

Mike Bauer Project Manager Marketing Business Unit Chevron Environmental Management Company 145 S. State College Blvd Brea, CA 92821 Tel (714) 671-3200 Fax (714) 671-3440 mbauer@chevron.com

March 21, 2013

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

By Alameda County Environmental Health at 10:49 am, Mar 25, 2013

Re: Former Signal Oil Marine Storage and Distribution Facility

(Former Chevron Bulk Plant 206127)

2301-2311 Blanding Avenue

Alameda, California LOP Case RO0002466

Dear Mr. Wickham:

The purpose of this letter is to verify that as a representative for Chevron Environmental Management Company (Chevron), I reviewed, and concur with, the comments in the *First Semi-Annual 2013 Groundwater Monitoring and Sampling Report* for the referenced facility, prepared on behalf of Chevron by Conestoga-Rovers & Associates. I declare under penalty of perjury that the foregoing is true and correct.

Please feel free to contact me at (714) 671-3207 if you have any questions.

Sincerely,

Mike Bauer Project Manager

NS Bauer



10969 Trade Center Drive Rancho Cordova, California 95670

Telephone: (916) 889-8900 Fax: (916) 889-8999

http://www.craworld.com

March 21, 2013 Reference No. 631916

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

Re: First Semi-Annual 2013

Groundwater Monitoring and Sampling Report

Former Signal Oil Marine Storage and Distribution Facility

(Chevron Bulk Plant 206127) 2301-2311 Blanding Avenue

Alameda, California ACEH Case RO0002466

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *First Semi-Annual 2013 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company. Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. (G-R) of Dublin, California. G-R's *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1 and shown on Figures 2 through 5. Well construction specifications are summarized in Table 2. Lancaster Laboratories' *Analytical Results* report is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF FIRST SEMI-ANNUAL 2013 EVENT

On January 19, 2013, G-R monitored and sampled site wells per the established schedule. Results of the current monitoring event indicate the following:

• Groundwater Flow Direction Northeast

• Hydraulic Gradient 0.02

Approximate Depth to Water
 3 to 9 feet below grade

Equal Employment Opportunity Employer



March 21, 2013 Reference No. 631916

Results of the current sampling event are presented below in Table A.

TABLE A GROUNDWATER ANALYTICAL DATA													
Well ID	TPHd¹ (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)							
ESLs	100 100 1 40 30 20												
MW-1RA	3,000/270	3,000/270 1,500 180 <5 <5											
MW-1RB	2,000 /62	200	2	<0.5	<0.5	<0.5							
MW-2	<50/<50	<50	<0.5	<0.5	<0.5	<0.5							
MW-3	1,600/< 50	69	<0.5	<0.5	<0.5	<0.5							
MW-4	380/< 50	<50	<0.5	<0.5	<0.5	<0.5							
MW-5	MW-5 4,200/400 3,500 100 7 <5 7												
MW-6	830/< 50	250	3	<0.5	<0.5	<0.5							

ESL Environmental screening level

CONCLUSIONS AND RECOMMENDATIONS

Results of this current quarterly monitoring and sampling are consistent with results from past quarters and indicate the following:

- The highest total petroleum hydrocarbons as diesel (TPHd), TPH as gasoline (TPHg), and benzene concentrations in groundwater are in the area of the former fuel pumps, and north of the former aboveground storage tanks (Figures 3 through 5).
- Analysis of TPHd using a 10 gram silica gel column cleanup resulted in a significant reduction in dissolved TPHd concentrations as compared to samples analyzed without the silica gel cleanup. Only the samples from MW-1RA and MW-5 were above the TPHd ESL using silica gel cleanup.
- Concentrations are generally stable in site wells where concentrations are detected above groundwater ESLs.

CRA recommends continuing monitoring and sampling to verify concentration trends over time.

TPHd without and with 10 gram silica gel cleanup

Concentrations in **Bold** exceed their respective ESL



March 21, 2013 Reference No. 631916

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

G-R will monitor and sample site wells per the established semi-annual schedule. CRA will submit a groundwater monitoring and sampling report.

Piezometer Installation and Tidal Influence Study

CRA is currently awaiting ACEH comment on the November 30, 2012 *Piezometer Well Installation and Tidal Influence Study,* including a response to our request to suspend monitoring and sampling at the site.



March 21, 2013 Reference No. 631916

Please contact Brian Silva at (916) 889-8908 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Brian Silva

Greg Barclay, PG 6260

BS/cw/30 Encl.

Figure 1 Vicinity Map

Figure 2 Groundwater Elevation Contour Map Figure 3 TPHd Concentration Contour Map Figure 4 TPHg Concentration Contour Map Figure 5 Benzene Concentration Contour Map

Table 1 Groundwater Monitoring and Sampling Data

Table 2 Well Construction Specifications

Attachment A Monitoring Data Package Attachment B Laboratory Analytical Report

Attachment C Historical Groundwater Monitoring and Sampling Data

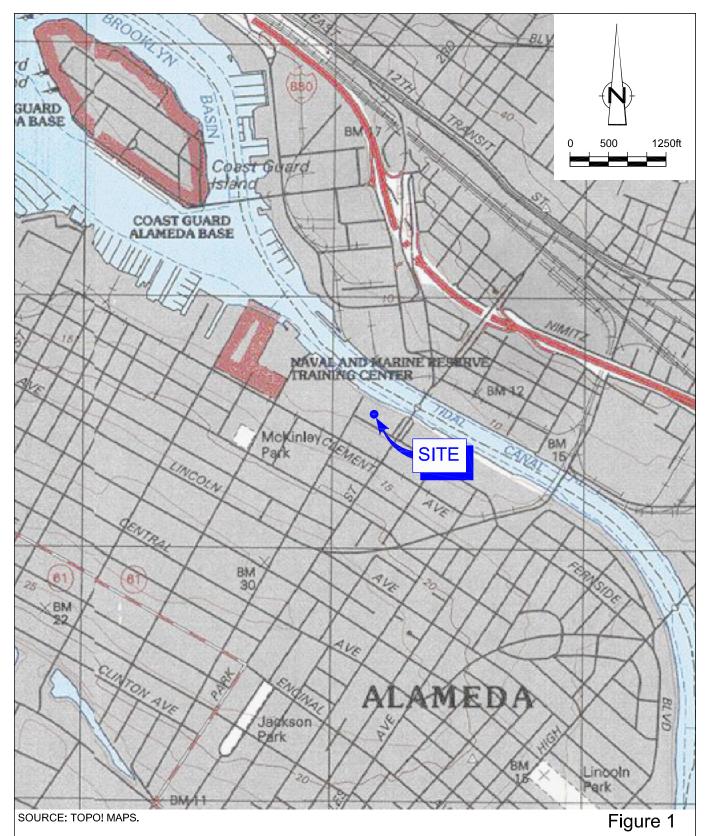
cc: Mr. Mike Bauer, Chevron (electronic only)

Ms. Julie Beck Ball

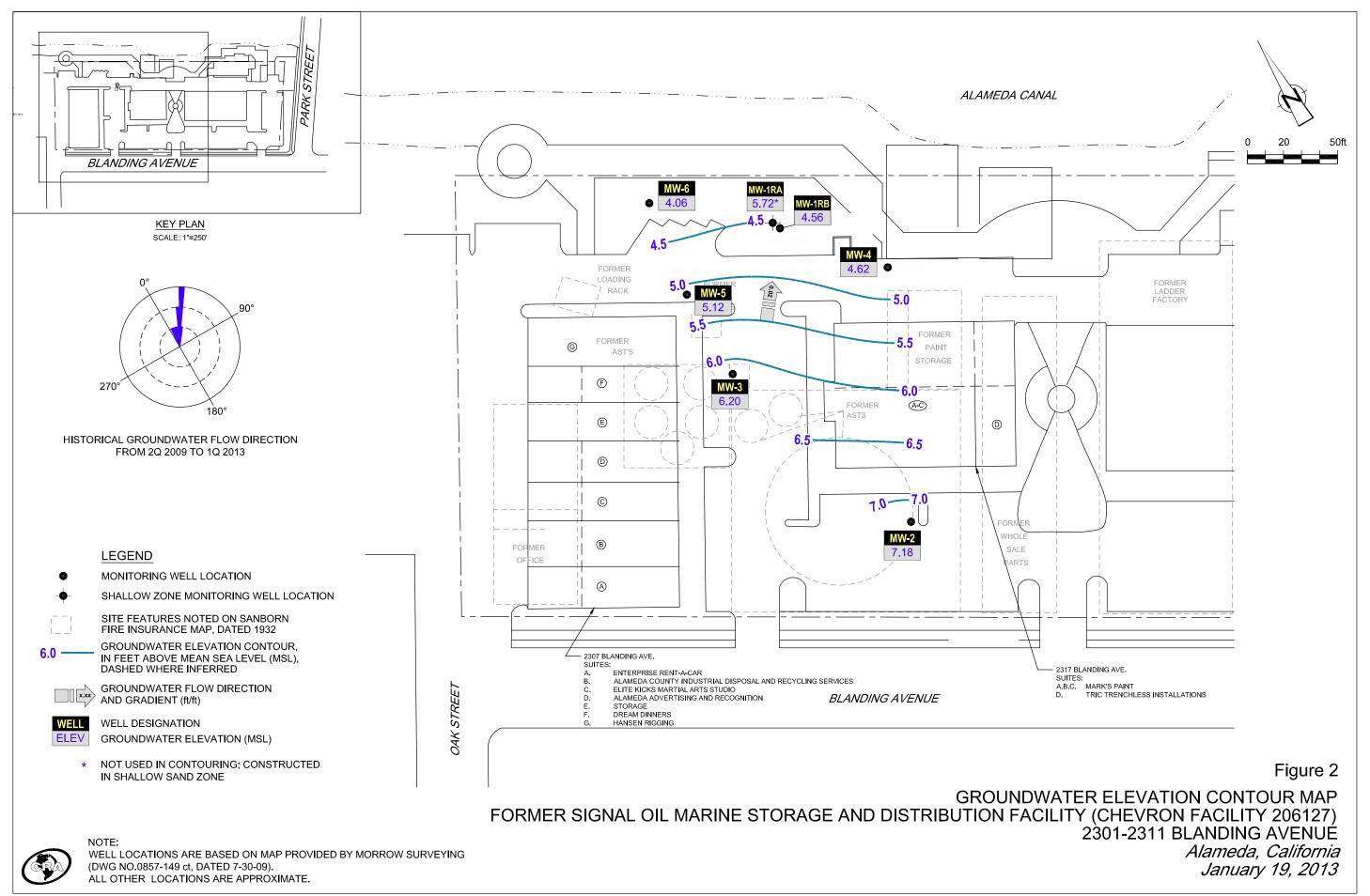
Mr. Peter Reinhold Beck Mr. Monroe Wingate

