

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

October 2, 2012

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 20-6127)

2301-2311 Blanding Avenue

Alameda, California LOP Case RO0002466 **RECEIVED** 

5:28 pm, Oct 30, 2012

Alameda County
Environmental Health

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 2012 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

MS Bauer



10969 Trade Center Drive Rancho Cordova, California 95670

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

http://www.craworld.com

October 2, 2012

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 2012

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 2012 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 August 3, 2012 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' August 7 and 9, 2012 Analytical Results reports are included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

#### **RESULTS OF SECOND SEMI-ANNUAL 2012 EVENT**

On July 23, 2012, G-R monitored and sampled site wells per the established schedule, except for MW-2 and MW-4, which were inaccessible due to cars parked over them. In addition, inadequate packaging of some sample containers at the laboratory resulted in analysis of total petroleum hydrocarbons as diesel (TPHd) samples only.

As a result, G-R returned to the site on July 27, 2012 and monitored and sampled all site wells. During re-sampling, G-R inadvertently missed collection of a TPHd sample from previously inaccessible wells MW-2 and MW-4, so TPHd results are not available for MW-2 and MW-4 for this event. No TPHd was detected in wells MW-2 and MW-4 using silica gel cleanup during the previous first semi-annual 2012 event.

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October 2, 2012 Reference No. 631916

Results of the current monitoring event indicate the following:

• Groundwater Flow Direction Northeast

• Hydraulic Gradient 0.01

• Approximate Depth to Water 3.5 to 8.5 feet below grade

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

TABLE A GROUNDWATER ANALYTICAL DATA												
Well ID	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$											
ESLs	100	100	1	40	30	20						
MW-1RA	6,000/1,000	4,800	640	9	20	7						
MW-1RB	<b>2,700</b> /<50	990	89	1	0.8	0.7						
MW-2	NA	<50	<0.5	<0.5	<0.5	<0.5						
MW-3	<b>1,200</b> /<50	<50	<0.5	<0.5	<0.5	<0.5						
MW-4	NA	<50	<0.5	<0.5	<0.5	<0.5						
MW-5	4,300/380	1,800	48	3	0.7	4						
MW-6	<b>1,600</b> /73	450	9	<0.5	<0.5	0.6						

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 TPHd, 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 ESL using silica gel cleanup.

<sup>1</sup> TPHd without and with 10 gram silica gel cleanup

Concentrations in **Bold** exceed their respective ESL



October 2, 2012 Reference No. 631916

• 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.

#### 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 permitting and scheduling the installation of two piezometers and performance of a tidal influence study pursuant to ACEH correspondence dated August 16, 2012. Work is tentatively scheduled to begin near the end of September 2012.



October 2, 2012 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/27 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 Reports

Attachment C Historical Groundwater Monitoring and Sampling Data

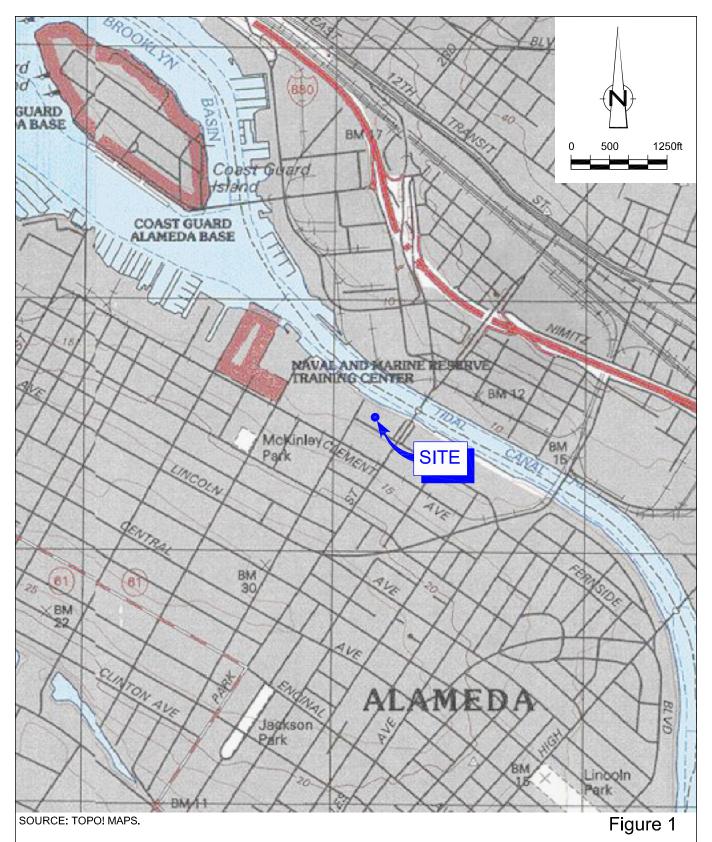
cc: Mr. Mike Bauer, Chevron (electronic only)

