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By Alameda County Environmental Health at 2:31 pm, Sep 12, 2013



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

September 12, 2013

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

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 *Second 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,

Bauer

Mike Bauer Project Manager



10969 Trade Center Drive Rancho Cordova, California 95670 Telephone: (916) 889-8900 Fax: (916) 889-8999 http://www.craworld.com

September 12, 2013

Reference No. 631916

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

Re: Second 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 *Second 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. Eurofins Lancaster Laboratories' *Analytical Results* report is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF SECOND SEMI-ANNUAL 2013 EVENT

On July 15, 2013, G-R monitored and sampled site wells per the established schedule. Results of the current monitoring event indicate the following:

0.01

- Groundwater Flow Direction
 North
- Hydraulic Gradient
- Approximate Depth to Water 4 to 8 feet below grade

Equal	
Employment Opportunity	
Employer	



September 12, 2013

	TABLE A GROUNDWATER ANALYTICAL DATA												
Well ID ESLs	TPHd ¹ (μg/L)	8 5											
MW-1RA	4,200/630	3,700	430	<u>40</u> 8	5	<u>20</u> 2							
MW-1RB	2,000 /<50	230	<0.5	<0.5	< 0.5	<0.5							
MW-2	150/ <50	<50	<0.5	<0.5	<0.5	<0.5							
MW-3	1,500/ <50	110	<0.5	< 0.5	< 0.5	< 0.5							
MW-4	530/ <50	<50	< 0.5	< 0.5	< 0.5	< 0.5							
MW-5	3,800/850	3,900	130	8	2	11							
MW-6	2,400/ <50	660	13	< 0.5	< 0.5	<0.5							
¹ TPHd w	¹ TPHd without and with 10 gram silica gel cleanup												

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

CONCLUSIONS AND RECOMMENDATIONS

Results of this current semi-annual 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.



September 12, 2013

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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.

Reference No. 631916



September 12, 2013

Reference No. 631916

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

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES



Brian Silva

Ingh-

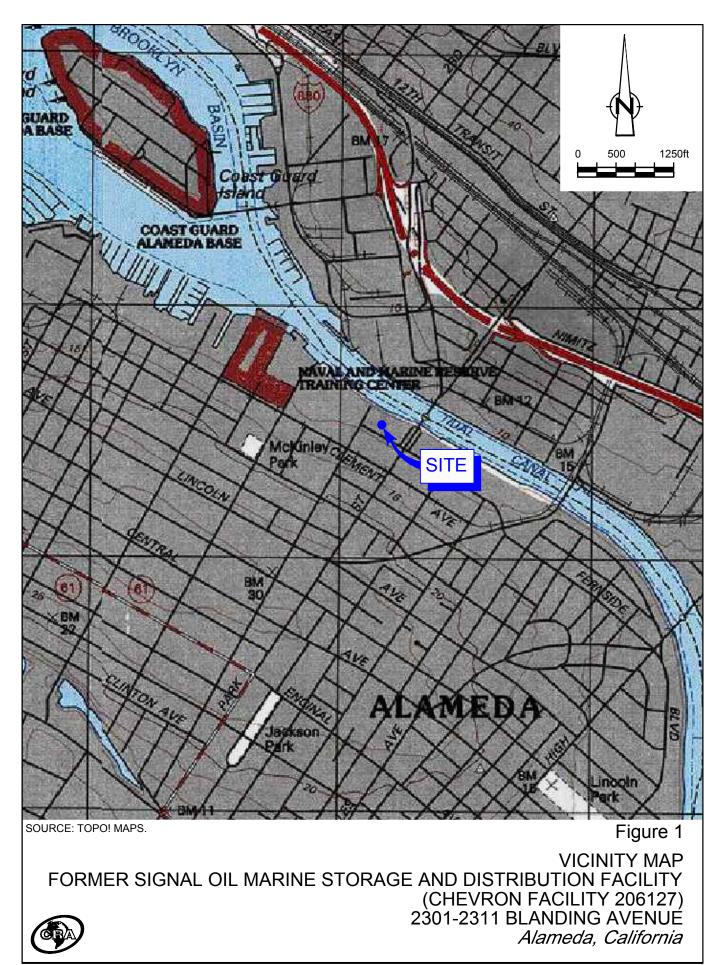
Greg Barclay, PG 6260

BS/cw/31 Encl.

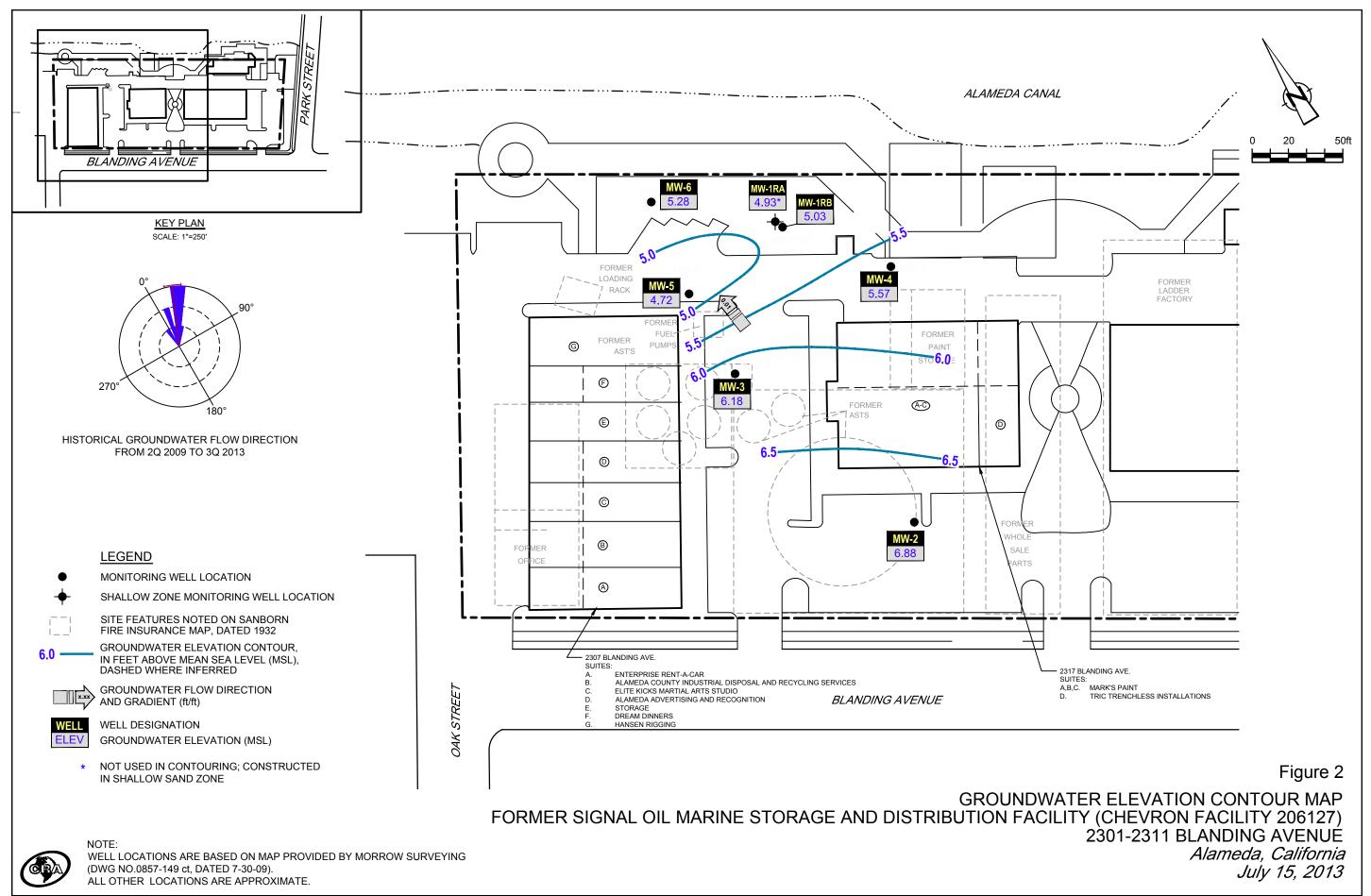
Vicinity Map									
Groundwater Elevation Contour Map									
TPHd Concentration Contour Map									
TPHg Concentration Contour Map									
Benzene Concentration Contour Map									
Groundwater Monitoring and Sampling Data									
Well Construction Specifications									
Monitoring Data Package									
Laboratory Analytical Report									
Historical Groundwater Monitoring and Sampling Data									
Bauer, Chevron (electronic only)									
Beck Ball									
Reinhold Beck									
oe Wingate									

