.D.	1.	ug/l	97	97	59-120	1	30
m+p-Xylene	N.D.	0.5	ug/l	104	104	80-120	0	30
o-Xylene	N.D.	0.5	ug/l	101	100	80-120	1	30
Batch number: Z093364AA		Sample number(s): 5850857						

*. Outside of specification

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

Quality Control Summary

 Client Name: Chevron
 Reported: 12/13/09 at 02:34 PM

Group Number: 1173055

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzene	N.D.	0.5	ug/l	102	96	79-120	5	30
Ethylbenzene	N.D.	0.5	ug/l	106	99	79-120	7	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	101	97	76-120	4	30
Toluene	N.D.	0.5	ug/l	108	101	79-120	7	30
Xylene (Total)	N.D.	0.5	ug/l	109	103	80-120	6	30
Batch number: 093337A07A	Sample number(s): 5850857-5850863							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30
Batch number: 093350035A	Sample number(s): 5850860							
TPH-DRO CA C10-C28	N.D.	32.	ug/l	78	73	56-122	7	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: P093371AA	Sample number(s): 5850858-5850859, 5850861-5850863 UNSPK: 5850859								
Benzene	101	102	80-126	1	30				
Ethanol	117	101	37-164	15	30				
Ethylbenzene	98	99	71-134	0	30				
Methyl Tertiary Butyl Ether	94	97	72-126	3	30				
Toluene	102	101	80-125	0	30				
Xylene (Total)	97	97	79-125	0	30				
Batch number: W093371AA	Sample number(s): 5850860 UNSPK: 5850860								
Benzene	102		80-126						
Bromodichloromethane	89		78-125						
Bromoform	76		60-121						
Bromomethane	125		38-149						
Carbon Tetrachloride	89		81-138						
Chlorobenzene	102		87-124						
Chloroethane	135		51-145						
Chloroform	97		81-134						
Chloromethane	112		67-154						
Dibromochloromethane	86		74-116						
1,2-Dichlorobenzene	101		84-119						
1,3-Dichlorobenzene	97		86-121						
1,4-Dichlorobenzene	98		85-121						
1,1-Dichloroethane	98		84-129						
1,2-Dichloroethane	89		66-141						
1,1-Dichloroethene	99		85-142						
cis-1,2-Dichloroethene	97		85-125						
trans-1,2-Dichloroethene	100		87-126						
1,2-Dichloropropane	99		83-124						
cis-1,3-Dichloropropene	90		75-125						
trans-1,3-Dichloropropene	92		74-119						
Ethanol	64		37-164						
Ethylbenzene	98		71-134						
Freon 113	97		89-148						

*- Outside of specification

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

Quality Control Summary

 Client Name: Chevron
 Reported: 12/13/09 at 02:34 PM

Group Number: 1173055

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
Methyl Tertiary Butyl Ether	88		72-126						
Methylene Chloride	93		79-120						
1,1,2,2-Tetrachloroethane	98		73-119						
Tetrachloroethene	98		80-128						
Toluene	104		80-125						
1,1,1-Trichloroethane	97		80-143						
1,1,2-Trichloroethane	100		77-124						
Trichloroethene	98		88-133						
Trichlorofluoromethane	130		73-152						
Vinyl Chloride	134*		66-133						
m+p-Xylene	100		79-125						
o-Xylene	97		79-125						

Batch number: Z093364AA	Sample number(s): 5850857 UNSPK: P850913
Benzene	96 80-126
Ethylbenzene	99 71-134
Methyl Tertiary Butyl Ether	93 72-126
Toluene	101 80-125
Xylene (Total)	102 79-125

Batch number: 09337A07A	Sample number(s): 5850857-5850863 UNSPK: P850914
TPH-GRO N. CA water C6-C12	118 63-154

Surrogate Quality Control

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

 Analysis Name: BTEX, MTBE, ETOH
 Batch number: P093371AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5850858	84	83	84	82
5850859	84	85	84	82
5850861	83	85	84	82
5850862	84	82	84	84
5850863	84	83	85	81
Blank	84	83	84	81
LCS	84	85	83	82
MS	84	85	85	84
MSD	85	87	84	84
Limits:	80-116	77-113	80-113	78-113

 Analysis Name: EPA SW846/8260 (water)
 Batch number: W093371AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5850860	84	90	93	87
Blank	83	87	93	87

*- Outside of specification

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

Quality Control Summary

Client Name: Chevron
Reported: 12/13/09 at 02:34 PM

Group Number: 1173055

Surrogate Quality Control

LCS	83	87	95	93
LCSD	83	85	96	94
MS	83	91	95	93

Limits:	80-116	77-113	80-113	78-113
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Analysis Name: BTEX+MTBE by 8260B

Batch number: Z093364AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5850857	98	93	96	87
Blank	98	92	97	87
LCS	97	92	97	93
LCSD	96	92	96	92
MS	97	92	97	92

Limits:	80-116	77-113	80-113	78-113
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Analysis Name: TPH-GRO N. CA water C6-C12

Batch number: 09337A07A

Trifluorotoluene-F

5850857	100
5850858	100
5850859	101
5850860	103
5850861	100
5850862	105
5850863	103
Blank	99
LCS	112
LCSD	112
MS	112

Limits:	63-135
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Analysis Name: TPH-DRO CA C10-C28

Batch number: 093350035A

Orthoterphenyl

5850860	199*
Blank	87
LCS	88
LCSD	86

Limits:	59-131
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*- Outside of specification

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

Lancaster Laboratories Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Unlts	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	l	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml
<	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.		

U.S. EPA data qualifiers:

Organic Qualifiers		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 amount not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
P	Concentration difference between primary and confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA <0.995
X,Y,Z	Defined in case narrative		

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

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

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