Ms. Julie Beck Ball

Mr. Peter Reinhold Beck Mr. Monroe Wingate

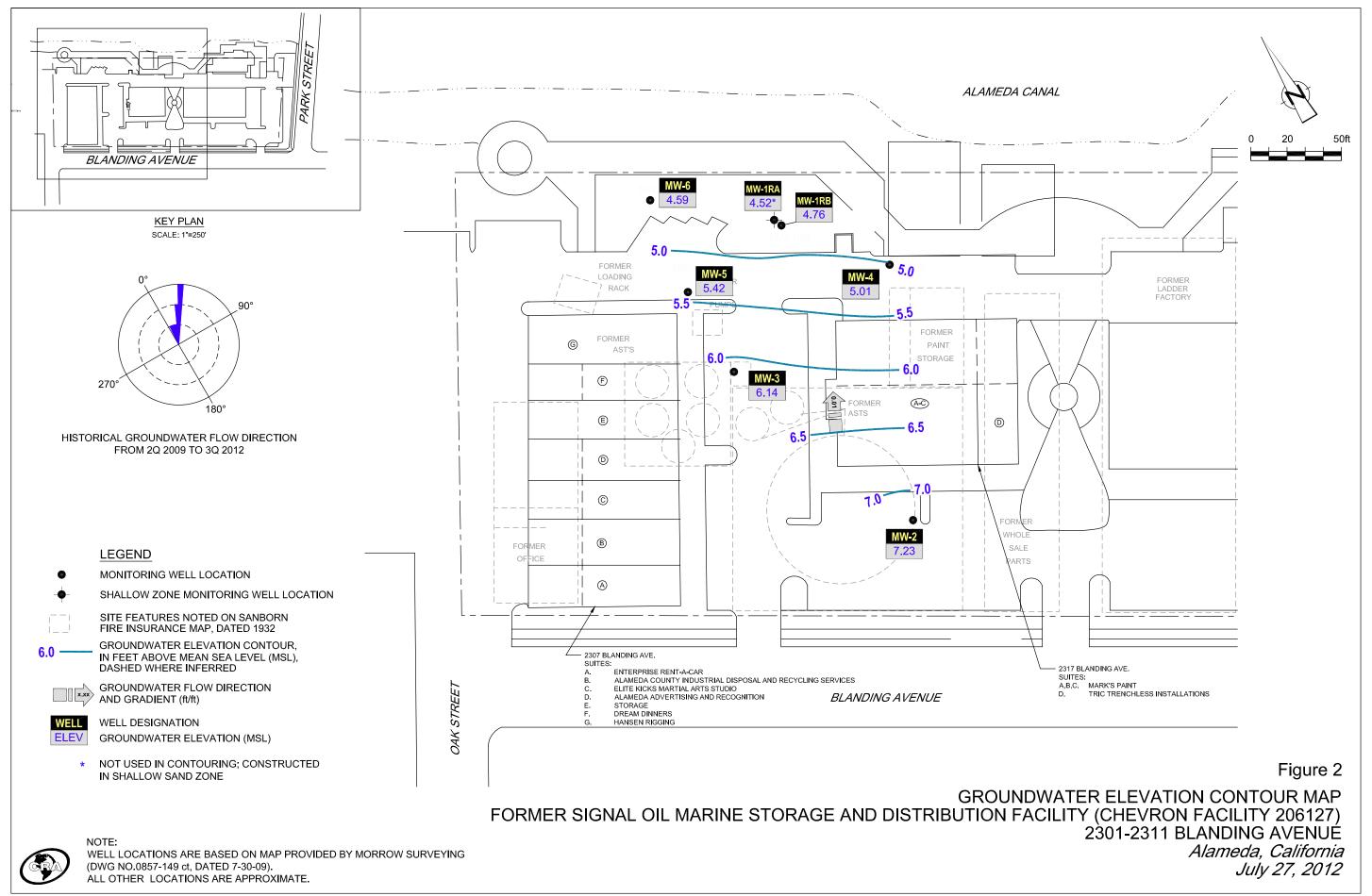
Mr. Tom Foley

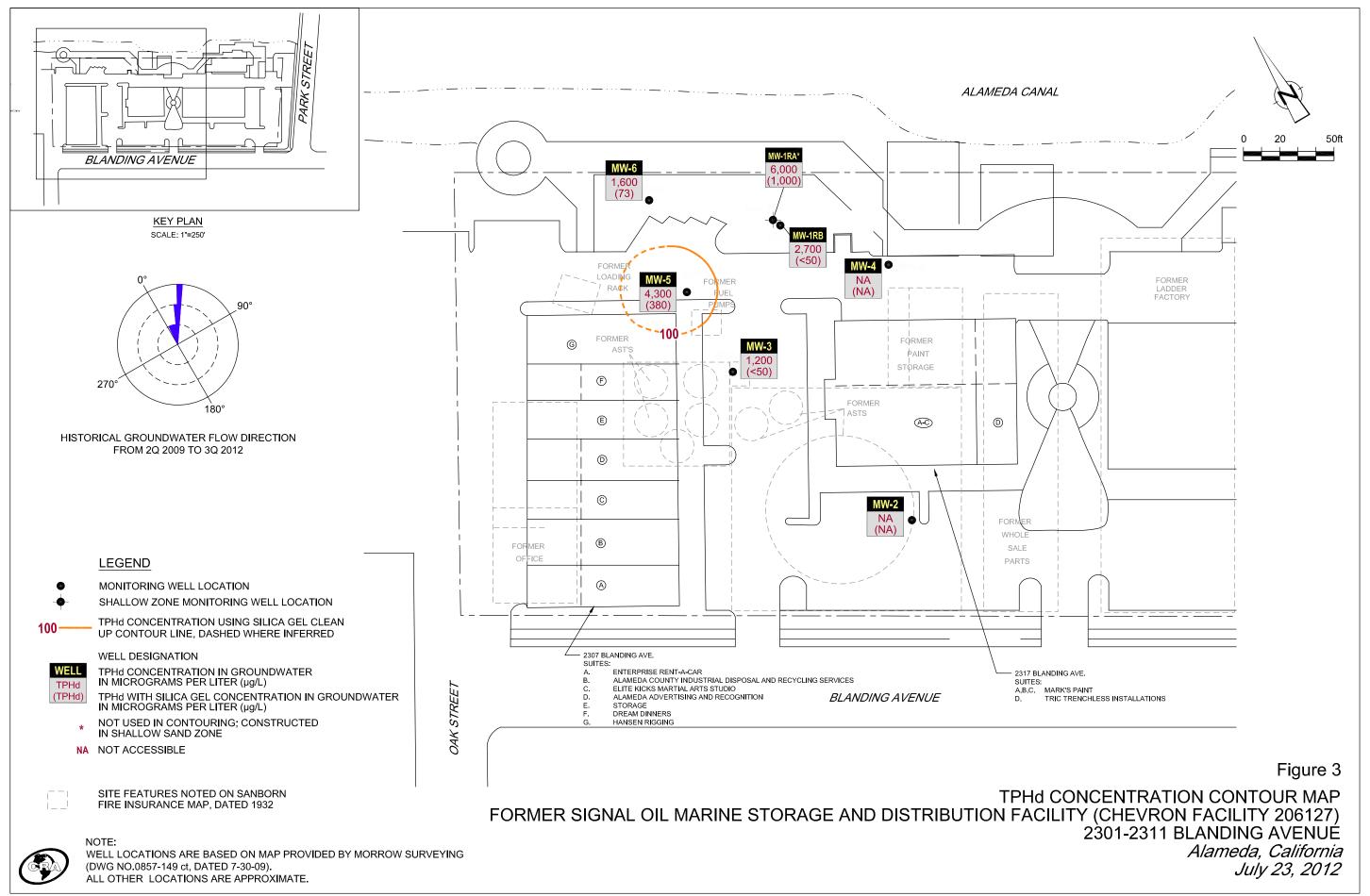
#### **FIGURES**

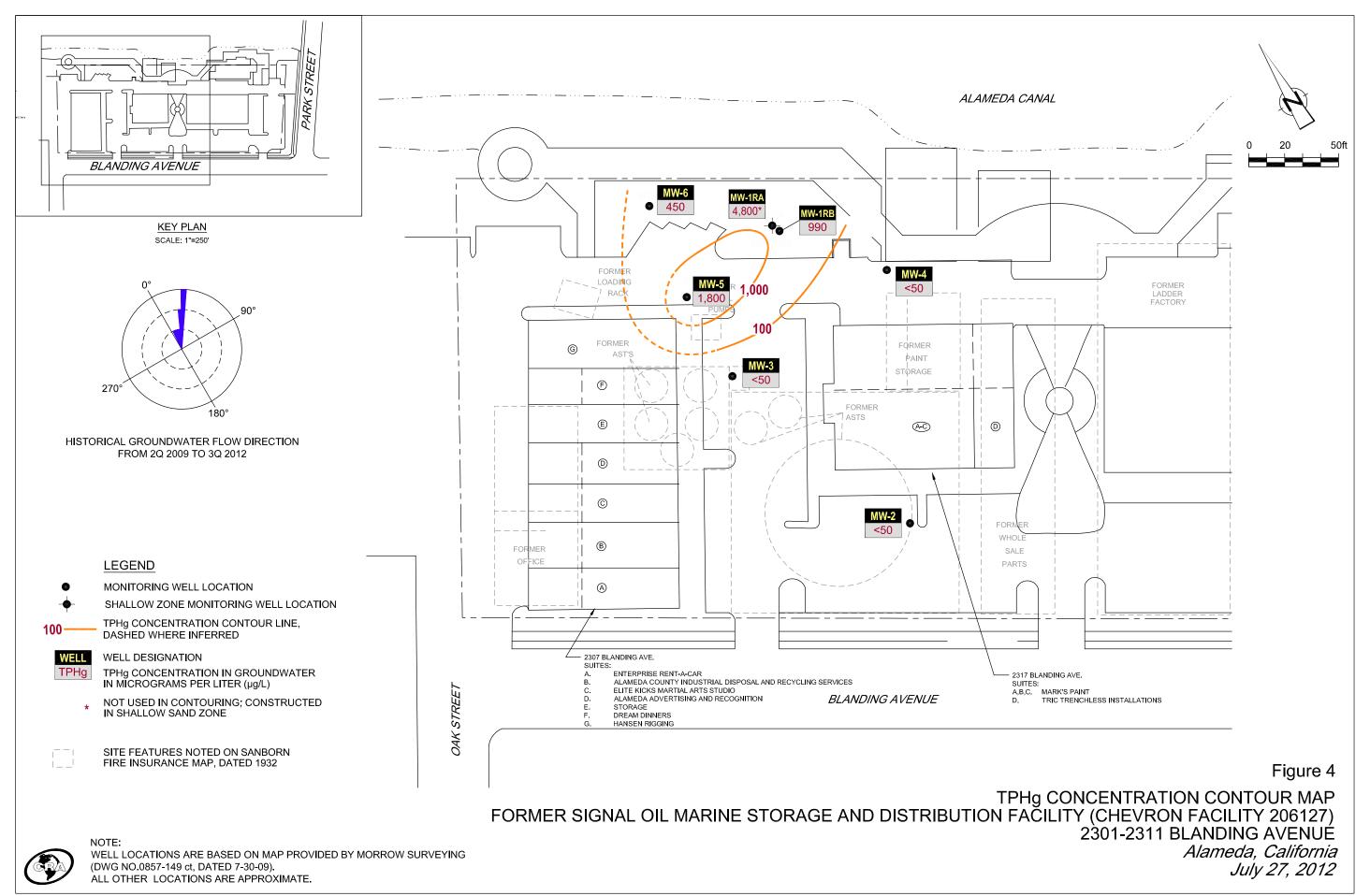