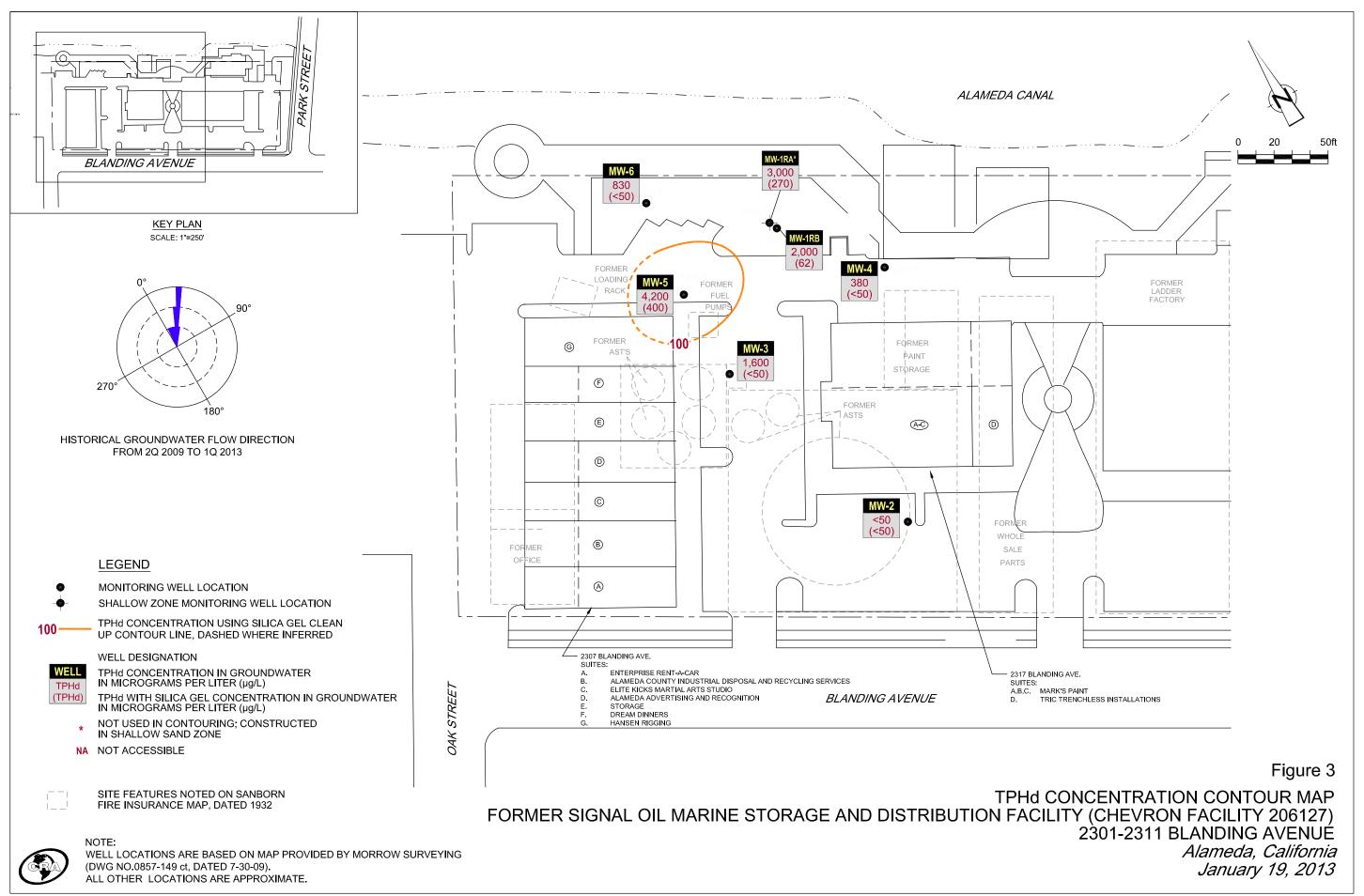
Mr. Tom Foley

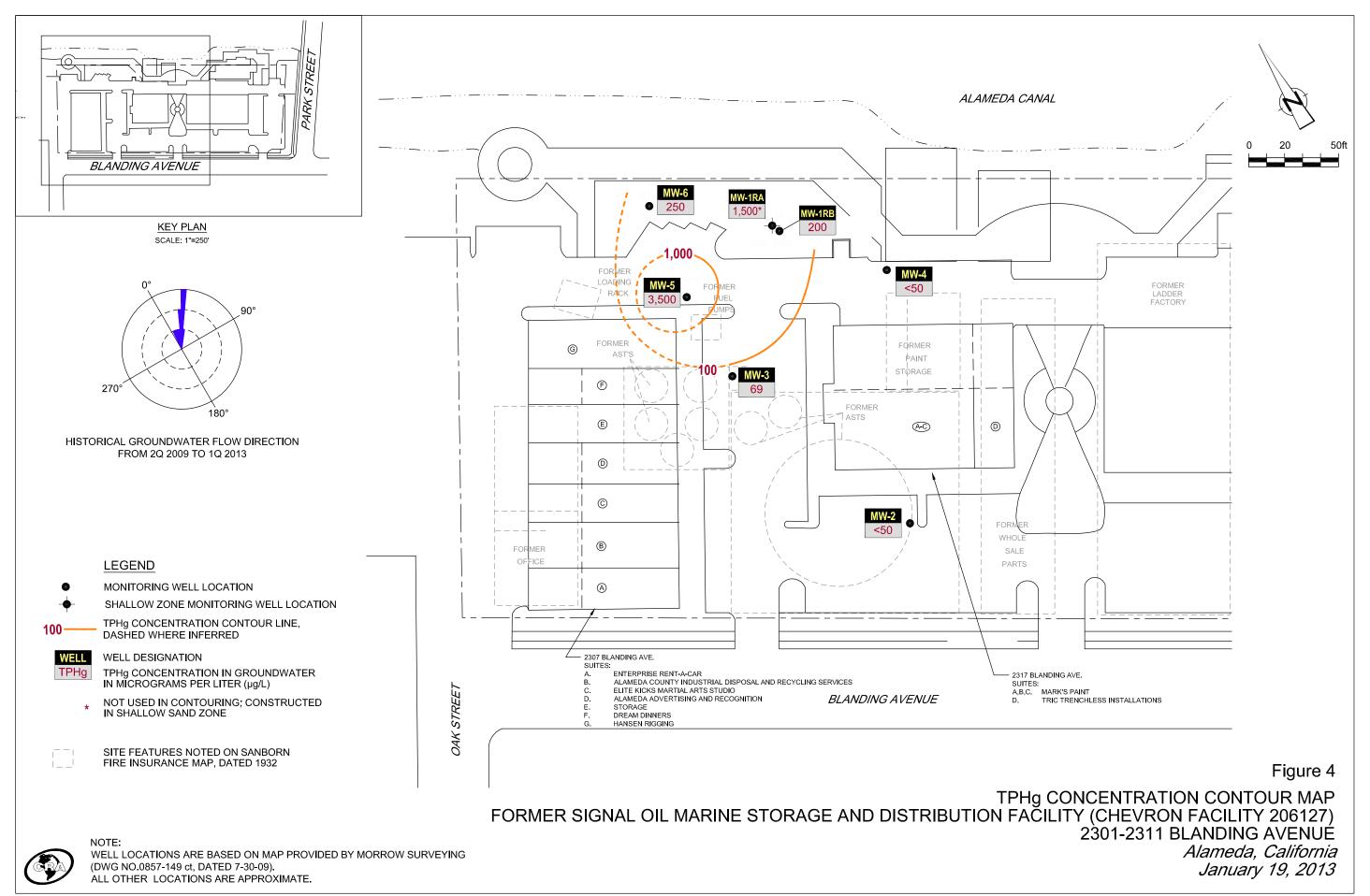
FIGURES

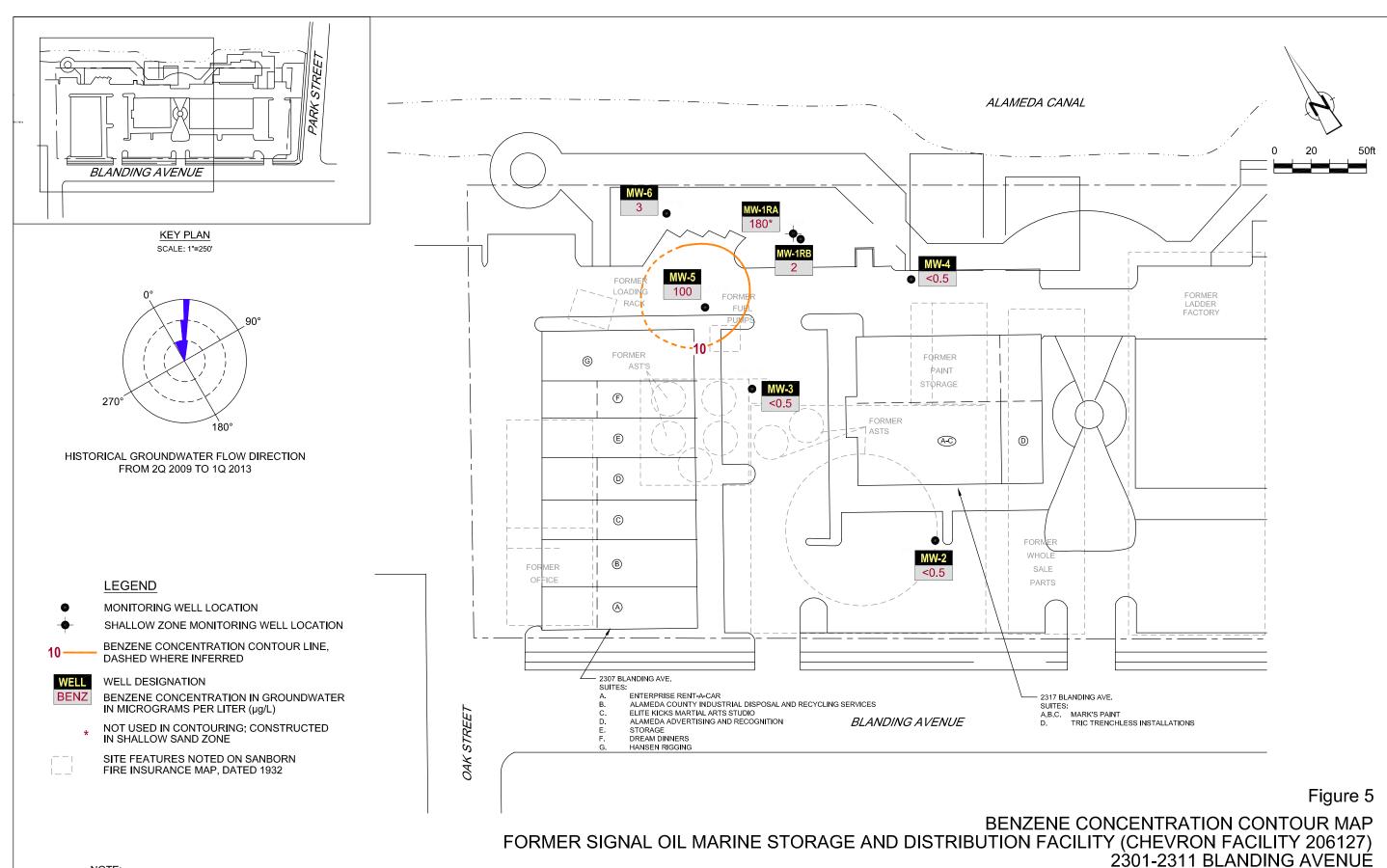


VICINITY MAP FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY (CHEVRON FACILITY 206127) 2301-2311 BLANDING AVENUE Alameda, California









NOTE: WELL LOCATIONS ARE BASED ON MAP PROVIDED BY MORROW SURVEYING (DWG NO.0857-149 ct, DATED 7-30-09). ALL OTHER LOCATIONS ARE APPROXIMATE.