Mr. Tom Foley

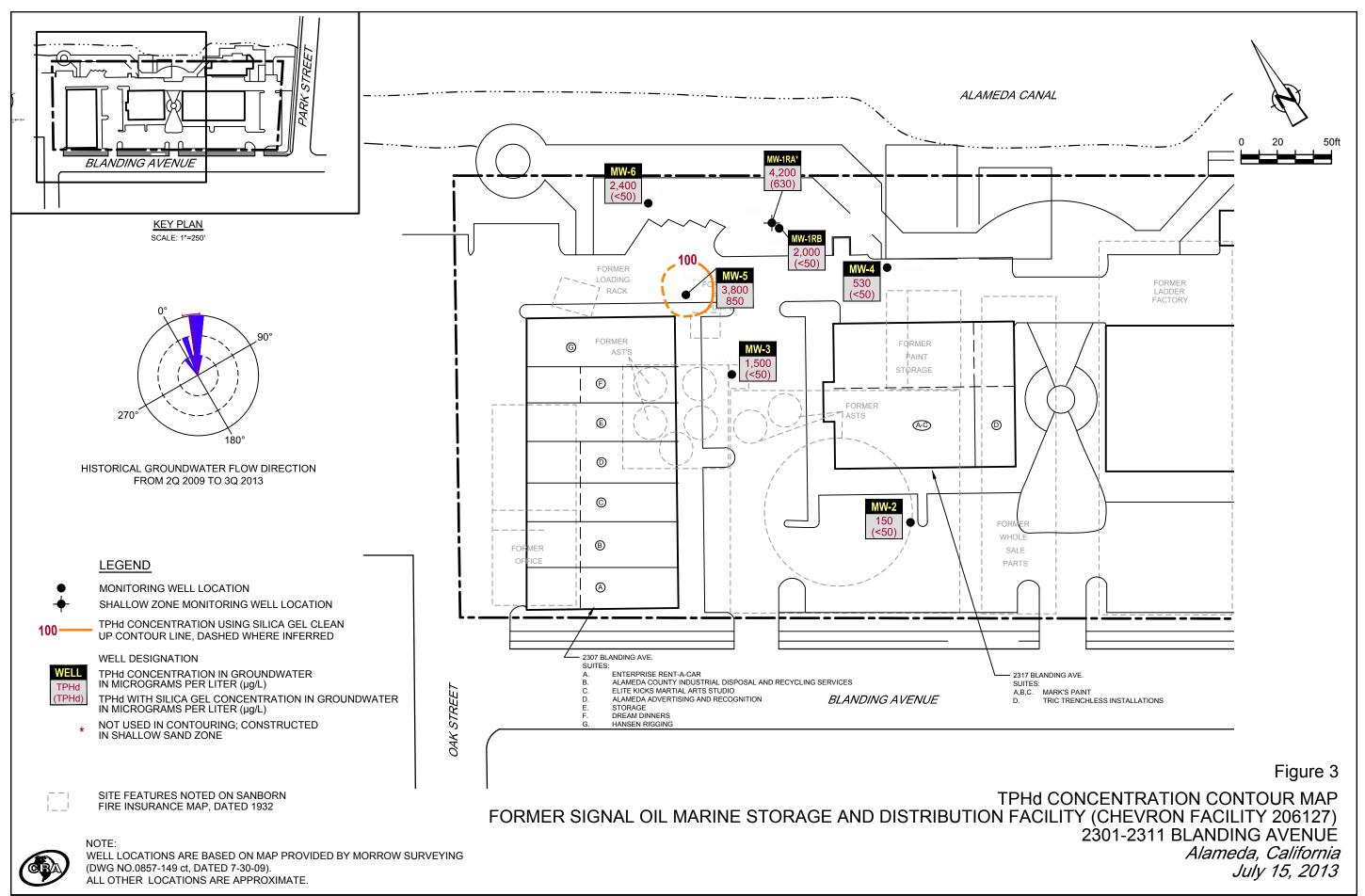
FIGURES



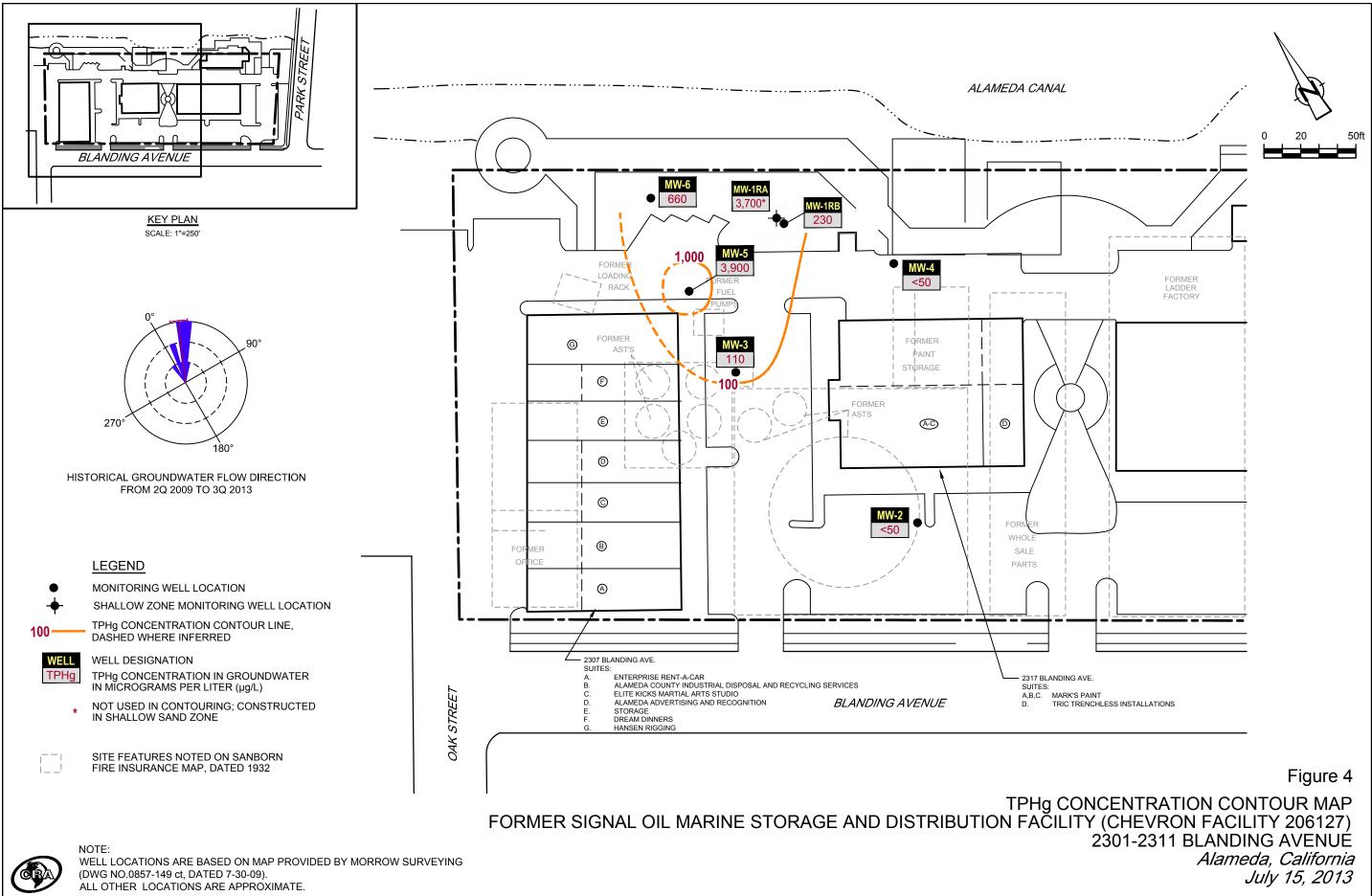
631916-95(031)GN-BR001 AUG 13/2013



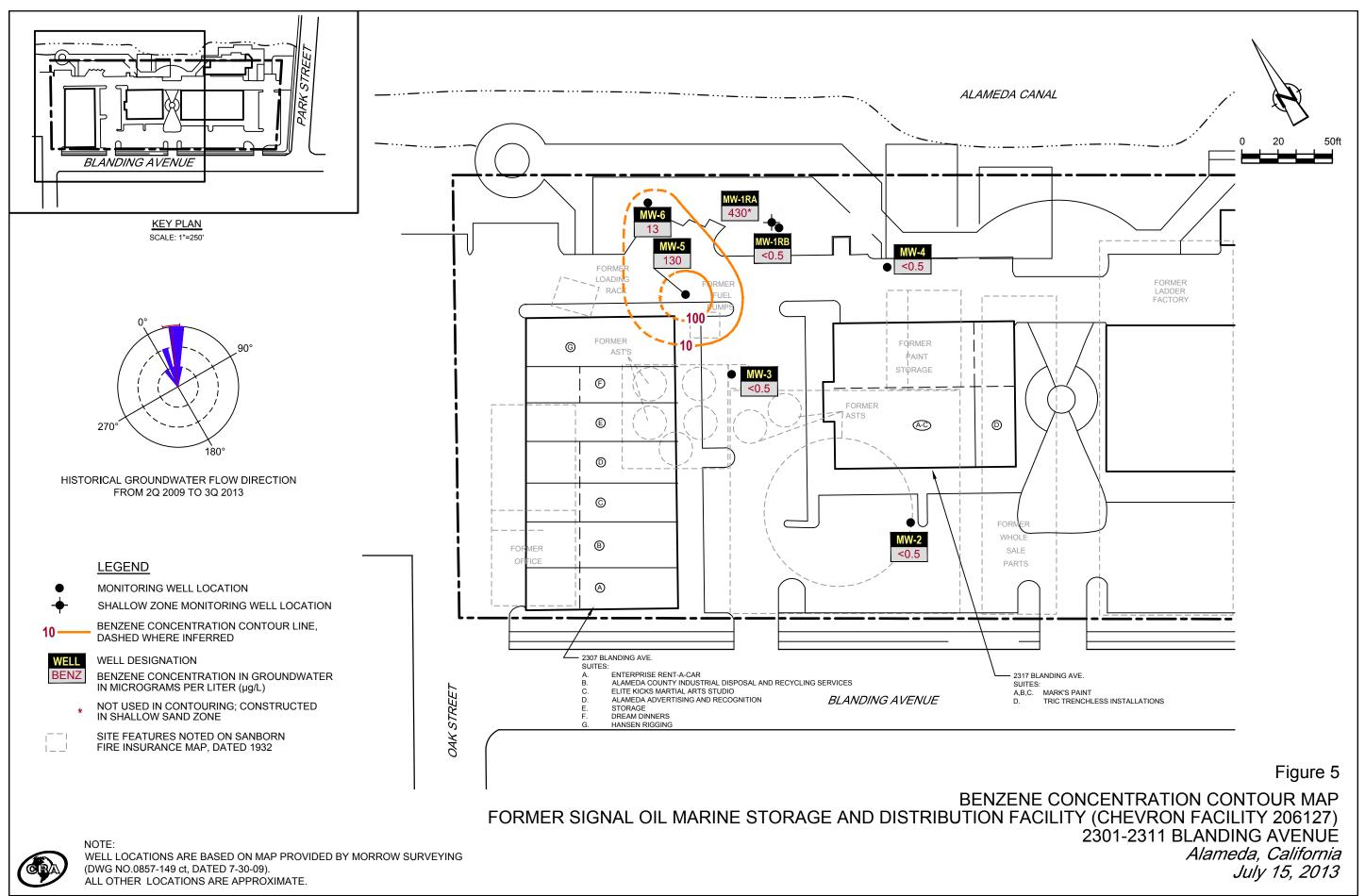
631916-95(031)GN-BR002 AUG 13/2013



631916-95(031)GN-BR003 AUG 13/2013



631916-95(031)GN-BR004 AUG 13/2013



631916-95(031)GN-BR005 AUG 13/2013

					H	YDROCARBO	NS		I	PRIMARY VOC	S	
Location	Date	ТОС	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Ge	TPH-GRO	В	Т	Ε	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	$07/27/2012^4$	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-1RA	07/15/2013	13.02	8.09	4.93	4,200	630	3,700	430	8	5	2	-
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	-	-	-	-	-	-
MW-1RB	$07/27/2012^4$	13.21	8.45	4.76	-	-	990	89	1	0.8	0.7	-

					H	YDROCARBO	NS		I	PRIMARY VOC	S	
Location	Date	ТОС	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Ge	TPH-GRO	В	Т	Ε	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-1RB MW-1RB	01/19/2013 07/15/2013	13.21 13.21	8.65 8.18	4.56 5.03	2,000 2,000	62 <50	200 230	2 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <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-2	07/15/2013	10.63	3.75	6.88	150	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-3	07/21/2010	10.72	5.09	5.63	640	-	65 J	0.6 J	<0.5	<0.5	<0.5	-
MW-3	10/22/2010	10.72	5.32	5.40	-	570	73	<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	-
MW-3	10/14/2011	10.72	4.52	6.20	1,800	<50	88	< 0.5	<0.5	< 0.5	<0.5	-

					H	YDROCARBO	NS		1	PRIMARY VOC	S	
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Ge	TPH-GRO	В	Т	Е	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	01/18/2012	10.72	5.22	5.50	1,700	<50	<50	<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-3	07/15/2013 ⁵	10.72	4.54	6.18	1,500	<50	110	<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-4	07/15/2013	11.40	5.83	5.57	530	<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	-
MW-5	$10/28/2010^2$	10.50	5.17	5.33	-	-	-	-	-	-	-	-

					H	YDROCARBO	NS		P	RIMARY VOC	s	
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Ge	TPH-GRO	В	Т	Ε	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-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 Tr	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-5	07/15/2013	10.50	5.78	4.72	3,800	850	3,900	130	8	2	11	-
								_			_	
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	$07/27/2012^4$	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	-
MW-6	07/15/2013	12.98	7.70	5.28	2,400	<50	660	13	<0.5	<0.5	<0.5	-
QA	07/21/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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

					H	YDROCARBON	IS	PRIMARY VOCS					
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/Si Gei	TPH-GRO	В	Т	Ε	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	10/22/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
QA	10/28/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	
QA	01/14/2011	-	-	-	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	