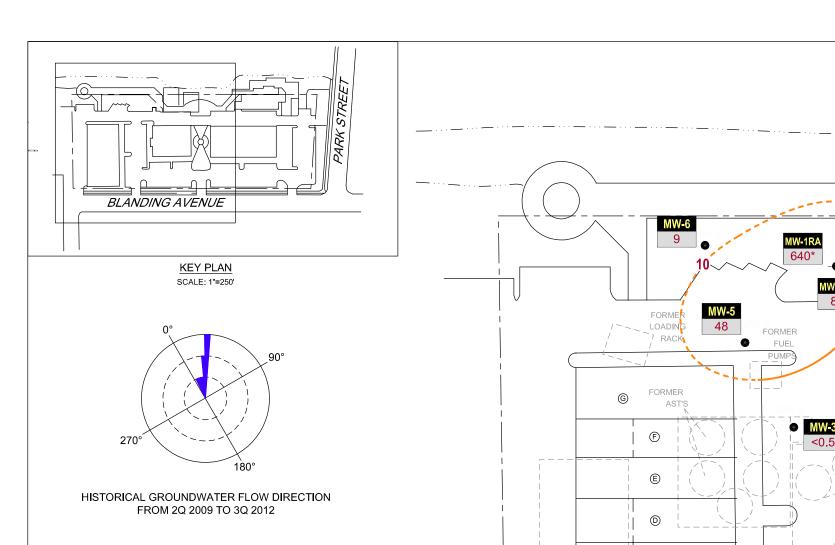
VICINITY MAP FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY (CHEVRON FACILITY 206127) 2301-2311 BLANDING AVENUE

Alameda, California









#### **LEGEND**

- MONITORING WELL LOCATION
- SHALLOW ZONE MONITORING WELL LOCATION

10 —— BENZENE CONCENTRATION CONTOUR LINE, DASHED WHERE INFERRED

WELL

WELL DESIGNATION

BENZENE CONCENTRATION IN GROUNDWATER IN MICROGRAMS PER LITER ( $\mu g/L$ )