Alameda, California January 19, 2013 **TABLES**

TABLE 1 Page 1 of 6

					Н	YDROCARBO	NS		1	PRIMARY VOC	es .	
Location	Date	тос	DTW	GWE	ТРН-DRО	TPH-DRO w/ Si Gel	TPH-GRO	В	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
MW-1 MW-1	07/21/2010 10/22/2010 ¹	13.49 13.49	9.47	4.02	440	- -	65 J -	<0.5 -	<0.5 -	<0.5 -	<0.5 -	<0.5 -
MW-1RA	10/28/2010	13.02	9.23	3.79	_	4,000	6,400	830	22	65	20	-
MW-1RA	01/14/2011	13.02	7.20	5.82	_	1,500	790	160	2	1	1	-
MW-1RA	04/19/2011	13.02	7.42	5.60	-	3,000	3,800	600	9	18	9	-
MW-1RA	06/30/2011	13.02	7.51	5.51	-	3,700	6,800	780	13	36	13	-
MW-1RA	10/14/2011	13.02	7.96	5.06	6,900	360	6,800	1,300	19	51	14	-
MW-1RA	01/18/2012	13.02	7.34	5.68	4,300	1,400	6,400	1,300	17	38	12	-
MW-1RA	04/19/2012	13.02	5.23	7.79	3,700	400	3,100	120	<5	<5	<5	-
MW-1RA	07/23/2012	13.02	7.92	5.10	6,000	1,000	-	-	-	-	-	-
MW-1RA	07/27/20124	13.02	8.50	4.52	-	-	4,800	640	9	20	7	-
MW-1RA	01/19/2013	13.02	7.30	5.72	3,000	270	1,500	180	<5	<5	<5	-
MW-1RB	10/28/2010	13.21	9.00	4.21	-	1,600	650	3	<0.5	0.8	<0.5	-
MW-1RB	01/14/2011	13.21	10.97	2.24	_	960	150	1	<0.5	<0.5	<0.5	_
MW-1RB	04/19/2011	13.21	12.11	1.10	-	1,200	190	6	<0.5	<0.5	<0.5	-
MW-1RB	06/30/2011	13.21	11.86	1.35	-	1,900	310	9	<0.5	<0.5	<0.5	-
MW-1RB	10/14/2011	13.21	12.14	1.07	4,000	57	300	15	<0.5	<0.5	<0.5	-
MW-1RB	01/18/2012	13.21	14.71	-1.50	2,400	260	340	11	<0.5	<0.5	<0.5	-
MW-1RB	04/19/2012	13.21	8.33	4.88	2,800	53	180	1	<0.5	<0.5	<0.5	-
MW-1RB	07/23/2012	13.21	8.96	4.25	2,700	<50	-	-	-	-	-	-

TABLE 1 Page 2 of 6

					Н	YDROCARBO	NS		1	PRIMARY VOC	es .	
Location	Date	тос	DTW	GWE	тен-рко	TPH-DRO w/ Si Gel	трн-ско	В	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	μg/L	μ <i>g</i> /L	μg/L	μg/L	μ <i>g</i> /L	μg/L	µg∕L	μg/L
MW-1RB	07/27/2012 ⁴ 01/19/2013	13.21 13.21	8.45 8.65	4.76 4.56	2,000	- 62	990 200	89 2	1 < 0.5	0.8 <0.5	0.7 < 0.5	-
MW-2	07/21/2010	10.63	4.12	6.51	65 J	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	10/22/2010	10.63	4.31	6.32	-	58	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	10/28/2010 ²	10.63	3.65	6.98	-	-	-	-	-	-	-	-
MW-2	01/14/2011	10.63	3.12	7.51	-	68	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	04/19/2011	10.63	3.51	7.12	-	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	06/30/2011	10.63	3.74	6.89	-	120	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	10/14/2011	10.63	3.52	7.11	160	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	01/18/2012	10.63	3.85	6.78	140	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-2	04/19/2012	10.63	3.16	7.47	<50	<50	<50	< 0.5	< 0.5	< 0.5	<0.5	-
MW-2	07/23/2012 ³	10.63	-	-	-	-	-	-	-	-	-	-
MW-2	07/27/2012	10.63	3.40	7.23	-	-	<50	<0.5	< 0.5	<0.5	<0.5	-
MW-2	01/19/2013	10.63	3.45	7.18	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-3	07/21/2010 10/22/2010	10.72 10.72	5.09 5.32	5.63 5.40	640	- 570	65 J 73	0.6 J <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	- -
MW-3	10/28/2010 ²	10.72	4.74	5.98	-	-	-	-	-	-	-	-
MW-3	01/14/2011	10.72	4.11	6.61	-	1,000	91	<0.5	<0.5	<0.5	<0.5	-
MW-3	04/19/2011	10.72	5.03	5.69	-	1,200	180	<0.5	<0.5	<0.5	<0.5	-
MW-3	06/30/2011	10.72	4.97	5.75	-	740	<50	< 0.5	< 0.5	< 0.5	< 0.5	-

TABLE 1 Page 3 of 6

					Н	YDROCARBO	NS		1	PRIMARY VOC	es	
Location	Date	тос	DTW	GWE	тен-рко	TPH-DRO w/ Si Gel	TPH-GRO	В	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
MW-3 MW-3	10/14/2011 01/18/2012	10.72 10.72	4.52 5.22	6.20 5.50	1,800 1,700	<50 <50	88 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	-
MW-3	04/19/2012	10.72	4.63	6.09	3,000	50	260	<0.5	<0.5	<0.5	<0.5	_
MW-3	07/23/2012	10.72	4.89	5.83	1,200	<50	-	-	-	-	-	-
MW-3	07/27/2012 ⁴	10.72	4.58	6.14	-	-	<50	<0.5	<0.5	<0.5	<0.5	_
MW-3	01/19/2013	10.72	4.52	6.20	1,600	<50	69	<0.5	<0.5	<0.5	<0.5	-
MW-4	07/21/2010	11.40	6.72	4.68	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	10/22/2010	11.40	6.87	4.53	-	91	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	$10/28/2010^2$	11.40	6.38	5.02	-	-	-	-	-	-	-	-
MW-4	01/14/2011	11.40	5.32	6.08	-	<50	<50	< 0.5	< 0.5	<0.5	< 0.5	-
MW-4	04/19/2011	11.40	7.65	3.75	-	<50	<50	<0.5	< 0.5	<0.5	<0.5	-
MW-4	06/30/2011	11.40	6.93	4.47	-	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	10/14/2011	11.40	5.66	5.74	440	<50	<50	<0.5	< 0.5	<0.5	<0.5	-
MW-4	01/18/2012	11.40	8.36	3.04	330	<50	<50	<0.5	< 0.5	<0.5	<0.5	-
MW-4	04/19/2012	11.40	6.40	5.00	360	<50	<50	<0.5	0.5	<0.5	<0.5	-
MW-4	07/23/2012 ³	11.40	-	-	-	-	-	-	-	-	-	-
MW-4	07/27/2012	11.40	6.39	5.01	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	01/19/2013	11.40	6.78	4.62	380	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-5	07/21/2010	10.50	5.76	4.74	2,000	-	1,500	80	2	1	2	-
MW-5	10/22/2010	10.50	5.94	4.56	-	1,500	830	47	< 0.5	1	< 0.5	-

TABLE 1 Page 4 of 6

					Н	YDROCARBO	NS		1	PRIMARY VOC	es	
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	В	Т	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
3.577.5	40.420.420402	10.50										
MW-5	10/28/2010 ²	10.50	5.17	5.33	-	-	2.400	-	-	-	-	-
MW-5	01/14/2011	10.50	4.40	6.10	-	1,800	2,100	61	4	1	6	-
MW-5	04/19/2011	10.50	5.69	4.81	-	2,000	2,200	73	4	1	6	-
MW-5	06/30/2011	10.50	5.82	4.68	-	3,200	2,900	99	6	1	7	-
MW-5	10/14/2011	10.50	4.51	5.99	4,600	89	2,300	76	5	1	5	-
MW-5	01/18/2012	10.50	5.98	4.52	3,700	460	3,500	140	7	2	10	-
MW-5	04/19/2012	10.50	5.40	5.10	3,600	310	2,000	87	5	1	5	-
MW-5	07/23/2012	10.50	5.29	5.21	4,300	380	-	-	-	-	-	-
MW-5	07/27/2012 ⁴	10.50	5.08	5.42	-	-	1,800	48	3	0.7	4	-
MW-5	01/19/2013	10.50	5.38	5.12	4,200	400	3,500	100	7	<5	7	-
MW-6	10/28/2010	12.98	8.35	4.63	-	300	620	7	<0.5	1	2	-
MW-6	01/14/2011	12.98	7.58	5.40	-	560	120	3	<0.5	< 0.5	<0.5	-
MW-6	04/19/2011	12.98	9.90	3.08	-	590	240	7	< 0.5	< 0.5	< 0.5	-
MW-6	06/30/2011	12.98	9.97	3.01	-	640	200	3	<0.5	<0.5	<0.5	-
MW-6	10/14/2011	12.98	7.40	5.58	1,700	<50	510	10	<0.5	<0.5	<0.5	-
MW-6	01/18/2012	12.98	9.82	3.16	1,300	<50	300	7	<0.5	<0.5	<0.5	-
MW-6	04/19/2012	12.98	8.02	4.96	1,600	<50	290	7	0.6	<0.5	<0.5	-
MW-6	07/23/2012	12.98	9.69	3.29	1,600	73	-	-	-	-	-	-
MW-6	07/27/20124	12.98	8.39	4.59	-	-	450	9	<0.5	<0.5	0.6	-
MW-6	01/19/2013	12.98	8.92	4.06	830	<50	250	3	<0.5	<0.5	<0.5	-
QA	07/21/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 1 Page 5 of 6

GROUNDWATER MONITORING AND SAMPLING DATA FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY CHEVRON BULK PLANT 206127 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

					Н	YDROCARBO	NS	PRIMARY VOCS					
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	В	T	E	X	MTBE by SW8260	
	Units	ft	ft	ft-amsl	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	
QA QA QA QA QA QA QA	10/22/2010 10/28/2010 01/14/2011 04/19/2011 06/30/2011 10/14/2011 01/18/2012 04/19/2012	- - - - -	- - - - - -	- - - - - -	- - - - - -	- - - - - -	<50 <50 <50 <50 <50 <50 <50 <50 <50 <50	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<0.5 - - - - - -	
QA	07/23/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	
QA	01/19/2013	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	

Abbreviations and Notes:

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

(ft-amsl) = Feet above mean sea level

ft = Feet

 $\mu g/L$ = Micrograms per liter

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

B = Benzene

T = Toluene

TABLE 1 Page 6 of 6

GROUNDWATER MONITORING AND SAMPLING DATA FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY CHEVRON BULK PLANT 206127 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

					Н	YDROCARBON	NS		P	RIMARY VOC	S	
Location	Date	тос	DTW	GWE	ТРН-БRО	TPH-DRO w/ Si Gel	TPH-GRO	В	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	µg/L	µg∕L	µg∕L	µg∕L	µg∕L	µg∕L	µg/L	μg/L

E = Ethylbenzene

X = Xylenes (Total)

MTBE = Methyl tert butyl ether

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit</p>

J = Estimated concentration

- * TOC elevations for all wells were surveyed on July 30, 2009, by Morrow Surveying. Vertical Datum is NAVD 88 from GPS observations. TOC elevations were surveyed on January 25, 2001, by Virgil Chacez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).
- Destroyed and re-installed as MW-1RB.
- Monitored only for the 10/28/10 Special Event
- 3 Inaccessible.
- Due to laboratory error, a second set of samples had to be collected for TPHg and BTEX on 7/27/12 for wells MW1RA, MW1RB, MW-3, MW-5 and MW-6.