QA	04/19/2011	-	-	-	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	
QA	06/30/2011	-	-	-	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	
QA	10/14/2011	-	-	-	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	
QA	01/18/2012	-	-	-	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	
QA	04/19/2012	-	-	-	-	-	<50	< 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	-	
QA	07/15/2013	-	-	-	-	-	<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

E = Ethylbenzene

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

					Н	HYDROCARBONS			PRIMARY VOCS			
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Ge	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

X = Xylenes (Total)

MTBE = Methyl tert butyl ether

-- = Not available / not applicable

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

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).

¹ Destroyed and re-installed as MW-1RB.

² Monitored only for the 10/28/10 Special Event

³ Inaccessible.

⁴ 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.

⁵ No purge sample collected due to limited access.

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	ТОС	Total Depth	Diameter ¹	Slot Size	Screen Interval	Filter Pack	Status
	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>8</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
<u>Sub-Slab Va</u>	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)

¹ = Schedule 40 PVC casing material

fbg = Feet below grade

NA = Not applicable

NS = Not surveyed

ATTACHMENT A

MONITORING DATA PACKAGE



TRANSMITTAL

July 23, 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 Second Semi-Annual Event of July 15, 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.

WELL CONDITION STATUS SHEET

Client/Facility #:	Chevror	n #206127			_	Job #:	386498						
Site Address:	2301-23	37 Blandin	g Avenue			-	Event Date:	-	74	5-	13	-	
City:	Alameda	a, CA				-	Sampler:			W		_	
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)	REPLACE LOCK Y/N		ACE	WELL VAULT Manufacture/Size/ # of Bolts	Ta	tures aken ′ / N
Mw-4	OK							N		J	Emeo/12"/2	İ	V
MW-IRA	OK							1	1		marison / 8'/2	1	1
MW-IRB	OK										J		
MW-6	OK)	Im	213	OK		>				L L		
MW-5 MW-2 MW-3	OK						2				Enco/ 12 1/2	+	
MN-Z	NK	<u> </u>					<u> </u>					1	
MW-3	OK							J	T.		V 1	T V	<
												+	1
												+	
												<u> </u>	
				45								+	
												 	
										+			-
Comments	L		l	l		<u> </u>						<u> </u>	

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 conductivityare measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbiditymay 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 m aintaining 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 signed and dated (including time of transfer) by each person who receives or surrenders the sam ples, 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 decontam ination water generated during sam pling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.