\* NOT USED IN CONTOURING; CONSTRUCTED IN SHALLOW SAND ZONE

SITE FEATURES NOTED ON SANBORN FIRE INSURANCE MAP, DATED 1932

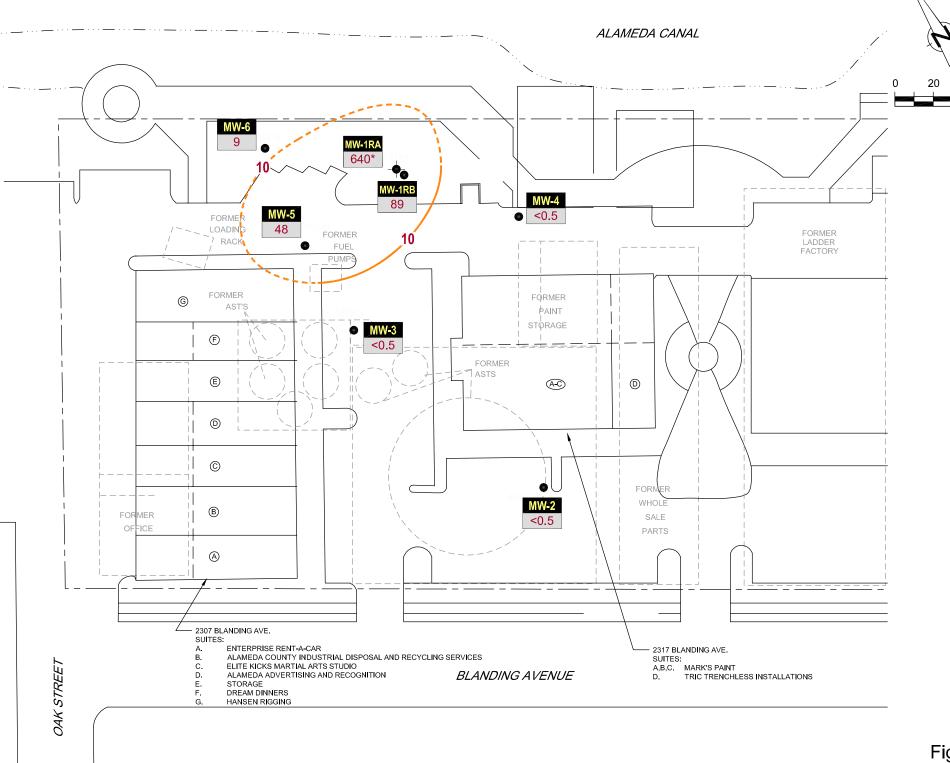


Figure 5

BENZENE CONCENTRATION CONTOUR MAP FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY (CHEVRON FACILITY 206127) 2301-2311 BLANDING AVENUE

Alameda, California July 27, 2012

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. **TABLES** 

TABLE 1 Page 1 of 6

					Н	YDROCARBO	NS		1	PRIMARY VOC	:S	
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
MW-1 MW-1	07/21/2010 10/22/2010 <sup>1</sup>	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-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 <sup>4</sup>	13.21	8.45	4.76	-	-	990	89	1	0.8	0.7	-

TABLE 1 Page 2 of 6

					Н	YDROCARBO	NS		1	PRIMARY VOC	cs .	
Location	Date	тос	DTW	GWE	трн-рко	TPH-DRO w/ Si Gel	трн-ско	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
NATAL 2	07/21/2010	10.62	4.12	C E1	(F.I.		<b>~</b> E0	<0.5	<0.5	<0.5	<0.F	
MW-2	07/21/2010	10.63	4.12	6.51	65 J	-	<50				<0.5	-
MW-2 MW-2	$10/22/2010$ $10/28/2010^{2}$	10.63 10.63	4.31 3.65	6.32 6.98	-	58	<50 -	<0.5	<0.5	<0.5	<0.5	-
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 <sup>3</sup>	10.63	-	-	-	-	-	-	-	-0.5	-0.5	_
MW-2	07/27/2012	10.63	3.40	7.23	_	-	<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 <sup>2</sup>	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	-
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	-

TABLE 1 Page 3 of 6

					Н	YDROCARBO	NS			PRIMARY VOC	es	
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
MW-3 MW-3	07/23/2012 07/27/2012 <sup>4</sup>	10.72 <b>10.72</b>	4.89 <b>4.58</b>	5.83 <b>6.14</b>	1,200	<50 -	<b>-</b> <50	- <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 <sup>3</sup>	11.40	-	-	-	-	-	-	-	-	-	-
MW-4	07/27/2012	11.40	6.39	5.01	-	-	<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	-	-	-	-	-	-	-	-
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	-

TABLE 1 Page 4 of 6

					Н	YDROCARBO	NS		I	PRIMARY VOC	?S	
Location	Date	тос	DTW	GWE	трн-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-5 MW-5	01/18/2012	10.50 10.50	5.98 5.40	4.52 5.10	3,700 3,600	460 310	3,500 2,000	140 87	7 5	2 1	10 5	-
MW-5	04/19/2012	10.50	5.40	5.10	4,300						3	-
MW-5	07/23/2012 <b>07/27/2012</b> <sup>4</sup>	10.50 10.50	5.29 5.08	5.21 5.42	4,300	380	1,800	48	3	0.7	4	-
14144-3	0./=//=01=	10.50	3.06	3.42	-	-	1,000	40	3	0.7	4	-
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 <sup>4</sup>	12.98	8.39	4.59	-	-	450	9	<0.5	<0.5	0.6	-
QA	07/21/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
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	-

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	VS	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 <b>QA</b>	04/19/2012 <b>07/23/2012</b>	-	-	-	-	-	<50 < <b>50</b>	<0.5 <0.5	<0.5 <0.5	<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

X = Xylenes (Total)

MTBE = Methyl tert butyl ether

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit

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

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	YDROCARBOI	NS		F	PRIMARY VOC	S	
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

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

<sup>3</sup> Inaccessible.