TABLE 2 Page 1 of 1

WELL CONSTRUCTION SPECIFICATIONS FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY (CHEVRON BULK PLANT 206127) 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

				Casing				
Well ID	Date	TOC	Total Depth	Diameter 1	Slot Size	Screen Interval	Filter Pack	Status
3.5 1: 1	Installed		(fbg)	(inches)	(inches)	(fbg)	(fbg)	
<u>Monitoring</u>	<u>Wells</u>							
MW-1	8/15/1990	13.49	19.5	2	0.020	4-19	3-19.5	Replaced w/MW-1RB
MW-1RA	8/4/2010	13.02	13	2	0.020	8-13	7-13	Active
MW-1RB	8/4/2010	13.21	20	2	0.020	16.5-20	15.5-20	Active
MW-2	6/19/2009	10.63	18	2	0.020	10.5-15.5	10-16	Active
MW-3	6/19/2009	10.72	18.5	2	0.020	13.5-18.5	12.5-18.5	Active
MW-4	6/19/2009	11.40	20.5	2	0.020	15.5-20.5	14.5-20.5	Active
MW-5	6/23/2009	10.50	18	2	0.020	13-18	12-18	Active
MW-6	8/4/2010	12.98	20	2	0.020	16.5-20	15.5-20	Active
Vapor Wells	<u> </u>							
VP-1	7/9/2008	NS	4.25	1	0.020	3.75-4.25	3.5-4.5	Vapor only
VP-2	7/9/2008	NS	4.75	1	0.020	4.25-4.75	4-5	Vapor only
VP-3	7/14/2008	NS	5.75	1	0.020	5.25-5.75	5-6	Vapor only
VP-4	7/14/2008	NS	5.75	1	0.020	5.25-5.75	5-6	Vapor only
VP-5	7/14/2008	NS	5.75	1	0.020	5.25-5.75	5-6	Vapor only
VP-6	7/9/2008	NS	5.75	1	0.020	5.25-5.75	5-6	Vapor only
Sub-Slab Va	apor Probes							
VP-7	7/17/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-8	7/17/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-9	7/22/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-10	7/22/2009	NS	0.5	0.25	NA	NA	NA	Destroyed
VP-11	7/17/2009	NS	0.5	0.25	NA	NA	NA	Destroyed
VP-12	7/22/2009	NS	0.5	0.25	NA	NA	NA	Destroyed
VP-13	7/22/2009	NS	0.5	0.25	NA	NA	NA	Vapor only

Abbreviations / Notes

TOC = Top of casing elevation (feet above mean sea level)

fbg = Feet below grade

NA = Not applicable

NS = Not surveyed

¹ = Schedule 40 PVC casing material

ATTACHMENT A

MONITORING DATA PACKAGE



TRANSMITTAL

January 25, 2013 G-R #386498

TO:

Mr. Brian Silva

Conestoga-Rovers & Associates 10969 Trade Center Drive, Suite 107 Rancho Cordova, California 95670

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 **RE: Chevron #206127**

2301-2337 Blanding Avenue

Alameda, California

(Former Signal Oil Marine Terminal)

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package First Quarter Event of January 19, 2013

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/206127

WELL CONDITION STATUS SHEET

Client/Facility #: Site Address: City:		37 Blandin	g Avenue			-	Job #: Event Date: Sampler:	386	498			lligli) VZ			
WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	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)	REPL LOG	CK	0	PLACE CAP		WELL VAULT acture/Size/ # of Bolts		ictures Taken Y / N
MW-1RA	Olc	•						1	ノ		V	8" n	102113~		N
MW-1RB	oſc	~					-		(1		1
mw-2	olc	-					_3					12" er	160		
Mr.)	ok	_					->						1		1
MW-4	ok									11					
mw-5	ok								,						
mw-6	OK			-IXD	ol-		-	4		7	1	8" 1	MERRIST		1
			N				,								
									-50						
												<u>.</u>			
Comments															

STANDARD OPERATING PROCEDURE -GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

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, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). 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 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, as directed by the scope of work. 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. 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 Clean Harbors Environmental Services to Evergreen Oil located in Newark, California.



Client/Facility#:	Chevron #206127	7	Job Number:	386498	
Site Address:	2301-2337 Bland	ing Avenue	Event Date:	1/15/12	—— (inclusive)
City:	Alameda, CA		Sampler:	HZ.	(molasive)
Well ID	MW- IRA		Date Monitored:	1/19/17	
Well Diameter	2	Volur	ne 3/4"= 0.0	02 1"= 0.04 2"= 0.17 3"=	: 0.38
Total Depth	12.67 ft.	Facto	or (VF) 4"= 0.6	66 5"= 1.02 6"= 1.50 12"=	5.80
Depth to Water	7.30 ft.	Check if water colun			
Danielo da NAC d				Estimated Purge Volume: 2.7	3gal.
Depth to water	w/ 80% Recharge [(Heig	ht of Water Column x 0.20)	+ DTW]: 8 - 5 /	Time Started:	(2400 hrs)
Purge Equipment:		Sampling Equipment	1	Time Completed:	
Disposable Bailer		Disposable Bailer	×	Depth to Product:	
Stainless Steel Baile		Pressure Bailer		Depth to Water:	
Stack Pump		Metal Filters		Hydrocarbon Thickness:	
Suction Pump		Peristaltic Pump		Visual Confirmation/Descri	ption:
Grundfos		QED Bladder Pump		Skimmer / Absorbant Sock	(circle one)
Peristaltic Pump		Other:		Amt Removed from Skimm	
QED Bladder Pump				Amt Removed from Well:_	gal
Other:	<u> </u>			Water Removed:	
Sample Time/Da Approx. Flow Ra Did well de-water Time (2400 hr.) /347 /345	te: gpm. 7? If yes, 7 Volume (gal.) pH	Sediment D Fime: Volu Conductivity (µmhos/cm - (S)	· · · · · · · · · · · · · · · · · · ·	Lisk	8.20
		LABORATORY II	NFORMATION	707 37	
SAMPLE ID	(#) CONTAINER REF			ANALYSES	
MW-18A	x voa vial YE		LANCASTER	TPH-GRO(8015)/BTEX(8260)	
	2 x 1 liter ambers YE	S NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH	-DRO (8015)
			 		
			-		
COMMENTS:					
Add/Replaced L	ock:	Add/Replaced Plug		Add/Replaced Bolt:	



Client/Facility#:	Chevron #206	127		Job Number:	386498		
Site Address:	2301-2337 Bla	nding Avenu	<u>е</u>	Event Date:	1/19/12		(inclusive)
City:	Alameda, CA			Sampler:	ZW	<u>.</u>	(/5.55.60)
Well ID	MW- IRE	3		ate Monitored:	1/18/17		
Well Diameter	2		Volume			0.17 3"= 0.38	
Total Depth	19.92 ft.		Factor			1.50 12"= 5.80	
Depth to Water	8.65 ft.	Districtory		n is less then 0.50		~ = ./	
Donth to Water					Estimated Purge Volu	ıme: <u>5.79</u>	gal.
Depth to water	w/ 80% Recharge [(Height of Water Coli	Jmn x 0.20) +	DTW]: 10.10	Time Started:	(d)	(2400 hrs)
Purge Equipment:		Sampling I	Equipment:			d:	
Disposable Bailer	×	Disposable		K		ct:	
Stainless Steel Baile		Pressure B	ailer			· ·	
Stack Pump		Metal Filter	S			nickness:	ft
Suction Pump		Peristaltic F	ump		Visual Confirma	ation/Description:	
Grundfos		QED Bladd	er Pump		Skimmer / Abso	orbant Sock (circle	one)
Peristaltic Pump		Other:				rom Skimmer:	
QED Bladder Pump						rom Well:	
Other:					Water Remove	d:	
	· · · · · · · · · · · · · · · · · · ·			·			
Start Time (purge): 1255	. We	eather Con	ditions:	Clean		
Sample Time/Da					Odor: Y / 🚯		
Approx. Flow Ra			diment De		_ , —		····
Did well de-water		•		•	L.316	10	
Did well de-water	1? 11 yo	es, i ime.	volun	ne:	gal. DTW @ San	npling:	31
Time	Volume (gal.)	nH	uctivity	Temperature	D.O.	ORP	
(2400 hr.)		(µmnos	/cm -(µS)	(G/F)	(mg/L)	(mV)	
1300		7.62 55		18.6			
1305		7.38 52		18.5			
1310	6	7.30 509	<u></u>	18.2			
		14565				501	
SAMPLE ID	(#) CONTAINER		ERV. TYPE	FORMATION LABORATORY		NALYSES	
MW- JRB	x voa vial		HCL	LANCASTER	TPH-GRO(8015)/BTE		
1,23	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc CO		8015)
		_					
COMMENTS:		·			I		
		-			· · · · · · · · · · · · · · · · · · ·		
Add/Replaced L	ock:	Add/Replace	d Plug:		Add/Replaced Bo	olt:	****



Client/Facility#:	Chevron #20	6127		Job Number:	386498	
Site Address:	2301-2337 B	anding Av	enue	Event Date:	1/18/13	(inclusive)
City:	Alameda, CA			Sampler:	JH	(
Well ID	MW- 2	9	-1	Date Monitored:	1/19/13	
Well Diameter	2		Volum	ne 3/4"= 0.0	2 1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	15-58 ft.	. <u>_</u>	Facto	r (VF) 4"= 0.6		12"= 5.80
Depth to Water		Provenoussell		in is less then 0.50		
5 0 4 14 4	12.13	xVF7	= 2.66	x3 case volume =	Estimated Purge Volume:	6 18 gal.
Depth to Water	w/ 80% Recharge	[(Height of Wate	er Column x 0.20)	+ DTW]: <u>\$ - 87</u>	Time Started:	(2400 hm)
Purge Equipment:		Sam	pling Equipment:		Time Completed:	(2400 hrs) (2400 hrs)
Disposable Bailer	<u></u>		osable Bailer	<i>8</i>	Depth to Product:	
Stainless Steel Baile		•	sure Bailer		Depth to Water:	
Stack Pump			l Filters		Hydrocarbon Thickne	
Suction Pump			taltic Pump		Visual Confirmation/D	escription:
Grundfos			Bladder Pump		Claire and All and A	0.144
Peristaltic Pump			r:		Skimmer / Absorbant	Sock (circle one) kimmer: gal
QED Bladder Pump					Amt Removed from W	/ell:gal
Other:					Water Removed:	
Start Time (purge	e): 0820		Weather Co	nditions:	clean	
Sample Time/Da		19/13			Odor: Y / 🐧	
Approx. Flow Ra		gpm.				
Did well de-wate			Sediment De		Listr	// ===
Did Well de-Wate	11 700 11	es, Time:	Volui	me:	gal. DTW @ Sampling	: 4.59
Time	Volume (gal.)	pH ,	Conductivity	Temperature	D.O.	ORP
(2400 hr.)	,	(h	ımhos/cm - 🚱	(Ø/F)	(mg/L) (mV)
0825		7.89	419	18.3		
0831	<u> </u>	7.80	432	18-1		
0837		7.63	470	18.6		
	-	1 2				<u>.</u>
		IΔI	BORATORY IN	FORMATION		
SAMPLE ID	(#) CONTAINER		PRESERV. TYPE	LABORATORY	ANALY	SES
MW- 2	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(826	
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/	TPH-DRO (8015)
			-			
			-	 		
				- 1 - 1 - 1		
COMMENTS:	12" cmes					
	12 0,					-
	12 01110					
Add/Replaced t			placed Plug:			



Client/Facility#:	Chevron #206	127	Job Number:	386498	
Site Address:	2301-2337 Bla	nding Avenue	Event Date:	1/19/13	(inclusive)
City:	Alameda, CA		Sampler:	ZH	(110103140)
Well ID	MW- 3		Date Monitored:	1/19/13	
Well Diameter	2		Volume 3/4"= 0.0	2 1"= 0.04 2"= 0.	17 3"= 0.38
Total Depth	17.86 ft.		Factor (VF) 4"= 0.6		
Depth to Water		190-1-1909	column is less then 0.50		
	13 .34 ×	VF .17 = 2.2	x3 case volume =	Estimated Purge Volum	ne: <u>6.80</u> gal.
Depth to Water	w/ 80% Recharge [(Height of Water Column x (0.20) + DTW]: 7./8	Time Started:	(2400 hrs)
Purge Equipment:		Sampling Equipr	nent·	Time Completed:	(2400 hrs)
Disposable Bailer	X	Disposable Bailer	×	Depth to Product	ft
Stainless Steel Baile		Pressure Bailer			ft
Stack Pump		Metal Filters			kness:ft
Suction Pump		Peristaltic Pump		Visual Confirmati	on/Description:
Grundfos		QED Bladder Pum	p	Chimmon / Ab a a d	
Peristaltic Pump		Other:			ant Sock (circle one) m Skimmer: gal
QED Bladder Pump				Amt Removed fro	m Well:gal
Other:				Water Removed:	gai
					