N;\California\forms\chevron-SOP- 2013



Job Number:	386498	
Event Date:	7-15-13	– (inclusive)
Sampler:	Aw	-
Date Monitored:	7-15-13	_
olume 3/4"= 0.02 actor (VF) 4"= 0.66		
-		
20) + DTWJ: <u>9,00</u>	Time Started:	(2400 hrs)
ent:		
<u> </u>		
	· · · · · · · · · · · · · · · · · · ·	
		gal
	Water Removed	
· /		-00
olume ga	$\frac{1}{2}$ DIV @ Sampling $\frac{-7}{2}$	
$\begin{array}{c} MS \text{Temperature} \\ O & (F) \\ (E) \\ \hline \\ 16, 2 \\ \hline \\ 16, 4 \\ \hline \\ 16, 4 \\ \hline \\ \hline \\ 16, 4 \\ \hline \\ \hline \end{array}$	D.O. ORP (mg/L) (mV)	
	Event Date: Sampler: Date Monitored: Date Monitored: Date Monitored: 3/4"= 0.02 4"= 0.66 lumn is less then 0.50 ft X3 case volume = Es 20) + DTWJ: 9.00 ent: Conditions: lor: 9.00 Description: Description: 9 Description: 9 Description	Event Date: $7 - 15 - 13$ Sampler: Aw Date Monitored: $7 - 15 - 13$ Diversity of the monitor of the mo

LABORATORY INFORMATION								
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES			
MW-IRA-	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)			
	2x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)			
I								

COMMENTS:



Client/Facility#:	Chevron #206127	Job Number:	386498	
Site Address:	2301-2337 Blanding Avenue	Event Date:	7-15-13	- (inclusive)
City:	Alameda, CA	Sampler:	AW	-
Well ID	MW-IRB	Date Monitored:	7-15-13	
Well Diameter Total Depth	<u>2</u> 19.92 ft.	Volume 3/4"= 0.02 Factor (VF) 4"= 0.66	1"= 0.04 2"= 0.17 3"= 0.38 5"= 1.02 6"= 1.50 12"= 5.80	
Depth to Water	Check if wat		stimated Purge Volume: 60] _ gal.
Depth to Water w	// 80% Recharge [(Height of Water Column)	1×0.20) + DTWJ: <u>10・52</u>	Time Started	(2400 hm)
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	Metal Filters Peristaltic Pur QED Bladder F Other:	iler	Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description: Skimmer / Absorbant Sock (circle Amt Removed from Skimmer: Amt Removed from Well: Water Removed:	ft ftft ft f
Approx. Flow Rate	e: <u>0745 / 7-15-1</u> 3 Wate e:gpm. Sedir ? If yes, Time:	nent Description: /ga Volume:ga ivity ///Sga ivity ///Sga ivity ///Sga ivity ///Sga	Cloudy Odor: Y D al. DTW @ Sampling: <u>10.1</u> D.O. ORP (mg/L) (mV)	9
0725	40 <u>8.91</u> 6.2 6.0 <u>892</u> 6.2	8 16.6		

	LABORATORY INFORMATION							
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES			
MW-1RB	b x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)			
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)			

COMMENTS:



Client/Facility#:	Chevron #206	127	Job	Number:	386498			
Site Address:	2301-2337 Bla	nding Avenue	Eve	nt Date:	7-	15-13		(inclusive)
City:	Alameda, CA		San	npler:		Ar		
Well ID	2		Date N	Ionitored:	•	7-15-	13	
Well Diameter	2		Volume	3/4"= 0.02	1"= 0.04	2"= 0,17	3"= 0.38	
Total Depth	<u>15.58 ft.</u>	_	Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80	
Depth to Water	<u> </u>	Check if water					10	
		VF7_=2			stimated Purg	je Volume:	6.0	_gal.
Depth to Water	w/ 80% Recharge [(Height of Water Column	x 0.20) + DTW]	0.1/	- Time Sta	irted:		(2400 hrs)
Purge Equipment:	/	Sampling Equi	pment:	,		mpleted:		
Disposable Bailer	/	Disposable Baile	-			Product:		
Stainless Steel Baile	r	Pressure Bailer				Water:		
Stack Pump		Metal Filters				bon Thickne		
Suction Pump		Peristaltic Pump			r visual Co	onfirmation/l	Jescription:	
Grundfos		QED Bladder Pu			Skimmer	/ Absorbant	Sock (circle	e one)
Peristaltic Pump	· · · · · · · · · · · · · · · · · · ·	Other:				loved from S		
QED Bladder Pump Other:						oved from V		gal
					Vvater Re	moved:		
Start Time (purge): 0925	\\/ooth	er Condition		Ch	1		
Sample Time/Da					Clou			
Approx. Flow Ra			Color:		Ddor: Y /	1		
Did well de-water			ent Descript			Cloud		
Did well de-water	1? <u>IV</u> II YE	es, Time:	volume:	ga	I. DTW @	Sampling	g: <u>5,8</u>	8
Time (2400 hr.)	Volume (gal.)	pH Conductiv (µmhos/cm -	ity MS Temi	perature / F)	D.O. (mg/L)		ORP (mV)	
0930	200	1.06 0.5:	٤ ١	K.7				
0935	4.0 9	78 0.59		<u></u>				
0940	6.0 8	0.63		7.2				
	<u> </u>							

	LABORATORY INFORMATION							
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES			
MW-2	b x voa viai	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)			
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)			

COMMENTS:



Client/Facility#: Site Address: City:	Chevron #206127 2301-2337 Blandin Alameda, CA	g Avenue	Job Number: Event Date: Sampler:	386498 7-15-13 Av	(inclusive)
Well ID Well Diameter Total Depth Depth to Water Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladde Pump Other:	w/ 80% Recharge [(Height	Check if water colum	(VF) 4"= 0.66 n is less then 0.50 x3 case volume = 6	5"= 1.02 6"= 1.50 ft. Estimated Purge Volume: Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickne: Visual Confirmation/D Skimmer / Absorbant Amt Removed from S	3"= 0.38 12"= 5.80 gal. (2400 hrs) ft ft ss:ft ss:ft ss:ft ssc:ft vescription: gal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	ate: 1015 / 7-15- ate:gpm.	Sediment De	escription:		g: ORP (mV)

		L	ABORATORY IN	FORMATION	
SAMPLE ID	(供) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	Z x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)
OMMENTS:	Well part	ed over	, was ab	e to a	cces from under truck.
No	proc	suple	taken.		
		V	• • • • •		

-



Client/Facility#:	Chevron #206127	Job Number:	386498	
Site Address:	2301-2337 Blanding Avenue	Event Date:	7-15-13	- (inclusive)
City:	Alameda, CA	Sampler:	An	
Well ID Well Diameter Total Depth Depth to Water	<u>MW- 4</u> <u>2</u> <u>20.17 ft.</u> 5.83 ft. □] Check if wate	Date Monitored: Volume $3/4"= 0.02$ Factor (VF) $4"= 0.66$ r column is less then 0.50 f 2. 43 x3 case volume = E x 0.20) + DTVV]: 3.69 pment: er	7-15-13 1"= 0.04 2"= 0.17 3"= 0.38 5"= 1.02 6"= 1.50 12"= 5.80	(2400 hrs) (2400 hrs) ft ft
Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	Peristaltic Pump QED Bladder Pu Other:	ump	Visual Confirmation/Description: Skimmer / Absorbant Sock (circle Amt Removed from Skimmer: Amt Removed from Well: Water Removed:	e one) gal
Start Time (purge): Sample Time/Date Approx. Flow Rate Did well de-water? Time (2400 hr.) 0605 0610 0615	e: 0630 / 7-(5-1)3 Water e:gpm. Sedim	ent Description: / ga Volume: ga ity MS Temperature (C/ F) 27 - 8	Cloudy / Dav Ddor: Y @ al. DTW @ Sampling: D.O. ORP (mg/L) (mV)	<u>m</u>

	LABORATORY INFORMATION								
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES				
MW- 4	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)				
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)				
-									
L									

COMMENTS:



Client/Facility#:	Chevron #20612	27	Job	Number:	386498		
Site Address:	2301-2337 Blan	ding Avenue	Ever	nt Date:	7-	15-13	(inclusive)
City:	Alameda, CA		Sam	pler:		An	_` ′ _
Well ID	MW- 5		Dete M	onitored:	(7)	15-12	
Well Diameter	2			onitorea.	/	-15-13	<u></u>
Total Depth	17,90 ft.		Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 3"= 0.3 6"= 1.50 12"= 5.8	
Depth to Water	5.78 ft	Check if water]
		17 = 2				e Volume: 6.5	qal.
Depth to Water w	// 80% Recharge [(He						
						rted:	
Purge Equipment:		Sampling Equip		/	R	npleted: Product:	······································
Disposable Bailer Stainless Steel Bailer		Disposable Baile Pressure Bailer	۲ <u> </u>			Water:	
Stack Pump	~ <u>~</u>	Metal Filters		<u></u>		bon Thickness:	
Suction Pump	<u> </u>	Peristaltic Pump			Visual Co	onfirmation/Description	
Grundfos		QED Bladder Pu	mp		Skimmer	/ Absorbant Sock (circ	
Peristaltic Pump		Other:				oved from Skimmer:	
QED Bladder Pump						oved from Well:	
Other:					Water Re	moved:	
Start Time (purge)	: 0840		on Oon dition		Clor	.1.	
	e: 0910 / 7-1						
Approx. Flow Rate			Color: <u>Cl</u>		Odor: 🔗 I		e
Did well de-water			ent Descriptio			Cloudy	26
Did well de-water		Time:		ga	ai. DTVV @	Sampling: / 7	.75
Time	Volume (gal.) p	H Conductivi		erature	D.O.	ORP	
(2400 hr.)	25 11	⊓ (µmhos/cm -		//F) - つ	(mg/L)	(mV)	
0845	2.5 4.			<u>.3</u> -			-
0650	$\frac{T^{\circ}}{6 \in \mathbb{Z}} = \frac{8}{7}$	17 _1.63		1.8			-
<u> </u>		<u></u>		8.2	· · ·		_

LABORATORY INFORMATION								
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES			
MW-5	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)			
	2x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)			

COMMENTS:



Client/Facility#:	Chevron #206127	Job Number:	Job Number: 386498		
Site Address:	2301-2337 Blanding Avenue	Event Date:	7-15-13	(inclusive)	
City:	Alameda, CA	Sampler:	AW		
Well ID	MW- 6	Date Monitored:	7-15-13		
Well Diameter	2	Volume 3/4"= 0.02	1"= 0.04 2"= 0.17 3"= 0.38		
Total Depth	20.02 ft.	Factor (VF) 4"= 0.66	5"= 1.02 6"= 1.50 12"= 5.80		
Depth to Water	7.70 ft. Check if water 12.32 xVF _ 17 = 2.	r column is less then 0.50 ft 29 x3 case volume = Fs		gal.	
Depth to Water w/	80% Recharge [(Height of Water Column				
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	Sampling Equi Disposable Baile Pressure Bailer Metal Filters Peristaltic Pump QED Bladder Pu Other:	pment: er	Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description: Skimmer / Absorbant Sock (circle Amt Removed from Skimmer: Amt Removed from Well: Water Removed:	(2400 hrs) ft ft ft ft gal	
Start Time (purge): Sample Time/Date: Approx. Flow Rate: Did well de-water? Time (2400 hr.) <u>0805</u> <u>0810</u> 0615	gpm. Sedim	volume: ga	<u>Cloudy</u> Ddor <u>9 / N</u> <u>Slight</u> <u>Cloudy</u> I. DTW @ Sampling/ <u>9.</u> D.O. ORP (mg/L) (mV)	55	

LABORATORY INFORMATION SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES												
(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES								
💪 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)								
2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO (8015)								
<u> </u>	·····											
ł ł			<u> </u>									
		(#) CONTAINER REFRIG.	(#) CONTAINER REFRIG. PRESERV. TYPE Image: State St	(#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY x voa vial YES HCL LANCASTER								

COMMENTS:

Demonstration PM Lead Consultant Mile Mile Multiple	Chev					R	legi	on	1 /	4 <i>n</i>	al	ys	sis	; F	?e	qı	Ie.	st	<u>'C</u>	ha	air	n of Cus	stody
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Periling Star 200127-0ML G-R#386498 Global 1D#T080019744728 Construction Provide G-R#386498 Global 1D#T0800197447478 Construction Provide G-R#386498 Global 1D#T0800197447428 Construction Provide G-R#386498 Global 1D#T0800197447478 Global 1D#T0801074 Construction Provide G-R#386498 Global 1D#T0801074 Global 1D#T0801074 Constrestruction Provide G-R#386498		es /L			_		Madaia		Istructio		everse	side cor			1	-				W41-0000	_		
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Consultant Project Mgr. Deather is Project Mgr. <td>Chevron PM MB CRASB</td> <td></td> <td></td> <td></td> <td></td> <td>dimer</td> <td>round</td> <td></td> <td>S</td> <td>X,00</td> <td></td> <td>Clean</td> <td>eanup</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>74</td> <td></td>	Chevron PM MB CRASB					dimer	round		S	X ,00		Clean	eanup									74	
Consultant Phone # (916) 889-3908 x Image: Standard Phone # (916) 700 x Im	Consultant/Office Getter-Ryan, Inc., 6747 Sierra Co	ourt, Suite J, I	Dublin, Ci	A 945	568	Sec	ចីល័		ainer	82	82	ca Gel	Gel Cl			J	q						rmation
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Type VI (Raw Data) Other: Temperature Upon Receipt °C Custody Seals Intact? Yes Nr Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 Issued by Dept. 40 *	Type VI (Raw Data)								_						7.050		-	y Se	als I	ntact	t?		

The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.

1

ATTACHMENT B

LABORATORY ANALYTICAL REPORT





2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601 Prepared for:

Chevron L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

July 30, 2013

Project: 206127

Submittal Date: 07/16/2013 Group Number: 1404220 PO Number: 0015115966 Release Number: SHRILL HOPKINS State of Sample Origin: CA

Client Sample Description QA-T-130715 NA Water MW-1RA-W-130715 Grab Groundwater MW-1RB-W-130715 Grab Groundwater MW-2-W-130715 Grab Groundwater MW-3-W-130715 Grab Groundwater MW-4-W-130715 Grab Groundwater MW-5-W-130715 Grab Groundwater MW-6-W-130715 Grab Groundwater

Lancaster Labs (LL) # 7127885

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
СОРҮ ТО		
ELECTRONIC	Chevron c/o CRA	Attn: Report Contact
СОРҮ ТО		
ELECTRONIC	Chevron	Attn: Anna Avina
COPY TO		
ELECTRONIC	CRA	Attn: Brian Silva
COPY TO		





2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Respectfully Submitted,

fiel M. Parker

Jill M. Parker Senior Specialist

(717) 556-7262



Analysis Report

LL Sample # WW 7127885

LL Group # 1404220

Account # 10904

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: QA-T-130715 NA Water Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected: 07/15/2013

Submitted: 07/16/2013 09:45 Reported: 07/30/2013 14:27

6127Q

L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

Chevron

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.	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
10943	BTEX 8260B Water	SW-846 8260B	1	D131992AA	07/18/2013 11:44	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131992AA	07/18/2013 11:44	Daniel H Heller	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13198A94A	07/17/2013 19:29	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13198A94A	07/17/2013 19:29	Marie D Beamenderfer	1



Analysis Report

Account

LL Sample # WW 7127886

10904

LL Group # 1404220

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-1RA-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	07:05	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

271RA

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	430	5	10
10943	Ethylbenzene		100-41-4	5	0.5	1
10943	Toluene		108-88-3	8	0.5	1
10943	Xylene (Total)		1330-20-7	2	0.5	1
GC Vol	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	3,700	50	1
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
Hydrod	arbons					
08269	TPH-DRO water C10-C2	28	n.a.	4,200	50	1
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
Hydroc	arbons w/Si					
02216	TPH-DRO water C10-C The reverse surrogat	,		630 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.

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 82	260B	1	D131992AA	07/18/2013	18:14	Daniel H Heller	1
10943	BTEX 8260B Water	SW-846 82	260B	1	D131992AA	07/18/2013	18:37	Daniel H Heller	10
01163	GC/MS VOA Water Prep	SW-846 50	030B	1	D131992AA	07/18/2013	18:14	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 50	030B	2	D131992AA	07/18/2013	18:37	Daniel H Heller	10
01728	TPH-GRO N. CA water C6- C12	SW-846 80	015B	1	13198A94A	07/17/2013	21:35	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 50	030B	1	13198A94A	07/17/2013	21:35	Marie D Beamenderfer	1
08269	TPH-DRO water C10-C28	SW-846 80	015B	1	132030010A	07/23/2013	22:14	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 80	015B	1	132030011A	07/29/2013	14:43	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 35	510C	1	132030011A	07/22/2013	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 35	510C	1	132030010A	07/22/2013	22:00	Elaine F Stoltzfus	1



Analysis Report

Account

LL Sample # WW 7127887

10904

LL Group # 1404220

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-1RB-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	07:45	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

271RB

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.	230	50	1
GC Pet	troleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons					
08269	TPH-DRO water C10-C	28	n.a.	2,000	50	1
	troleum	SW-846	8015B	ug/l	ug/l	
-	carbons w/Si					
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