<sup>&</sup>lt;sup>4</sup> Due ro 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

Well ID	Date Installed	тос	Total Depth (fbg)	Casing Diameter <sup>1</sup> (inches)	Slot Size (inches)	Screen Interval (fbg)	Filter Pack (fbg)	Status
Monitoring			y 28/	(menes)	(PIREIRES)	<u> </u>	V - 8/	
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>s</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

<sup>&</sup>lt;sup>1</sup> = Schedule 40 PVC casing material

#### ATTACHMENT A

MONITORING DATA PACKAGE



#### TRANSMITTAL

August 3, 2012 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
	Third Quarter Event of July 23, 2012
	Special Event of July 27, 2012

#### **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 #: Site Address: City:		37 Blandin	g Avenue			-	Job #: Event Date: Sampler:	386498		7/23/12 34		<u>-</u>	
WELL ID	Vault Frame Condition	Casket/O Bins	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WE	ELL VAULT Ire/Size/ # of Bolts	Pictu Take	en
mu-3	6/4							~	~	12" en	700	1	
MW-5	ەلد							١	1	1			
mw-2	oll						<del></del>				Parkolover		
mw-4	oll						6	1	+	L	1		
MW-6	ok		-	1×D	01			Y	424	8" ME	2713~		
MW-12A	61C							r	K		1		
MW-12B	olc.						_0	N	r				
												F	
					<del></del>								
												1.0	
			e l										
Comments	gr.												

					WELL (	CONDITIC	N STATUS	SHEE	T		
Client/Facility #:	Chevror	n #206127					Job #:	38649	8		
Site Address:	2301-23	37 Blandin	g Avenue			_	Event Date:			7-27-2	-
City:	Alameda	a, CA				<u>-</u>	Sampler:			FT	<del>-</del> -
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)	REPLAC LOCK Y //N	REPLACE CAP Y	<b>WELL VAULT</b> Manufacture/Size/ # of Bolts	Pictures Taken
MW-IRA	DL									Mourisa 8-12	
MW-128	OK						->		1	14 4	
MW-2	OL						->			Em6/12"/2	
HW-3	OL						>			1	
Mu 4	OL						>				4
Mw-5	DIL									+ +	
Mw-6	OK	<del></del>	<del></del>	B=1	OK		>	4	1	Mount 502/8"/2	(8)
,											
									1		

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.

### CHEVRON #206127 (Former Signal Oil Marine Terminal) Alameda, CA

THIRD QUARTER EVENT OF July 23, 2012



Client/Facility#:	Chevron #20	06127		Job Number:	386498	
Site Address:	2301-2337 E	Blanding	Avenue	Event Date:	7/23/12	(inclusive)
City:	Alameda, C			Sampler:	317	(ilicidsive)
Well ID	MW-JR	A		Date Monitored:	7/23/12	
Well Diameter	2	_	Volum	e 3/4"= 0.0	02 1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	12.67 ft	<u>.                                    </u>	Factor	(VF) 4"= 0.6		12"= 5.80
Depth to Water		- Innual	Check if water colum			2 ((0
Depth to Water	4.75 w/ 80% Recharge	_xVF	7 =		= Estimated Purge Volume:_	2.92 gal.
Dopan to Water	W 00 % Recharge	e ((neight of	vvater Column x 0.20) 4	FDTVVJ. <u>8 - 0 7</u>	Time Started:	(2400 hrs)
Purge Equipment:		\$	Sampling Equipment:		Time Completed:	
Disposable Bailer	X		Disposable Bailer		Depth to Product:	
Stainless Steel Baile	er	F	Pressure Bailer		Depth to Water:	······································
Stack Pump		N	/letal Filters		Hydrocarbon Thickne	
Suction Pump		F	Peristaltic Pump		Visual Confirmation/[	Jescription:
Grundfos		C	QED Bladder Pump		Skimmer / Absorbant	Sock (circle one)
Peristaltic Pump		C	Other:			Skimmer:gal
QED Bladder Pump						Vell:gal
Other:	· · · · · · · · · · · · · · · · · · ·				Water Removed:	
Start Time (purging Sample Time/Da Approx. Flow Ra Did well de-water (2400 hr.)	ate:	pH 7-82 7-60	Conductivity (µmhos/cm - (S) 754	cloul, scription: ne: Temperature (C / F ) 20-7		
1112	2.5	7-37	805	20.9		
			LABORATORY IN	FORMATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALY	
MW- IRA	x voa vial		HCL	LANCASTER	TPH-GRO(8015)/BTEX(82	
<u> </u>	> x 1 liter ambers	YES	NP*	LANCASTER	TPH-DRO w/sgc COLUMN	/TPH-DRO (8015)
					<u></u>	
ä	3/6					
COMMENTS:						
Add/Replaced I	Lock:	Add/	Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #20	06127			Job Number:	386498		
Site Address:	2301-2337 B	landing	Avenue		Event Date:	7/	23/12	(inclusive)
City:	Alameda, C	4			Sampler:		HC	
	2001 1 0				<u></u>		1 1	
Well ID	MW-18	<u>.1</u> 2		C	ate Monitored:	7	123/12	
Well Diameter	2			Volume			2"= 0.17	3"= 0.38
Total Depth	19.96 ft			Factor			6"= 1.50 1	2"= 5.80
Depth to Water	8.56 ft				n is less then 0.56			•
Donah do Modern	11.60	_xVF •	= 1.0		x3 case volume =	Estimated Pu	rge Volume: <mark>\\$</mark>	-GI gal.
Depth to water	w/ 80% Recharge	€ [(Height of	Water Column x	(0.20) +	DTWJ: 11-16	Time S	tarted:	(2400 hrs)
Purge Equipment:			Sampling Equip	ment:				(2400 hrs)
Disposable Bailer	<b>&gt;</b>		Disposable Baile		X	Depth t	o Product:	ft
Stainless Steel Baile			Pressure Bailer					ft
Stack Pump			Metal Filters			18 -	arbon Thickness	
Suction Pump			Peristaltic Pump			Visual (	Confirmation/Des	scription:
Grundfos			QED Bladder Pu	mp		Skimme	er / Absorbant So	ock (circle one)
Peristaltic Pump			Other:					nmer: gal
QED Bladder Pump								l: gal
Other:							Removed:	
Start Time (purge	): 1205		Weath	er Con	ditions:	C	lear	
Sample Time/Da	te: 1250 /	7/23/n	Water	Color:	cloul	Odor: (Y)	N Lw	
Approx. Flow Rat		gpm.			scription:	L-W		00
Did well de-water							② Sampling:	10.04
	"	<b>y</b> 00, 11111	o	VOIGH		gai. Divv (	w Samping.	70.07
Time (2400 hr.)	Volume (gal.)	рН	Conductivi (µmhos/cm {	- \	Temperature C / F )	D.O. (mg/L)	OF (m)	
1210	2	7.57	552		20.8	(3. =)	(111	•,
1215	4	7.50	581		21-1		<del></del>	<del></del>
1220	5.8	7.26	603		20-9		<del></del>	
				<del></del>				
					<del>_</del>			
SAMPLE ID	(#) CONTAINER	REFRIG.			FORMATION	<u> </u>		
MW- 12/3		YES	HCL	ITPE	LABORATORY LANCASTER	TPH CPO/90	ANALYSI (15)/BTEX(8260)	
····· ()CD	2 x 1 liter ambers	YES	NP.		LANCASTER		sgc COLUMN/TI	
					BITOTOTEK			11-51(0 (0010)
			<del></del>					
-		<del></del>	<del> </del>				<u> </u>	
<u> </u>			1			<del></del>		
			<del></del>			<u> </u>		
COMMENTS:					<del></del>			
		<u> </u>						
	·							
Add/Replaced L	ock:	Add	l/Replaced Pl	ug:		Add/Repla	ced Bolt:	