Start Time (purg	e): <u>0920</u>	Weathe	Conditions:	Clean	
Sample Time/Da	ate: /000 /	15 lig Water C	olor: clad	Odor: Y / 🚯	
Approx. Flow Ra	ate: 🔷 g	pm. Sedimer			
Approx. Flow Ra Did well de-wate			nt Description:	4.040	ling: \$57
Did well de-wate		es, Time:\	nt Description:		ling: 5. 57
Did well de-wate		es, Time:\	nt Description: /olume:	gal. DTW @ Samp	ORP
Did well de-wate Time (2400 hr.)	Volume (gal.)	pH Conductivity (µmhos/cm µ	Temperature (G / F)	gal. DTW @ Samp	
Time (2400 hr.)	er? /// If ye	PH Conductivity (μmhos/cm (μ	Temperature () (F)	gal. DTW @ Samp	ORP
Time (2400 hr.)	Volume (gal.)	PH Conductivity (μmhos/cm (μ. 7.80 582 6.20	Temperature 17-9 17-9	gal. DTW @ Samp	ORP
Time (2400 hr.)	Volume (gal.)	PH Conductivity (μmhos/cm (μ	Temperature () (F)	gal. DTW @ Samp	ORP
Time (2400 hr.)	Volume (gal.)	PH Conductivity (μmhos/cm (μ. 7.80 582 6.20	Temperature 17-9 17-9	gal. DTW @ Samp	ORP
Time (2400 hr.) 0926 0932 0940	Volume (gal.) 2 0/ 7	Conductivity (µmhos/cm (µ 7.80 7.35 6 45 LABORATOR	Temperature 17-9 17-9	gal. DTW @ Samp	ORP
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 Cl 7 7 (#) CONTAINER	Conductivity (µmhos/cm (µm	Temperature (C) / F) 17.9 17.9 Y INFORMATION (PE LABORATORY)	gal. DTW @ Samp D.O. (mg/L)	ORP (mV)
Time (2400 hr.) 0926 0932 0940	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 Cl 7 7 (#) CONTAINER	Conductivity (µmhos/cm (µm	Temperature (C) / F) 17.9 17.9 Y INFORMATION (PE LABORATORY)	gal. DTW @ Samp D.O. (mg/L)	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 926 O 932 O 940 SAMPLE ID MW- 3	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 924 O 932 O 940 SAMPLE ID	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 926 O 932 O 940 SAMPLE ID MW- 3	Volume (gal.) 2 1 7 7 (#) CONTAINER 1 6 x voa vial	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)
Time (2400 hr.) O 926 O 932 O 940 SAMPLE ID MW- 3	Volume (gal.) 2	Conductivity (µmhos/cm (µ 7.80 7.35 582 7.35 643 LABORATOR REFRIG. PRESERV. T YES HCL	Temperature (G / F) 17.9 17.9 17.4 Y INFORMATION (PE LABORATORY LANCASTER	gal. DTW @ Samp D.O. (mg/L) ANA TPH-GRO(8015)/BTEX	ORP (mV)



Client/Facility#:	Chevron #20	6127		Job	Number:	386498		
Site Address:	2301-2337 B	landing	Avenue	 Ever	nt Date:	111	8/13	— (inclusive)
City:	Alameda, CA			Sam			271.7	(
			···		——————————————————————————————————————		3 H	
Well ID	MW- 4			Date M	onitored:	111	5/13	
Well Diameter	2	-	J	Volume	3/4"= 0.02			
Total Depth	20.17 ft.	-		Factor (VF)	4"= 0.66		2"= 0.17 3"= 0.3 6"= 1.50 12"= 5.8	-
Depth to Water	6.78 ft.		Check if water	column is les	s then 0.50) ft.		···
	13.39	xVF	7 = 2.	27 x3 cas	e volume =	Estimated Pur	ge Volume: 6.82	gal.
Depth to Water v	w/ 80% Recharge	[(Height of \	Nater Column x	0.20) + DTW]:	9.45			
							arted:	
Purge Equipment:			Sampling Equip				ompleted:	
Disposable Bailer	<u> </u>		Disposable Bailer	r }	<		Water:	
Stainless Steel Bailer	<u> </u>		ressure Bailer				rbon Thickness:	
Stack Pump			letal Filters	-			confirmation/Description	
Suction Pump			eristaltic Pump	-				
Grundfos			ED Bladder Pur	-			r / Absorbant Sock (cir	
Peristaltic Pump QED Bladder Pump		C	other:				noved from Skimmer:_	
Other:							noved from Well:	
Other.						vvaterR	emoved:	
Start Time (purge Sample Time/Da Approx. Flow Rat Did well de-water (2400 hr.)	te: 1050 / te:	gpm. yes, Time pH 7.60 7.42	Water (Sedime	y_ Temp	erature	۲.	N Ho	7.20
1032	7	7.35	653	17.	7		- 12 ·	
		-						_
			LABODATO	DV INFORM	ATION			
SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATO		RATORY		ANALYSES	
MW- 4	6 x voa vial	YES	HCL		CASTER	TPH-GRO(80	15)/BTEX(8260)	
	2 x 1 liter ambers	YES	NP		CASTER		gc COLUMN/TPH-DR	O (8015)
<u> </u>								
			 					
						<u> </u>		
COMMENTS:								
Add/Replaced L		Add/	Replaced Plu	ug:		Add/Replac	ced Bolt:	



Client/Facility#:	Chevron #20	06127		Job Number:	386498	386498		
Site Address:	2301-2337 B	landing	Avenue	Event Date:	1/19/1	3	(inclusive)	
City:	Alameda, CA			— Sampler:	US		_ ()	
			-				-	
Well ID	MW-5			Date Monitored:	1/19/13			
Well Diameter	2		[v	olume 3/4"= 0.0	02 1"= 0.04 2"	= 0.17 3"= 0.38		
Total Depth	17.90 ft	_	I	actor (VF) 4"= 0.6		= 1.50 12"= 5.80		
Depth to Water	5.38 ft.			lumn is less then 0.5				
	12.52	xVF	17 = 2.12	x3 case volume =	= Estimated Purge Vo	olume: 6-38	_ gal.	
Depth to Water	w/ 80% Recharge	(Height of	Water Column x 0.2	20) + DTW]: 7.88				
Burgo Equipment			6. r = :	_		ted:		
Purge Equipment:			Sampling Equipme	,		duct:		
Disposable Bailer	×		Disposable Bailer	×		er:		
Stainless Steel Baile	<u> </u>		Pressure Bailer			Thickness:		
Stack Pump			Metal Filters		- H	nation/Description:		
Suction Pump Grundfos			Peristaltic Pump			<u></u>		
			QED Bladder Pump	· · · · · · · · · · · · · · · · · · ·		sorbant Sock (circle		
Peristaltic Pump		(Other:		Amt Remove	d from Skimmer:	gal	
QED Bladder Pump					Amt Removed	d from Well:	gal	
Other:					Water Remov	/ed:		
		***		·				
Start Time (purge	e): /// <i>U</i>		Weather	Conditions:	Clea	~		
Sample Time/Da	ite: 40 /	1/19/13	Water Co	olor: close,	Odor: Y /			
Approx. Flow Ra		gpm.		Description:	Listo		···	
Did well de-wate				· -	gal. DTW @ Sa	moline: 76		
Dia wow do wate	"	yC3, 111110	J V.	olume.	gai. Divv @ Sa	impling		
Time	Volume (gal.)	рН	Conductivity	Temperature	D.O.	ORP		
(2400 hr.)			(µmhos/cm - uS		(mg/L)	(mV)		
1115		7.42	383	18.2		-		
1120		7.37	595	18.1				
1125	6	7.44	6 20	18.0				
•								
			LABORATORY	/ INFORMATION				
SAMPLE ID	(#) CONTAINER	REFRIG.				ANALYSES		
MW- 5	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/B	TEX(8260)		
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc C	OLUMN/TPH-DRO	(8015)	
			ļ					
	-	_						
_								
			<u> </u>		<u> </u>			
COMMENTS:		···						
			7.65					
	· · · · · · · · · · · · · · · · · · ·				<u>"</u>			
Add/Replaced I	ock:	۸۵۸	I/Penlaged Dive		Add/Danisassi	Dalt.		
Add/Neplaced I		Add	I/Replaced Plug	•	Add/Replaced I	50IT:		

	Chevron #2061	<u> </u>	Job Number:	386498	
Site Address:	2301-2337 Blan	ding Avenue	Event Date:	1/19/13	(inclusive)
City:	Alameda, CA		— Sampler:	2 <i>h</i>	(**************************************
Well ID	MW- 6		Date Monitored:	, listin	
Well Diameter	2	i,	/olume 3/4"= 0.0	2 1"= 0.04 2"=	0.17 3"= 0.38
Total Depth	20.02 ft.		factor (VF) 4"= 0.6		1.50 12"= 5.80
Depth to Water	8.92 ft.	Check if water co	olumn is less then 0.50	O ft.	
	11.10 xVI	= <u>.17</u> = <u>1.88</u>	x3 case volume =	Estimated Purge Vol	ume: 5.66 gal.
Depth to Water	w/ 80% Recharge [(H	eight of Water Column x 0			
					(2400 hrs)
Purge Equipment:		Sampling Equipm	ent:		ed:(2400 hrs) uct:ft
Disposable Bailer		Disposable Bailer			r:ft
Stainless Steel Baile	r	Pressure Bailer			hickness: ft
Stack Pump		Metal Filters		Na -	ation/Description:
Suction Pump Grundfos		Peristaltic Pump QED Bladder Pump			
Peristaltic Pump					orbant Sock (circle one)
QED Bladder Pump		Other:		Amt Removed	from Skimmer: gal
Other:	. 700			Amt Removed	from Well: gal d:
				vvaler Kemove	u
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	te: 1240 / 114 te: gpi r? If yes Volume (gal.)	Water Com. Sedimen Time: Conductivity (µmhos/cm µS	Temperature	gal. DTW @ Sar	
1205 1210 1214	2 7.	80 670 57 649 43 624	18.2 18.1 18.0	(mg/L)	
1219	y 7. 5,5 7.	57 43 649 624 LABORATOR	18.1 18.0 Y INFORMATION		
1210 1214	4 7. 7. 7. 7. CONTAINER RI	LABORATOR	Y INFORMATION PE LABORATORY		ANALYSES
1219	(#) CONTAINER RI	57 43 649 624 LABORATOR	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION PE LABORATORY	TPH-GRO(8015)/BT	ANALYSES
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)
1210 1214	(#) CONTAINER RI	LABORATOR FRIG. PRESERV. TO YES HCL	Y INFORMATION (PE LABORATORY LANCASTER	TPH-GRO(8015)/BT	ANALYSES EX(8260)