	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	D131992AA	07/18/2013	19:00	Daniel H Heller	1		
01163	GC/MS VOA Water Prep	SW-846	5030B	1	D131992AA	07/18/2013	19:00	Daniel H Heller	1		
01728	TPH-GRO N. CA water C6- C12	SW-846	8015B	1	13198A94A	07/17/2013	22:00	Marie D Beamenderfer	1		
01146	GC VOA Water Prep	SW-846	5030B	1	13198A94A	07/17/2013	22:00	Marie D Beamenderfer	1		
08269	TPH-DRO water C10-C28	SW-846	8015B	1	132000005A	07/22/2013	13:50	Christine E Dolman	1		
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846	8015B	1	132000006A	07/25/2013	13:34	Christine E Dolman	1		
11172	DRO by 8015 w/ Silica Gel	SW-846	3510C	1	132000006A	07/19/2013	16:30	Seth A Farrier	1		
07003	Extraction - DRO (Waters)	SW-846	3510C	1	132000005A	07/19/2013	16:30	Seth A Farrier	1		



Analysis Report

Account

LL Sample # WW 7127888

10904

LL Group # 1404220

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-2-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	09:55	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

61272

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.	N.D.	50	1
GC Pet	croleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons					
08269	TPH-DRO water C10-C	28	n.a.	150	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
-	carbons w/Si					
02216	TPH-DRO water C10-C The reverse surroga	,		N.D. t at <1%.	50	1

General Sample Comments

State of California Lab Certification No. 2501

	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	F131983AA	07/17/2013	18:41	Brett W Kenyon	1		
01163	GC/MS VOA Water Prep	SW-846	5030B	1	F131983AA	07/17/2013	18:41	Brett W Kenyon	1		
01728	TPH-GRO N. CA water C6- C12	SW-846	8015B	1	13198A94A	07/17/2013	22:25	Marie D Beamenderfer	1		
01146	GC VOA Water Prep	SW-846	5030B	1	13198A94A	07/17/2013	22:25	Marie D Beamenderfer	1		
08269	TPH-DRO water C10-C28	SW-846	8015B	1	132000005A	07/22/2013	11:11	Christine E Dolman	1		
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846	8015B	1	132000006A	07/25/2013	14:00	Christine E Dolman	1		
11172	DRO by 8015 w/ Silica Gel Ext	SW-846	3510C	1	132000006A	07/19/2013	16:30	Seth A Farrier	1		
07003	Extraction - DRO (Waters)	SW-846	3510C	1	13200005A	07/19/2013	16:30	Seth A Farrier	1		



Analysis Report

Account

LL Sample # WW 7127889

10904

LL Group # 1404220

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-3-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	10:15	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

61273

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.	110	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons					
08269	TPH-DRO water C10-C	28	n.a.	1,500	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
-	carbons w/Si		_			
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

	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	F131983AA	07/17/2013	19:46	Brett W Kenyon	1		
01163	GC/MS VOA Water Prep	SW-846 !	5030B	1	F131983AA	07/17/2013	19:46	Brett W Kenyon	1		
01728	TPH-GRO N. CA water C6- C12	SW-846	8015B	1	13198A94A	07/17/2013	22:51	Marie D Beamenderfer	1		
01146	GC VOA Water Prep	SW-846 !	5030B	1	13198A94A	07/17/2013	22:51	Marie D Beamenderfer	1		
08269	TPH-DRO water C10-C28	SW-846	8015B	1	132000005A	07/22/2013	16:59	Christine E Dolman	1		
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846	8015B	1	132000006A	07/25/2013	14:22	Christine E Dolman	1		
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3	3510C	1	132000006A	07/19/2013	16:30	Seth A Farrier	1		
07003	Extraction - DRO (Waters)	SW-846	3510C	1	13200005A	07/19/2013	16:30	Seth A Farrier	1		



Analysis Report

Account

LL Sample # WW 7127890

10904

LL Group # 1404220

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-4-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	06:30	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

61274

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.	N.D.	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
08269	Carbons TPH-DRO water C10-C	28	n.a.	530	50	1
	croleum carbons w/Si	SW-846	8015B	ug/l	ug/l	
-	TPH-DRO water C10-C The reverse surroga			N.D. t at 1%.	50	1

General Sample Comments

State of California Lab Certification No. 2501

	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	D131992AA	07/18/2013	19:23	Daniel H Heller	1		
01163	GC/MS VOA Water Prep	SW-846	5030B	1	D131992AA	07/18/2013	19:23	Daniel H Heller	1		
01728	TPH-GRO N. CA water C6- C12	SW-846	8015B	1	13198A94A	07/17/2013	23:41	Marie D Beamenderfer	1		
01146	GC VOA Water Prep	SW-846	5030B	1	13198A94A	07/17/2013	23:41	Marie D Beamenderfer	1		
08269	TPH-DRO water C10-C28	SW-846	8015B	1	132000005A	07/22/2013	14:13	Christine E Dolman	1		
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846	8015B	1	132000006A	07/25/2013	14:45	Christine E Dolman	1		
11172	DRO by 8015 w/ Silica Gel Ext	SW-846	3510C	1	132000006A	07/19/2013	16:30	Seth A Farrier	1		
07003	Extraction - DRO (Waters)	SW-846	3510C	1	132000005A	07/19/2013	16:30	Seth A Farrier	1		



Analysis Report

Account

LL Sample # WW 7127891

10904

LL Group # 1404220

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-5-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	09:10	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

61275

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	130	0.5	1
10943	Ethylbenzene		100-41-4	2	0.5	1
10943	Toluene		108-88-3	8	0.5	1
10943	Xylene (Total)		1330-20-7	11	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	3,900	250	5
GC Pet	croleum	SW-846	8015B	ug/l	ug/l	
Hvdro	carbons					
-	TPH-DRO water C10-C	28	n.a.	3,800	50	1
GC Pet	croleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons w/Si					
02216	TPH-DRO water C10-C Due to the presence recovery can not be	of fuel	in the sample extra	850 act, capric acid	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	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D131992AA	07/18/2013	19:46	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131992AA	07/18/2013	19:46	Daniel H Heller	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13198A94A	07/18/2013	09:57	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	13198A94A	07/18/2013	09:57	Marie D Beamenderfer	5
08269	TPH-DRO water C10-C28	SW-846 8015B	1	132000005A	07/22/2013	17:22	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	132000006A	07/25/2013	15:08	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	132000006A	07/19/2013	16:30	Seth A Farrier	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	132000005A	07/19/2013	16:30	Seth A Farrier	1



Analysis Report

Account

LL Sample # WW 7127892

10904

LL Group # 1404220

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Sample Description: MW-6-W-130715 Grab Groundwater Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728

Project Name: 206127

Collected:	07/15/2013	08:30	by AW	Chevron
				L4310
Submitted:	07/16/2013	09:45		6001 Bollinger Canyon Rd.
Reported:	07/30/2013	14:27		San Ramon CA 94583

61276

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	13	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.	660	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons					
08269	TPH-DRO water C10-C	28	n.a.	2,400	50	1
	croleum	SW-846	8015B	ug/l	ug/l	
-	carbons w/Si					
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

	Laboratory Sample Analysis Record								
CAT No.	Analysis Name	Method	Tr	ial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8	260B 1		D131992AA	07/18/2013	20:31	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5	030B 1		D131992AA	07/18/2013	20:31	Daniel H Heller	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8	015B 1		13198A94A	07/18/2013	00:07	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5	030B 1		13198A94A	07/18/2013	00:07	Marie D Beamenderfer	1
08269	TPH-DRO water C10-C28	SW-846 8	1 8015B		132000005A	07/22/2013	15:51	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8	015B 1		132000006A	07/25/2013	15:31	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3	510C 1		132000006A	07/19/2013	16:30	Seth A Farrier	1
07003	Extraction - DRO (Waters)	SW-846 3	510C 1		13200005A	07/19/2013	16:30	Seth A Farrier	1