Client/Facility#: Site Address:	Chevron #206127 2301-2337 Blandi		Job Number: Event Date:	386498 7/23/	12	(inclusive)
City:	Alameda, CA		Sampler:	<u></u>		(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 Bladder Pump Other:	MW- 2 2 15.60 ft.	Volum Factor Check if water colum	(VF) 4"= 0.66 n is less then 0.50 x3 case volume =	ft. Estimated Purge Vol Time Started: Time Complete Depth to Produ Depth to Wate Hydrocarbon T Visual Confirm Skimmer / Abs Amt Removed Amt Removed	ed:	gal. gal. (2400 hrs)(2400 hrs)ftftft on:rcle one)galgal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	ate: / gpm.	Weather Cor Water Color: Sediment De ime:Volun Conductivity (µmhos/cm - µS)	scription:	Odor: Y / N gal. DTW @ Sar D.O. (mg/L)	ORP (mV)	
	<u> </u>	LAPOPATORY IN	FORMATION			
SAMPLE ID MW-	(#) CONTAINER REFE  X voa vial YES  X 1 liter ambers YES	HCL	LABORATORY LANCASTER	TPH-GRO(8015)/BT TPH-DRO w/sgc CO		RO (8015)
COMMENTS:  Add/Replaced I		Parket over		a Ble to		own



Client/Facility#: Site Address: City:	Chevron #20 2301-2337 B Alameda, CA	Avenue		Number: nt Date: pler:	386498	(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 Bladder Pump Other:	13 .01 w/ 80% Recharge	xVF . / xVF . / e [(Height of V s D P M P	Check if water of 2 = 2 - 2  Vater Column x  ampling Equipority is posable Bailer ressure Bailer ressure Bailer restal Filters eristaltic Pump ED Bladder Punther:	Volume Factor (VF)  column is less: 0.20) + DTW]:  ment:	e volume =	time Start Time Start Time Com Depth to F Depth to V Hydrocarb Visual Cor Skimmer / Amt Remo	2"= 0.17 3"= 0.3 6"= 1.50 12"= 5.8  Volume: 6.63  ded: pleted: product: Vater: on Thickness: offirmation/Descriptio  Absorbant Sock (cirved from Skimmer: ved from Well: noved:	gal(2400 hrs)(2400 hrs)ftftftftftgalgal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.) 0835 0846	ate: 0 905 / 1	gpm. yes, Time:  pH  7.82  7.65  7.45	Water ( Sedime		erature / F )	Cloud Odor: Y / ( L , y, gal. DTW @ D.O. (mg/L)	8	.40
-			ABOBATO	DV INICODM	ATION			
SAMPLE ID	(#) CONTAINER	REFRIG.	ABORATOR PRESERV. 1		RATION [	·	ANALYSES	
MW- S	6 x voa vial 2 x 1 liter ambers	YES YES	HCL NP			TPH-GRO(8015 TPH-DRO w/sgo		O (8015)
COMMENTS:	12" ema							
Add/Replaced I	Lock:	Add/l	Replaced Plu	ıa.		Add/Renlace	d Bolt	