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories Please forward the lab results directly	to the Lead	Consultan	it and c	c: G		Acct.	#:				Sam	ple #	#		Labo				010	809
Site Address: S#206127-OML G-R#386496 Site Address: Site Address: G-R, Inc., 6747 Sierra Coulonsultant/Office: Deanna L. Harding (de	Consultant: Consul	PA, CA RASB Publin, CA			Potable NPDES		Containers	8021	H	Silica Gel Cleanup	30 (Ecic)	rese	erva	tion	Codes	3		Preserva H = HCI N = HNO ₃ S = H ₂ SO ₄ ☐ J value report	T = Thio B = NaC O = Othe	esulfate OH er
Consultant Phone #925-551-7555		551-7899	Grab	Soil	Water 🗀 N	Oil 🗆 Air	Total Number of Con	BTEX + METST 8260 'E 80	TPH 8015 MOD GRO	TPH 8015 MOD DRO 🗹 Sili	886944 Broam TOH-OX	Oxygenates	Total Lead Method —	Dissolved Lead Method —				possible for 8 8021 MTBE Cor Confirm highe Confirm all hit Run oxy Run oxy	260 composition ast hit by 8 ts by 8260 y's on high	ounds 3260 est hit
MIN-1RA MIN-1RB MIN-2 MIN-2 MIN-1 MIN-7 MIN-5	1 1811	1920 1330 0500 1000 1070 1110 1240	× × × × × × × × × × × × × × × × × × ×		× × × × × × ×			X	TXXXXXX	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	× × × × × × × × × × × × × × × × × × ×							TPI+DRO WI REQUESTII COLUMN CL CAPRIC AC	TH SILICA NG 10 GR EAN-UP V	GEL AM VITH
Turnaround Time Requested (TAT) (please circle if required) 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 need WIP (RWQCB) Disk	EDF/EDD	Relinqu Relinqu UPS	ished by: Ished by: Ished by: Ished by Finature Upon	Comi		C	rrier:	7	5/-,	1/-/	Date Date Date	Tii	me me C°	Red	eeived eeived eeived stody S	by: by: by:	James -	Yes No	Date Direction of the second o	Time Time Time Time

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



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

ANALYTICAL RESULTS

Prepared by:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Chevron L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

February 07, 2013

Project: 206127

Submittal Date: 01/22/2013 Group Number: 1363813 PO Number: 0015115966 Release Number: BAUER State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
QA-T-130119 NA Water	6930772
MW-1RA-W-130119 Grab Water	6930773
MW-1RB-W-130119 Grab Water	6930774
MW-2-W-130119 Grab Water	6930775
MW-3-W-130119 Grab Water	6930776
MW-4-W-130119 Grab Water	6930777
MW-5-W-130119 Grab Water	6930778
MW-6-W-130119 Grab Water	6930779

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

ELECTRONIC	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
COPY TO ELECTRONIC	Chevron c/o CRA	Attn: Report Contact
COPY TO ELECTRONIC	Chevron	Attn: Anna Avina
COPY TO		
ELECTRONIC COPY TO	CRA	Attn: Brian Silva



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Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



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Sample Description: QA-T-130119 NA Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 QA

LLI Sample # WW 6930772

LLI Group # 1363813

Account # 10904

Project Name: 206127

Collected: 01/19/2013 Chevron

L4310

Submitted: 01/22/2013 21:11 6001 Bollinger Canyon Rd.

Reported: 02/07/2013 21:03 San Ramon CA 94583

BAAQA

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	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles TPH-GRO N. CA water	SW-846 C6-C12	8015B n.a.	ug/1 N.D.	ug/1 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 Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130252AA	01/25/2013	10:10	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130252AA	01/25/2013	10:10	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13024A20A	01/24/2013	20:04	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13024A20A	01/24/2013	20:04	Catherine J Schwarz	1



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Sample Description: MW-1RA-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-1RA

LLI Sample # WW 6930773

LLI Group # 1363813

Account # 10904

Project Name: 206127

Submitted: 01/22/2013 21:11

Reported: 02/07/2013 21:03

Collected: 01/19/2013 14:20 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

BAA1A

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS 10943 10943 10943	Volatiles Benzene Ethylbenzene Toluene	SW-846	8260B 71-43-2 100-41-4 108-88-3	ug/1 180 N.D. N.D.	ug/1 5 5 5	10 10 10
10943 GC Vol 01728	Xylene (Total) atiles TPH-GRO N. CA water	SW-846 C6-C12	1330-20-7 8015B n.a.	N.D. ug/l 1,500	5 ug/1 50	10
Hydrod	croleum carbons TPH-DRO water C10-C	SW-846	8015B	ug/l 3,000	ug/1 50	1
	croleum carbons w/Si TPH-DRO water C10-C The reverse surroga		el n.a.	ug/l 270 at <1%.	ug/1 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 Tim	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130244AA	01/25/2013	01:59	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130244AA	01/25/2013	01:59	Brett W Kenyon	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13024A20A	01/24/2013	21:54	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13024A20A	01/24/2013	21:54	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	130240017A	01/26/2013	10:43	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	130240018A	02/01/2013	01:13	Artie D Kunselman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	130240018A	01/24/2013	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	130240017A	01/24/2013	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-1RB-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-1RB

LLI Sample # WW 6930774

LLI Group # 1363813

Account # 10904

Project Name: 206127

Reported: 02/07/2013 21:03

Collected: 01/19/2013 13:30 by JH Chevron

L4310

Submitted: 01/22/2013 21:11 6001 Bollinger Canyon Rd.

San Ramon CA 94583

BAA1B

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				
10943	Benzene		71-43-2	2	0.5	1			
10943	Ethylbenzene		100-41-4	N.D.	0.5	1			
10943	Toluene		108-88-3	N.D.	0.5	1			
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1			
GC Vol	latiles	SW-846	8015B	ug/l	ug/l				
01728	TPH-GRO N. CA water	C6-C12	n.a.	200	50	1			
GC Petroleum SW-846 8015B ug/l ug/l									
-	carbons TPH-DRO water C10-C	28	n.a.	2,000	50	1			
GC Pet	roleum	SW-846	8015B	ug/l	ug/l				
Hydrod	carbons w/Si								
02216	TPH-DRO water C10-C28 w/Si Gel n.a. 62 50 1 The reverse surrogate, capric acid, is present at <1%. The blank associated with this sample exhibited a late-eluting contamination pattern. This sample also contains a similar late-eluting pattern. No further action was taken.								

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.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution
No.					Date and Tir			Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130244AA	01/24/2013	23:40	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130244AA	01/24/2013	23:40	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13024A20A	01/24/2013	22:16	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13024A20A	01/24/2013	22:16	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	130240017A	01/26/2013	09:08	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	2	130240018A	02/01/2013	01:36	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	130240018A	01/24/2013	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	130240017A	01/24/2013	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-2-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-2

LLI Sample # WW 6930775

LLI Group # 1363813 Account # 10904

Project Name: 206127

Submitted: 01/22/2013 21:11

Reported: 02/07/2013 21:03

Collected: 01/19/2013 09:00 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

BAAM2

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	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
				=	50	1
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
-	arbons					
08269	TPH-DRO water C10-C	28	n.a.	N.D.	50	1
	croleum carbons w/Si	SW-846	8015B	ug/l	ug/l	
02216	TPH-DRO water C10-C The reverse surroga			N.D. at <1%.	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130244AA	01/25/2013	02:26	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130244AA	01/25/2013	02:26	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13024A20A	01/24/2013	22:38	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13024A20A	01/24/2013	22:38	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	130240017A	01/26/2013	04:23	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	130240018A	02/01/2013	01:59	Artie D Kunselman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	130240018A	01/24/2013	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	130240017A	01/24/2013	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-3-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-3

LLI Sample # WW 6930776

LLI Group # 1363813 Account # 10904

Project Name: 206127

Reported: 02/07/2013 21:03

Collected: 01/19/2013 10:00 by JH Chevron

L4310

Submitted: 01/22/2013 21:11 6001 Bollinger Canyon Rd.

San Ramon CA 94583

BAAM3

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	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	69	50	1
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
Hvdro	arbons					
-	TPH-DRO water C10-C	2.8	n.a.	1,600	50	1
00203	1111 2110 114001 010 01			1,000		_
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons w/Si					
02216	TPH-DRO water C10-C	20 **/61 C	al na	N.D.	50	1
02210	The reverse surrogat	,			50	1
		_		at 11%. A a late-eluting contaminat	ion	
			_	ate-eluting pattern. No f		
	action was taken.	ic aiso c	Jiicains a Similal I	acc cracing pactern. NO I	ar ciici	

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.

				_	_				
CAT No.	Analysis Name	Method		Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846	8260B	1	P130244AA	01/25/2013	02:54	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846	5030B	1	P130244AA	01/25/2013	02:54	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846	8015B	1	13025A07A	01/28/2013	12:50	Marie D John	1
01146	GC VOA Water Prep	SW-846	5030B	1	13025A07A	01/28/2013	12:50	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846	8015B	1	130240017A	01/26/2013	09:32	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846	8015B	1	130240018A	02/06/2013	09:34	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846	3510C	1	130240018A	01/24/2013	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846	3510C	1	130240017A	01/24/2013	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-4-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-4

LLI Sample # WW 6930777

LLI Group # 1363813 Account # 10904

Project Name: 206127

Submitted: 01/22/2013 21:11

Reported: 02/07/2013 21:03

Collected: 01/19/2013 10:50 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

BAAM4

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	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	.atiles TPH-GRO N. CA water	SW-846 C6-C12	8015B	ug/l N.D.	ug/l 50	1
	roleum arbons	SW-846	8015B	ug/l	ug/l	
-	TPH-DRO water C10-C	28	n.a.	380	50	1
	roleum arbons w/Si	SW-846	8015B	ug/l	ug/l	
-	TPH-DRO water C10-C The reverse surroga			N.D. at <1%.	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130244AA	01/25/2013 03:	22	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130244AA	01/25/2013 03:	22	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13025A07A	01/28/2013 13:	15	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13025A07A	01/28/2013 13:	15	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	130240017A	01/26/2013 05:	35	Christine E Dolman	. 1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	130240018A	02/01/2013 02:	44	Artie D Kunselman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	130240018A	01/24/2013 22:	00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	130240017A	01/24/2013 22:	0.0	Elaine F Stoltzfus	1



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Sample Description: MW-5-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-5

LLI Sample # WW 6930778

LLI Group # 1363813

Account # 10904

Project Name: 206127

Submitted: 01/22/2013 21:11

Reported: 02/07/2013 21:03

Collected: 01/19/2013 11:40 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

BAAM5

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	
10943	Benzene		71-43-2	100	5	10
10943	Ethylbenzene		100-41-4	N.D.	5	10
10943	Toluene		108-88-3	7	5	10
10943	Xylene (Total)		1330-20-7	7	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	3,500	50	1
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
Hydrod	arbons					
08269	TPH-DRO water C10-C	28	n.a.	4,200	50	1
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
	carbons w/Si					
-	•			400		
02216	TPH-DRO water C10-C			400	50	1
	The reverse surroga	te, capri	c 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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130244AA	01/25/2013 0	3:49	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130244AA	01/25/2013 0	3:49	Brett W Kenyon	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13025A07A	01/28/2013 1	3:41	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13025A07A	01/28/2013 1	3:41	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	130240017A	01/26/2013 1	1:07	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	130240018A	02/01/2013 0	3:07	Artie D Kunselman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	130240018A	01/24/2013 2	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	130240017A	01/24/2013 2	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-6-W-130119 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2307 Blanding Ave-Ala T06019744728 MW-6

LLI Sample # WW 6930779

LLI Group # 1363813 Account # 10904

Project Name: 206127

Submitted: 01/22/2013 21:11

Reported: 02/07/2013 21:03

Collected: 01/19/2013 12:40 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

ваам6

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	
10943	Benzene		71-43-2	3	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GG 17-1	latiles	SW-846	901ED	ug/l	ug/l	
				=	=	
01728	TPH-GRO N. CA water	C6-C12	n.a.	250	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
-	arbons					
08269	TPH-DRO water C10-C	28	n.a.	830	50	1
	roleum carbons w/Si	SW-846	8015B	ug/l	ug/l	
02216	TPH-DRO water C10-C. The reverse surroga			N.D. at <1%.	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130244AA	01/25/2013	04:17	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130244AA	01/25/2013	04:17	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13025A07A	01/28/2013	14:06	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13025A07A	01/28/2013	14:06	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	130240017A	01/26/2013	05:58	Christine E Dolman	. 1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	130240018A	02/01/2013	03:30	Artie D Kunselman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	130240018A	01/24/2013	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	130240017A	01/24/2013	22:00	Elaine F Stoltzfus	1