Analysis Report

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Quality Control Summary

Client Name: Chevron Reported: 07/30/13 at 02:27 PM Group Number: 1404220

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

<u>Analysis Name</u>	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>	<u>RPD</u>	<u>RPD Max</u>
Batch number: D131992AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numbo N.D. N.D. N.D. N.D. N.D.	er(s): 712 0.5 0.5 0.5 0.5 0.5	27885-7127 ug/l ug/l ug/l ug/l	887,712789 100 98 100 95	90-7127892	77-121 79-120 79-120 77-120		
Batch number: F131983AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numbo N.D. N.D. N.D. N.D. N.D.	er(s): 712 0.5 0.5 0.5 0.5 0.5	27888-7127 ug/l ug/l ug/l ug/l ug/l	889 91 86 86 89		77-121 79-120 79-120 77-120		
Batch number: 13198A94A TPH-GRO N. CA water C6-C12	Sample numbe N.D.	er(s): 712 50.	27885-7127 ug/l	892 99	96	75-135	3	30
Batch number: 132000005A TPH-DRO water C10-C28	Sample numb N.D.	er(s): 712 32.	27887-7127 ug/l	892 103	107	73-120	4	20
Batch number: 132030010A TPH-DRO water C10-C28	Sample numb N.D.	er(s): 712 32.	27886 ug/l	105	105	73-120	0	20
Batch number: 132000006A TPH-DRO water C10-C28 w/Si Gel	Sample numb N.D.	er(s): 712 32.	27887-7127 ug/l	892 98	108	43-120	9	20
Batch number: 132030011A TPH-DRO water C10-C28 w/Si Gel	Sample numb N.D.	er(s): 712 32.	27886 ug/l	81	98	43-120	19	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 <u>%REC</u>	MSD <u>%REC</u>	MS/MSD Limits	<u>RPD</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: D131992AA	Sample	number(s): 7127885	5-71278	87,7127	890-71278	92 UNSPK: P	128250	
Benzene	101	103	72-134	2	30				
Ethylbenzene	99	101	71-134	2	30				
Toluene	98	100	80-125	2	30				
Xylene (Total)	95	96	79-125	1	30				
Batch number: F131983AA	Sample	number(s): 7127888	8-71278	89 UNSE	PK: 712788	8		

*- 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.



Analysis Report

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Quality Control Summary

Client Name: Chevron Reported: 07/30/13 at 02:27 PM Group Number: 1404220

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	DUP	DUP	Dup RPD
<u>Analysis Name</u>	<u>%REC</u>	<u>%REC</u>	<u>Limits</u>	<u>RPD</u>	MAX	Conc	Conc	RPD	<u>Max</u>
Benzene	95	94	72-134	1	30				
Ethylbenzene	92	90	71-134	2	30				
Toluene	92	91	80-125	1	30				
Xylene (Total)	94	91	79-125	3	30				

Surrogate Quality Control

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

Batch nu	mber: D131992AA Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
7127885	101	96	98	102	
7127886	100	99	99	111	
7127887	101	98	99	109	
7127890	101	98	98	102	
7127891	102	99	98	110	
7127892	102	101	98	108	
Blank	101	100	96	101	
LCS	101	100	98	104	
MS	101	101	97	105	
MSD	100	100	96	102	
1162	100	100	50	102	
Limits:	80-116	77-113	80-113	78-113	
Analuaia	Name . HOT MOCA by	Water			
	Name: UST VOCs by mber: F131983AA	y 8260B - Water			
	Name: UST VOCs by mber: F131983AA Dibromofluoromethane	y 8260B - Water 1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
Batch nu	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4			
Batch nu 7127888	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4	100	97	
Batch nu 7127888 7127889	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4	100 102	97 101	
Batch nu 7127888 7127889 Blank	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4	100 102 98	97 101 95	
Batch nu 7127888 7127889 Blank LCS	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99	100 102 98 99	97 101 95 97	
Batch nu 7127888 7127889 Blank LCS MS	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99 98	100 102 98 99 99	97 101 95 97 98	
Batch nu 7127888 7127889 Blank LCS	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99	100 102 98 99	97 101 95 97	
Batch nu 7127888 7127889 Blank LCS MS	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99 98	100 102 98 99 99	97 101 95 97 98	
Batch nu 7127888 7127889 Blank LCS MS MSD	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99 98 100	100 102 98 99 99 99 98	97 101 95 97 98 98	
Batch nu 7127888 7127889 Blank LCS MS MSD Limits:	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99 98 100 77-113	100 102 98 99 99 99 98	97 101 95 97 98 98	
Batch nu 7127888 7127889 Blank LCS MS MSD Limits: Analysis	mber: F131983AA Dibromofluoromethane	1,2-Dichloroethane-d4 101 100 97 99 98 100 77-113	100 102 98 99 99 99 98	97 101 95 97 98 98	

7127885727127886266*712788783712788872712788990

*- 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.



Analysis Report

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Quality Control Summary

Client Name: Chevron Reported: 07/30/13 at 02:27 PM

Surrogate Quality Control

7127890 7127891 7127892	72 100 95
Blank	73 88
LCSD	89

Limits: 63-135

Analysis Name: TPH-DRO water C10-C28 Batch number: 132000005A Orthoterphenyl

	Ortifice prierty
7127887	107
7127888	97
7127889	112
7127890	93
7127891	109
7127892	86
Blank	101
LCS	113
LCSD	115
Limits:	46-131
	Name: TPH-DRO water C10-C28 w/Si Gel
Batch nu	mber: 132000006A
	Orthoterphenyl
7127887	112
7127888	100
7127889	108
7127890	96
7127891	103
7127892	
Blank	95
LCS LCSD	106
LCSD	117
Limits:	46-131
	Name: TPH-DRO water C10-C28
Batch nu	mber: 132030010A
	Orthoterphenyl
7127886	106
Blank	106
LCS	113
LCSD	115
Limits:	46-131
	Name: TPH-DRO water C10-C28 w/Si Gel
Batch nu	mber: 132030011A
	Orthoterphenyl

*- 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 Reported: 07/30/13 at 02:27 PM Group Number: 1404220

Surrogate Quality Control

7127886	96
Blank	106
LCS	107
LCSD	114

Limits: 46-131

*- 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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eurofins Lancaste	r ries	7151 L	3- % Ac	ct. #/	090	94	l Group Ir	For Eu	40 40 ons on r	s Lanc <u>122</u> everse	caster	Labo _ Sai	ratorie mple = d with ci	es use # rcled nu	e only 12 umbers	78	85	-9	z			
1) Please forward the lab resulptiding the	o the diffe	Consulta	nt and cc: (G-R.	4	Matrix]	5			Ar	nalys	ses F	Requ	ieste	d				SCR #:	
Facility # SS#206127-OML G-R#38649		WBS I ID#TO	60197447	728																		
Site Address 2301-2337 BLANDING AVENU	JE, ALA	MEDA,	CA			ľ``					₽ ₽	Ø									Results in Dry Weight	ed
Chevron PM MB CRASB		Lead Cons Silva			Sediment	Ground Surface		s	8260	8260	Gel Cleanup	eanup									Must meet lowest deter limits possible for 8260	
Consultant/Office Getter-Ryan, Inc., 6747 Sierra	Court, S	uite J, C	ublin, CA	94568	Sec	<u></u> 5 0		Containers	82	82		Gel Cleanup			q	Ð					compounds	ion
Consultant Project Mgr. Deanna L. Harding, (deanna@	grinc.co	n), (92	5) 551-74	44 x180)				8021	801552	without Silica	Silica		s	Method	Method				1	Confirm highest hit by 8	0
Consultant Phone # (916) 889-8908 x						Potable	Air	ber of	8	80		TPH-DRO 8015 with Silica	S	Oxygenates		ad					Run oxy's on h	
Sampler Alex Woron				Grab ©				Number		В.	TPH-DRO 8015	RO 80	Full Scan	Ň	ead	/ed Lead						
② Sample Identification	Soil Depth	Col Date	lected Time	Grab	Soil	Water	ö	Total	BTEX	TPH-GRO	TPH-D	П-Н-П	8260 F		Total Lead	Dissolved					6) Remarks	
QA		7-15-1	3	\mathbf{X}		X		2	\mathbf{N}	\mathbf{N}											TPH-DRO WITH SI	
mw-ira			0705	K)				8	X	\mathbb{N}	\bowtie	\bowtie									GEL REQUESTING	3 10
mw-IRB			0745	<u>X</u>		Ι×	_	8	\square											_	GRAM COLUMN CL UP WITH CAPRIC /	
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mw-4			0630	K≯⊢	_			8	╉╋	┼╂╴	┼┼	\mathbb{H}						-	+			
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7) Turnaround Time Requested (TAT) (pleas	se circle)		Relinquis	hed by				Date		_	Time			Recei	ved by					Date Time	e 9
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72 hour 48 hour		24 hour		Relinquis	nea by	lo			Date		L13	Time	39	<u>,</u>	recel	ved by	PS	-			Date Time	•
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Type VI (Raw Data)	Othe	er:			_	erature	_					_	C			ustod	y Sea	ais ir	uact'	?	(Jes)	No

Issued by Dept. 40 Management

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7050.03

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Lancaster Laboratories Environmental

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)	Ĺ	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
- **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 per liter of gas.
- ppb parts per billion
- **Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C - result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