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Quality Control Summary

Client Name: Chevron Group Number: 1363813

Reported: 02/07/13 at 09:03 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 <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: P130244AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample number N.D. N.D. N.D. N.D.	er(s): 693 0.5 0.5 0.5 0.5	30773-6930 ug/l ug/l ug/l ug/l	779 89 92 92 92		77-121 79-120 79-120 77-120		
Batch number: P130252AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample number N.D. N.D. N.D. N.D. N.D.	er(s): 693 0.5 0.5 0.5 0.5	30772 ug/l ug/l ug/l ug/l	95 98 99 98		77-121 79-120 79-120 77-120		
Batch number: 13024A20A TPH-GRO N. CA water C6-C12	Sample numbe	er(s): 693 50.	30772-6930 ug/l	775 97	101	75-135	4	30
Batch number: 13025A07A TPH-GRO N. CA water C6-C12	Sample numbe	er(s): 693 50.	30776-6930 ug/l	779 108	108	75-135	0	30
Batch number: 130240017A TPH-DRO water C10-C28	Sample numbe	er(s): 693 32.	30773-6930 ug/l	779 90	85	56-122	6	20
Batch number: 130240018A TPH-DRO water C10-C28 w/Si Gel	Sample numbe	er(s): 693 32.	30773-6930 ug/l	779 79	75	50-124	5	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 <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: P130244AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample 87 92 91 92	number(s) 101 103 101 101	6930773 72-134 71-134 80-125 79-125	-693077 13 12 11 10	79 UNSP 30 30 30 30 30	K: 6930774			
Batch number: P130252AA Benzene Ethylbenzene Toluene	Sample 103 105 106	number(s) 104 106 105	6930772 72-134 71-134 80-125	UNSPK: 1 1 1	P9297 30 30 30	51			

- *- 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.



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Quality Control Summary

Client Name: Chevron Group Number: 1363813

Reported: 02/07/13 at 09:03 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

MS MSD MS/MSD RPD BKG DUD DUP Dup RPD <u>Analysis Name</u> %REC %REC <u>Limits</u> <u>MAX</u> Conc Conc RPD Max Xylene (Total) 79-125

Surrogate Quality Control

104

108

105

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: P130244AA

Baccii ilu	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6930773	102	100	103	101	
6930774	105	99	102	107	
6930775	105	103	101	102	
6930776	105	99	100	106	
6930777	106	98	101	101	
6930778	105	99	102	102	
6930779	104	101	101	103	
Blank	106	99	102	102	

102

102

101

80-113 78-113 80-116 77-113 Limits:

103

100

101

Analysis Name: UST VOCs by 8260B - Water Batch number: P130252AA

104

105

103

Batti iiu	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6930772	105	97	103	100	
Blank	104	95	102	101	
LCS	102	98	102	106	
MS	103	103	102	104	
MSD	103	100	102	105	
Limits:	80-116	77-113	80-113	78-113	

Analysis Name: TPH-GRO N. CA water C6-C12

Batch number: 13024A20A

Trifluorotoluene-F

5930772	79
5930773	162*
5930774	85
5930775	80
3lank	87
LCS	110
LCSD	109

LCS

MSD

MS

^{*-} 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.



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Quality Control Summary

Client Name: Chevron Group Number: 1363813 Reported: 02/07/13 at 09:03 PM Surrogate Quality Control Limits: 63-135 Analysis Name: TPH-GRO N. CA water C6-C12 Batch number: 13025A07A Trifluorotoluene-F 6930776 83 6930777 85 6930778 120 6930779 91 Blank LCS 97 LCSD Limits: Analysis Name: TPH-DRO water C10-C28 Batch number: 130240017A Orthoterphenyl 6930773 100 6930774 99 6930775 89 6930776 84 6930777 91 6930778 96 6930779 95 Blank 95 LCS 97 LCSD Limits: 50-154 Analysis Name: TPH-DRO water C10-C28 w/Si Gel Batch number: 130240018A Orthoterphenyl 6930773 6930774 100 6930775 83 6930776 84 6930777 87 6930778 89 6930779 92 Blank 116 LCS 96 LCSD

*- Outside of specification

50-154

Limits:

- (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

Lancaster Laboratories Please forward the lab results directly	21125-04 to the Lead	f Consultant an	od cc	: G-R		ct. #: <u>\</u>	٥ <u>٩</u> [100	<u> </u>	Sam; A n	ole# nalys	<u>69</u> es l	36 Reque	sted	ries us	e on	Group #: G∩P ±1.	363	3813
Facility #: SS#206127-OML G-R#386498 Site Address: 2301-2337 BLANDING AVENU Chevron PM: MB Lead Consultant/Office: G-R, Inc., 6747 Sierra Cou Consultant Prj. Mgr.: Deanna L. Harding (de Consultant Phone #925-551-7555 Sampler:	E, ALAMED Consultant: Consultant: Consultant: Consultant: Consultant: Consultant: Consultant Consul	DA, CA CRASB Si Dublin, CA 945 C.com) -551-7899	va 886			Oil □ Air Total Number of Containers	+ 100 S S S S S S S S S S S S S S S S S S	TPH 8015 MOD GRO	TPH 8015 MOD DRO ED Silica Gel Cleanup	TDH-DB (golf)	yenates		Dissolved Lead Method	des			$N = HNO_3$	T = Thios B = NaO O = Other ng needed rest detect 260 composition st hit by 82 s by 8260	sulfate H er 1 dion limits bunds
Sample Identification OA MW-IRA MW-IRB MW-2 MW-3 MW-4 MU-5 MU-6	Date Collected // (*/ is)	Time Collected 5 1420 X 1330 X 0500 X 1050 X 1240		Bio	公文文文 メ ス X Water		1 2		THI XXXXX			Total	Disse				Comments / R TPH-DRO WIT REQUESTIN COLUMN CLI CAPRIC ACI SURR	TH SILICA IG 10 GR. EAN-UP W ID REVER OGATE	GEL AM /ITH
Turnaround Time Requested (TAT) (please circle if required) TAT 72 hour 48 hour 4 day 5 day Data Package Options (please circle if required) QC Summary Type I - Full		Relinquishe Relinquishe Relinquishe	ed by:	12		Corrie	- 9	Ø1-	2/-	Date Date 13 Date 113	Tir //:	ne 72) ne 30	Rece	ived by: Ved by: ived by:	SR-J SA UA	<i>Py</i>	AN FRIDGE	Date 71-21-3 Date Date Date	Time 7707 Time Time

FedEx

Temperature Upon Receipt

UPS

Type VI (Raw Data)

WIP (RWQCB)

Disk

☐ Coelt Deliverable not needed

1/22/13

(Yes) No

Custody Seals Intact?



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)
С	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 <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

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

ppb parts per billion

Dry weight basis

Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

Inorganic Qualifiers

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

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.

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ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

Table 1 Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

Experience and the second	Alameda, Camornia												
WELL ID/	TQC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	E	X	MTBE			
DATE	(fl.)	(ft.)	(msl)	(μg/L)	(pg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)			
MW-1													
01/23/01		7.16		$1,100^{2,3}$	5,210 ⁴	868	<50.0	<50.0	<50.0	<250			
04/09/01	10.62	8.12	2.50	1,200 ⁶	3,000 ⁵	920	<20	<20	<20	<100			
07/30/01	10.62	9.15	1.47	550 ^{3,8}	2,0007	730	13	<5.0	<5.0	<25			
10/08/01	10.62	7.86	2.76	2,200°	1,200	120	2.4	5.9	6.4	<2.5			
01/13/02	10.62	7.02	3.60	$3,300^3$	930	320	0.78	0.87	3.8	<2.5			
04/08/02	10.62	9.60	1.02	1,200 ³	960	50	1.4	2.6	9.0	<2.5			
07/31/02	10.62	9.27	1.35	2,800 ³	930	64	1.4	1.9	H	<5.0			
10/15/02	10.62	8.00	2.62	1,000 ³	620	25	0.78	1.4	4.3	<2.5			
01/14/03	10.62	7.05	3.57	960³	1,600	20	1.3	1.3	<1.5	<2.5			
04/15/03	10.62	8.02	2.60	920 ³	870	56	1	1.4	3.1	<2.5			
07/16/03 ¹⁰	10.62	10.08	0.54	1,400 ³	780	85	1	0.8	0.7	<0.5			
10/18/03 ¹⁰	10.62	8.51	2.11	1,200 ³	640	42	0.8	<0.5	0.5	<0.5			
01/22/0410	10.62	8.95	1.67	1,500 ³	440	18	<0.5	<0.5	<0.5	<0.5			
04/23/04 ¹⁰	10.62	8.95	1.67	2,200 ³	410	10	<0.5	<0.5	<0.5	<0.5			
07/23/0410	10.62	9.21	1.41	1,800 ³	400	6	<0.5	<0.5	<0.5	<0.5			
10/22/0410	10.62	8.36	2.26	$2,200^3$	150	2	<0.5	<0.5	<0.5	<0.5			
01/28/05 ¹⁰	10.62	7.09	3.53	1,200 ³	55	8	<0.5	<0.5	<0.5	<0.5			
04/26/0510	10.62	7.84	2.78	480^{3}	<50	5	<0.5	<0.5	<0.5	<0.5			
07/15/05 ¹⁰	10.62	8.12	2.50	610 ^{3,11}	<50	< 0.5	<0.5	<0.5	<0.5	<0.5			
10/14/0510	10.62	8.07	2.55	9203,12	<50	10	<0.5	<0.5	<0.5	<0.5			
01/12/06 ¹⁰	10.62	6.98	3.64	960 ^{3,12}	<50	6	<0.5	<0.5	<0.5	<0.5			
04/13/06 ¹⁰	10.62	7.04	3.58	1,200 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
07/13/06 ¹⁰	10.62	7.13	3.49	1,200 ³	92	14	<0.5	<0.5	<0.5	<0.5			
10/17/06 ¹⁰	10.62	7.64	2.98	990 ³	<50	3	<0.5	<0.5	<0.5	<0.5			
01/16/07 ¹⁰	10.62	7.09	3.53	840 ³	83	4	<0.5	<0.5	<0.5	<0.5			
04/17/07 ¹⁰	10.62	7.11	3.51	1,200 ³	57	<0.5	<0.5	<0.5	<0.5	<0.5			
07/17/07 ¹⁰	10.62	7.41	3.21	1,100 ³	120	8	<0.5	<0.5	<0.5	<0.5			
10/16/07 ¹⁰	10.62	7.55	3.07	750 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
01/16/08 ¹⁰	10.62	6.98	3.64	1,700 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
04/16/08 ¹⁰	10.62	7.36	3.26	1,100 ³	62	<0.5	<0.5	<0.5	<0.5	<0.5			
07/16/08 ¹⁰	10.62	7.89	2.73	580 ³	93	3	<0.5	<0.5	<0.5	<0.5			
10/15/08 ¹⁰	10.62	7.46	3.16	740 ³	56	0.7	<0.5	<0.5	0.8	<0.5			

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron #206127 (Former Signal Oil Marine Terminal)

2301-2337 Blanding Avenue Alameda, California

WELL ID/	TQC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	E	X	MTBE
DATE	(f1.)	(ft.)	(msl)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(μg/L)
MW-1 (cont)										
01/21/0910	10.62	7.19	3.43	3903	<50	<0.5	<0.5	< 0.5	<0.5	<0.5
04/15/0910	10.62	6.93	3.69	1,4003	80	0.7	<0.5	<0.5	<0.5	<0.5
07/03/0910	13.49	8.08	5.41	1,3003	51	<0.5	<0.5	<0.5	<0.5	<0.5
10/01/0910	13.49	9.52	3.97	1,5003	86	<0.5	<0.5	< 0.5	<0.5	<0.5
01/19/1010	13.49	7.64	5.85	3403,15	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/1010	13.49	9.20	4.29	8203	66	<0.5	<0.5	<0.5	<0.5	<0.5
							100	100	1,000	7.5
MW-2										
06/30/09 ¹	10.63	3.80	6.83	-				**		-
07/03/09 ¹⁴	10.63	3.91	6.72	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	4
10/01/09 ¹⁴	10.63	4.11	6.52	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	-
01/19/10 ¹⁴	10.63	3.90	6.73	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	-
04/26/10 ¹⁴	10.63	4.08	6.55	< 50 ³	<50	<0.5	<0.5	<0.5	<0.5	1.2
BATTA A										
MW-3	10.50									
06/30/09 ¹	10.72	4.61	6.11		84					-
07/03/09 ¹⁴	10.72	4.57	6.15	1703	310	1	<0.5	2	<0.5	-
10/01/09 ¹⁴ 01/19/10 ¹⁴	10.72	5.22	5.50	1,0003	52	<0.5	<0.5	<0.5	<0.5	
	10.72	4.84	5.88	1,8003	120	2	<0.5	<0.5	<0.5	
D4/26/10 ¹⁴	10.72	4.86	5.86	1,700 ³	170	2	<0.5	<0.5	<0.5	
MW-4										
06/30/09 ¹	11.40	6.02	5.38							
07/03/09 ¹⁴	11.40	5.85	5.55	<50 ³	<50	<0.5		 -0.8	-0.5	19-7
0/01/09 ¹⁴	11.40	6.95	4.45	<50 ³	<50	<0.5 <0.5	<0.5	<0.5	<0.5	-
01/19/10 ¹⁴	11.40	6.22	5.18	370° 110³	<50 <50		<0.5	<0.5	<0.5	San-
04/26/10 ¹⁴	11.40	6.61	4.79	210 ^{5,17}		<0.5	<0.5	<0.5	<0.5	**
TI #U/ IV	AA.TU	0.01	4.79	210	<50	<0.5	<0.5	<0.5	<0.5	-

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron #206127 (Former Signal Oil Marine Terminal)

2301-2337 Blanding Avenue Alameda, California

	ELLID TOC DIW GWE TPHIDEO TRHICEG R TO T													
WELL ID/	TQC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	E	X	MTBE				
DATE	(fi.)	(fl)	(msl)	(μg/ L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(μg/L)				
MW-5														
06/30/091	10.50	5.20	5.30	220	**	Take	***	_	-					
07/03/0914	10.50	5.17	5.33	1103	930	33	2	0.6	3	÷				
10/01/0914	10.50	5.66	4.84	2,5003	1,800	57	3	0.9	5					
01/19/1014	10.50	5.48	5.02	2,600 ³	2,200	74	4	1	5	-				
04/26/1014	10.50	5.91	4.59	1,7003	2,200	94	4	2	5					
CS-2														
07/30/01	14	-	-	140 ^{3,5}	<50	<0.50	<0.50	<0.50	<0.50	<2.5				
10/08/01		-	-	53°	<50	<0.50	<0.50	<0.50	<1.5	<2.5				
01/13/02				<50 ³	<50	< 0.50	<0.50	<0.50	<1.5	<2.5				
04/08/02		-	**	77 ³	<50	<0.50	<0.50	<0.50	<1.5	<2.5				
07/31/02	-22	4.40	4.	<50 ³	<50	< 0.50	<0.50	<0.50	<1.5	<2.5				
10/15/02	-	(64)		<50 ³	<50	< 0.50	<0.50	<0.50	<1.5	<2.5				
01/14/03	-	140		<50 ³	<50	< 0.50	<0.50	<0.50	<1.5	<2.5				
04/15/03	-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<1.5	<2.5				
07/16/03 10	-	177		<50 ³	<50	< 0.5	0.7	<0.5	0.6	<0.5				
10/18/0310	-	()	-	<50 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
01/22/0410		-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5				
04/23/0410	4	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5				
07/23/0410	-	-	1.44	<50 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
10/22/0410	-	200	-	<50 ³	<50	<0.5	< 0.5	<0.5	<0.5	<0.5				
01/28/0510		- ***		<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5				
04/26/0510		-	-	<50 ³	<50	<0.5	< 0.5	< 0.5	< 0.5	<0.5				
07/15/05 ¹⁰	-	***	-	<50 ³	<50	< 0.5	< 0.5	<0.5	< 0.5	<0.5				
10/14/0510		-	-	<50 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
01/12/06 ¹⁰	-		24	<50 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
04/13/06 ¹⁰	-	-	+	<50 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
07/13/06 ¹⁰	(e)	+	-	140 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
10/17/06 ¹⁰	-	22	**	<50 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5				
01/16/07 ¹⁰	-	4	44	<50 ³	<50	< 0.5	< 0.5	< 0.5	<0.5	<0.5				
04/17/07 ¹⁰	- -	-	46	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5				

Table 1 Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/	TQC*	DTW	GWE	TPH-DRO	TPH-GRO	В		E	X	MTBE
DATE	(fl.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)
CS-2 (cont)										
07/17/07 ¹⁰				<50 ³	<50	< 0.5	<0.5	< 0.5	<0.5	< 0.5
10/16/0710				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/0810				85³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08 ¹⁰	••			<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/09 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/15/09 ¹⁰	••			86 ³	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
07/03/09 ¹⁰		••	••	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/01/0910	••	••	••	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/19/10 ¹⁰	••			210 ^{3,16}	<50	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP BLANK										
TB-LB										
01/23/01		-	-	***	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
04/09/01		-	-	-	<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
07/30/01		-	199		<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
QA										
10/08/01	-		100	-	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
01/13/02	-		-	-	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
04/08/02	4	**	-	-	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
07/31/02	-	-	-		<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
10/15/02	**		(44)	**	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
01/14/03	**	-	-	(44)	<50	< 0.50	< 0.50	<0.50	<1.5	<2.5
04/15/03	-	-	-	**	<50	< 0.5	< 0.5	< 0.5	<1.5	<2.5
07/16/03 ¹⁰	144			4	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
10/18/03 ¹⁰	-	-	-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04 ¹⁰	,	-	-	-	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
04/ 2 3/04 ¹⁰		**	-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/23/04 ¹⁰	**	-		-	<50	<0.5	< 0.5	< 0.5	<0.5	<0.5
10/22/04 ¹⁰			**	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1 Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/ DATE	TOC* (fl.)	DTW (ft.)	GWE (ntsl)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Β (μg/L)	Τ (μg/L)	E (pg/L)	Χ (μg/L)	MTBE (µg/L)
QA (cont)								-		
)1/28/05 ¹⁰	••	••	••	60-400	<50	<0.5	<0.5	<0.5	<0.5	< 0.5
4/26/05 ¹⁰		••		••	<50	<0.5	<0.5	< 0.5	<0.5	< 0.5
7/15/05 ¹⁰	••			e-e	<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
0/14/05 ¹⁰				••	<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
I/12/06 ¹⁰					<50	< 0.5	<0.5	< 0.5	<0.5	< 0.5
4/13/06 ¹⁰					<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5
7/13/06 ¹⁰					<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5
0/17/06 ¹⁰	••				<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1/16/07 ¹⁰		••			<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5
/17/07 ¹⁰	••				<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
7/17/07 ¹⁰				**	<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5
)/16/07 ¹⁰					<50	< 0.5	<0.5	<0.5	<0.5	<0.5
/16/08 ¹⁰					<50	<0.5	< 0.5	<0.5	<0.5	<0.5
I/16/08 ¹⁰			••		<50	< 0.5	<0.5	<0.5	<0.5	<0.5
//16/08 ¹⁰			••		<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/15/08 ¹⁰	••				<50	< 0.5	< 0.5	<0.5	<0.5	<0.5
I/21/09 ¹⁰				••	<50 ¹³	< 0.5	< 0.5	<0.5	<0.5	<0.5
1/15/09 ¹⁰				**	<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/03/09 ¹⁰		••		••	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
0/01/09 ¹⁰	••			**	<50	<0.5	<0.5	<0.5	<0.5	<0.5
/19/10 ¹⁰				••	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/26/10 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California

EXPLANATIONS:

TOC = Top of Casing ORO = Diesel Range Organics ORO = DIESEL PORTO = DIESEL P

TPH = Total Petroleum Hydrocarbons X = Xylenes

- * TOC elevations for all wells were surveyed on July 30, 2009, by Morrow Surveying. Vertical Datum is NAVD 88 from GPS observations.

 TOC elevations were surveyed on January 25, 2001, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).
- Well development performed.
- Laboratory report indicates unidentified hydrocarbons <C16.</p>
- Analyzed with silica gel cleanup.
- Laboratory report indicates weathered gasoline C6-C12.
- 5 Laboratory report indicates discrete peaks.
- Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.</p>
- Laboratory report indicates gasoline C6-C12.
- Laboratory report indicates unidentified hydrocarbons C9-C24.
- Analysis performed without silica gel cleanup although was requested on the Chain of Custody.
- 10 BTEX and MTBE by EPA Method 8260.
- Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel.
- Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.
- Laboratory report indicates the original analysis was performed on an instrument where the ending calibration standard failed the method criteria. The sample was originally analyzed approximately 60 minutes after the LCS/LCSD. The LCS/LCSD showed good GRO recovery and the surrogate recovery for this sample was 85%. The sample was reanalyzed from a vial with headspace since only 1 vial was submitted. The results for the original and the reanalysis were similar. The reanalysis was reported.
- BTEX by EPA Method 8260.
- Laboratory report indicates DRO was detected in the method blank at a concentration of 38 μg/L. Results from the reextraction are within limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.
- Laboratory report indicates DRO was detected in the method blank at a concentration of 38 μg/L. Results from the reextraction are within limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The DRO result for the reextract is 96 μg/L.
- Laboratory report indicates DRO was detected in the method blank at a concentration of 47 μg/L. Results from the reextraction are within limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

Table 2

Groundwater Analytical Results - Metals

Chevron #206127 (Former Signal Oil Marine Terminal)

2301-2337 Blanding Avenue Alameda, California

Assurous, Camorina																	
WELL ID/ DATE	(1g/L)	Arsenic Arsenic	Baring (ug/L)	(1/80)	(1/84)	(1/87)	Cobult (1/84)	Copper	(Lyg/L)	Malyhdenum (T.)	Nickel	Selenium (Yelenium	January (Hg/L)	(hg/L)	Vanadum (Tage)	Zinc	(µg/L)
MW-2									- 34-34		14.00		7.0 -7	0.0.7	11-6-7	Wary.	118-7
07/03/09	<9.7	<7.2	28.1	<1.4	<2.0	14.6	<2.1	<2.7	<6.9	<4.9	10.6	<8.9	<2.3	<14.0	12.6	11.6	<0.056
MW-3																	
07/03/09	<9.7	<7.2	143	<1.4	<2.0	8.5	<2.1	3.3	<6.9	<4.9	7.8	<8.9	<2.3	<14.0	13.8	18.8	<0.056
MW-4																	
07/03/09	<9.7	<7.2	83.5	<1.4	<2.0	10.0	<2.1	<2.7	<6.9	<4.9	4.5	<8.9	<2.3	<14.0	6.3	15.8	< 0.056
MW-5																	
07/03/09	<9.7	32.7	148	<1.4	<2.0	<3.4	<2.1	3.1	<6.9	<4.9	3.6	<8.9	<2.3	<14.0	<2.5	19.2	< 0.056
										•••		0.7	0	-11.0	2,0	17.2	•

EXPLANATIONS

 $(\mu g/L)$ = Micrograms per liter

ANALYTICAL METHODS:

Metals analyzed by EPA Method SW-846 6010B Mercury analyzed by Method SW-7470A