Analytical test results 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

WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	Т	E	X	MTBE
DATE	(fl.)	(fl.)	(msl)	(µg/L)	(pg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1									<u></u>	
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	1,2006	3,000 ⁵	920	<20	<20	<20	<100
07/30/01	10.62	9.15	1.47	550 ^{3,8}	2,000 ⁷	730	13	<5.0	<5.0	<25
10/08/01	10.62	7.86	2.76	2,200 ⁹	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	11	<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	960 ³	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
07/23/04 ¹⁰	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
01/28/0510	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	920 ^{3,12}	<50	10	<0.5	<0.5	<0.5	<0.5
01/12/0610	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
10/15/0810	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/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	в	T	E	x	MTBE
DATE	(fl.)	(ft.)	(msl)	(µg/L)	(ag/L)	(µg/L)	(µg/L)	с (µg/L)	л (µg/L)	μg/L)
MW-1 (cont)							(#5 ⁻¹⁻¹	,#8/ D/	(F 6/L)	(148/12)
01/21/0910	10.62	7.19	3.43	3905	<50	<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	1,400	51	<0.5	<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	<0.5 <0.5
04/26/1010	13.49	9.20	4.29	820 ³	66	<0.5	<0.5	<0.5		
	time.			040	00	-0.0	-0.5	-41.5	<0.5	<0.5
MW-2										
06/30/09 ¹	10.63	3.80	6.83							-
07/03/0914	10.63	3.91	6.72	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	
10/01/0914	10.63	4.11	6.52	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	
01/19/1014	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 <0.5	12
MW-3										
06/30/09 ¹	10.72	4.61	6.11							
07/03/09 ¹⁴	10.72	4.57	6.15	170 ³	310	1	<0.5	2	<0.5	
10/01/09 ¹⁴	10.72	5.22	5.50	1,000 ³	52	<0.5	<0.5	<0.5	<0.5	
01/19/10 ¹⁴	10.72	4.84	5.88	1,800 ³	120	2	<0.5	<0.5	<0.5	- A
04/26/10 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	6.00	6.20							
06/30/09 ¹⁴	11.40	6.02	5.38							1000
07/03/09 10/01/09 ¹⁴	11.40	5.85	5.55	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	~
10/01/09 ¹⁴	11.40	6.95	4.45	370 ³	<50	<0.5	<0.5	<0.5	<0.5	-
01/19/10 ¹⁴		6.22	5.18	110 ³	<50	<0.5	<0.5	<0.5	<0.5	
J4/20/10	11.40	6.61	4.79	210 ^{5,17}	<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

WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	r in the second s	E	X	мтве
DATE	<i>(f</i> L)	(FL)	(msl)	(µg/L)	(#g/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-5					·····					·····
06/30/09	10.50	5.20	5.30	-		-		-		
07/03/0914	10.50	5.17	5.33	1103	930	33	2	0.6	3	7
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	2,6003	2,200	74	4	1	5	
04/26/1014	10.50	5.91	4.59	1,7003	2,200	94	4	2	5	
				4,700					3	-
CS-2										
07/30/01	-	-	~	140 ^{3,5}	<50	<0.50	<0.50	-0.50	<i>(</i>) <i>5</i> 0	~ ~ ~
10/08/01	-	-		53 ⁹	<50	<0.50	<0.50	<0.50 <0.50	<0.50	<2.5
01/13/02	-		-	<50 ³	<50	<0.50	<0.50	<0.50	<1.5 <1.5	<2.5
04/08/02		2		<50 77 ³	<50	<0.50	<0.50	<0.50	<1.5 <1.5	<2.5
07/31/02	**			<50 ³	<50	<0.50	<0.50	<0.50	<1.5 <1.5	<2.5 <2.5
10/15/02	-	÷.		<50 ³	<50	<0.50	<0.50	<0.50	<1.5	
01/14/03	-	-	-	<50 ³	<50	<0.50	<0.50	<0.50	<1.5	<2.5 <2.5
04/15/03	-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<1.5	<2.5 <2.5
07/16/03 ¹⁰	_		-	<50 ³	<50	<0.5	0.7	<0.5	0.6	<2.5 <0.5
10/18/0310	-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04 ¹⁰	-	-	4	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
04/23/04 ¹⁰	- 6-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
07/23/04 ¹⁰	-			<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
10/22/0410	-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/05 ¹⁰	-			<503	<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 <0.5
07/15/05 ¹⁰	-	-		<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05 ¹⁰		<u></u>	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
01/12/06 ¹⁰	-	-	14	<50 ³	<50	<0.5	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
)4/13/06 ¹⁰			+	<50 ³	<50	<0.5	<0.5	<0.5	<0.5 <0.5	<0.3 <0.5
07/13/06 ¹⁰	e e	-	14	140 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
10/17/06 ¹⁰	1.2	-		<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
01/16/07 ¹⁰	-	4	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
04/17/07 ¹⁰	-	-	-4	<50 ³	<50	<0.5	<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/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	E	X	MTBE
DATE	(fl.)	(fL)	(msl)	(µg/L)	(ag/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
10/16/07 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08 ¹⁰	**			85 ³	<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			20	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/0910				<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
10/01/09 ¹⁰				<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										
ГВ-LB										
01/23/01	-	1.4	-	-	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
4/09/01				-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
7/30/01		-		4	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA					-50	-0.50	-0.50	-0.50	~0.50	~2.5
0/08/01	-		-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
)1/13/02	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
4/08/02			-	-	<50	< 0.50	<0.50	<0.50	<1.5	<2.5
)7/31/02		-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
0/15/02	-		-		<50	<0.50	<0.50	<0.50	<1.5	<2.5
1/14/03		-	-		<50	<0.50	<0.50	<0.50	<1.5	<2.5
4/15/03		-	-		<50	<0.5	<0.5	<0.5	<1.5	<2.5
7/16/03 ¹⁰		-	-	C.4	<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/18/0310	CHOIL 1	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/22/04 ¹⁰		-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/23/04 ¹⁰			-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/23/0410		-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/22/0410		-		-	<50	<0.5	<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/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	Ť	E	X	MTBE
DATE	(fl.)	(fl.)	(msl)	(µg/L)	(<i>ag/L</i>)	(Hg/L)	(µg/L)	(µg/L)	(ng/L)	(µg/L)
QA (cont)										
1/28/05 ¹⁰					<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
7/15/0510					<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
1/12/06 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
0/17/0610					<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/16/07 ¹⁰		8-9			<50	<0.5	<0.5	<0.5	<0.5	< 0.5
4/17/07 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
0/16/07 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/16/0810					<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/16/08 ¹⁰			••		<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/16/0810					<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/15/0810					<50	<0.5	<0.5	<0.5	<0.5	< 0.5
1/21/0910					<50 ¹³	<0.5	<0.5	<0.5	<0.5	<0.5
4/15/09 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
1/19/10 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	<0.5

EXPLANATIONS:

TOC = Top of CasingDRO = Diesel Range OrganicsN(ft.) = FeetGRO = Gasoline Range Organics(fDTW = Depth to WaterB = Benzene...GWE = Groundwater ElevationT = TolueneC(msl) = Mean sea levelE = EthylbenzeneCTPH = Total Petroleum HydrocarbonsX = Xylenes

MTBE = Methyl Tertiary Butyl Ether (μg/L) = Micrograms per liter -- = Not Measured/Not Analyzed CS-2 = Creek Sample QA = Quality Assurance/Trip Blank

* 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).

- ¹ Well development performed.
- ² Laboratory report indicates unidentified hydrocarbons <C16.
- ³ Analyzed with silica gel cleanup.
- ⁴ Laboratory report indicates weathered gasoline C6-C12.
- 5 Laboratory report indicates discrete peaks.
- ⁶ Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.
- ⁷ Laboratory report indicates gasoline C6-C12.
- ⁸ Laboratory report indicates unidentified hydrocarbons C9-C24.
- ⁹ Analysis performed without silica gel cleanup although was requested on the Chain of Custody.
- ¹⁰ BTEX and MTBE by EPA Method 8260.
- ¹¹ Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel.
- 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 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.
- ¹⁴ BTEX by EPA Method 8260.
- ¹⁵ 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.
- ¹⁶ 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.
- ¹⁷ 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.

								Former (Former -2337 Bl		Marine T enue							
WELL ID/	(1)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)	Arsenic (7,84)	Barium	(7) Beryllium	(7, ⁶⁴) (2, ⁶⁴)	(7/841)	(丁/8市) (丁/8市)	Copper	(1/g/L)	Malybdeaum	law). Nickel	(μg/L)	Janes (1, 81)	(hg/L)	(7/ Vanadium	Zinc	(T/ Mercury
MW-2 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

EXPLANATIONS

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

ANALYTICAL METHODS:

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