Client/Facility#:	Chevron #20	6127		Job	Number:	386498				
Site Address:	2301-2337 B	landing	Avenue	 Eve	nt Date:	7/	23/12		- (inclusive)	
City:	Alameda, CA	\		Sam	pler:			• `		
Well ID	MW- 4			Date M	onitored:	7/	23 m			
Well Diameter	2	-	_				231.0			
Total Depth	20-20 ft.	-		/olume factor (VF)	3/4"= 0.02 4"= 0.66		2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80		
Depth to Water		- 2	Check if water co				1.00	12 0.00		
<b>/</b>		- <del>'=</del>	=				ao Volumo:	-	1	
Depth to Water	w/ 80% Recharge					Laumateu Pur	ge volume		gai.	
,	an out to the transmig o	K. ioigin o	Trater Column X C	.20) . 5111.			arted:			
Purge Equipment:			Sampling Equipm	ent:			mpleted:			
Disposable Bailer			Disposable Bailer				Product:			
Stainless Steel Baile	er		Pressure Bailer				Water:			
Stack Pump			Metal Filters	-			rbon Thickne onfirmation/D		ft	
Suction Pump			Peristaltic Pump			Visual C	Offini Madon/L	rescription.		
Grundfos			QED Bladder Pump	° /	Υ.	Skimme	/ Absorbant	Sock (circle	one)	
Peristaltic Pump	/		Other:	_/_	<del></del>	Amt Ren	noved from S	kimmer:	gal	
QED Bladder Pump Other:				•		Amt Ren	noved from V	Vell:	gal	
Outer						Water Re	emoved:			
		gpm. yes, Time	Sedimen			D.O. (mg/L)	) Sampling	ORP (mV)		
			LABORATOR	Y INFORM	ATION					
SAMPLE ID	(#) CONTAINER	REFRIG.			PRATORY		ANALY			
MW-	x voa vial	YES	HCL			TPH-GRO(801				
	x 1 liter ambers	YES	NP	LAN	CASTER	TPH-DRO w/s	gc COLUMN	/TPH-DRO (	8015)	
		· <del></del>								
COMMENTS:	hell s	Pankal	an,	maßk	tu	Locate	DRIV	m.		
Add/Replaced I	Lock:	Add	I/Replaced Plug	):		Add/Replac	ed Bolt:			



Client/Facility#:	Chevron #20	06127		Job Number:	386498	
Site Address:	2301-2337 B	landing	Avenue	Event Date:	7/23/12	(inclusive)
City:	Alameda, CA			Sampler:	42	(
Well ID	MW- 5	_	[	Date Monitored:	7/23/12	
Well Diameter	2	_	Volum	e 3/4"= 0.0	2 1"= 0.04 2"= 0.17	2"- 0 20
Total Depth	17.93 ft		Factor			3"= 0.38 12"= 5.80
Depth to Water	5.29 ft		Check if water colum	n is less then 0.50	O ft.	
	12.64	xVF1	7 = 2-14	x3 case volume =	Estimated Purge Volume:	6.44 nal
Depth to Water	w/ 80% Recharge	= € [(Height of	Water Column x 0.20)	DTWJ: 7.81		
Purge Equipment:		•	Sampling Equipment:		Time Started: Time Completed:	(2400 hrs) (2400 hrs)
Disposable Bailer	~		Disposable Bailer	×		ft
Stainless Steel Baile	<del></del>		Pressure Bailer			ft
Stack Pump			Metal Filters		Hydrocarbon Thickr	
Suction Pump			Peristaltic Pump		Visual Confirmation	/Description:
Grundfos			QED Bladder Pump			
Peristaltic Pump			Other:		Skimmer / Absorbar	
QED Bladder Pump						Skimmer:gal Well:gal
Other:						Well:gal
Start Time (purge	e): @ 0930		Weather Cor	ditiona	Clean	
Sample Time/Da		7/23/12				
=					Odor: Y / N	
Approx. Flow Ra		gpm.	Sediment De	*	LUHO	
Did well de-wate	r? <u>"                                    </u>	yes, Time	e: Volur	ne:	gal. DTW @ Samplir	ng: <u>6.57</u>
Time			Conductivity	Temperature	D.O.	ORP
(2400 hr.)	Volume (gal.)	рН	(µmhos/cm -	( <b>C</b> / F)	(mg/L)	(mV)
0935	2	7.43	470	21.9		
0940	Y	7.40	443	21.2		
0946	65	7.28	468	21.1		<del></del>
			LABORATORY	FORMATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATORY IN PRESERV. TYPE	LABORATORY	ANAI	YSES
MW- S	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8)	
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUM	
			ļ. <u></u>			
			<u> </u>		<del></del>	
			<del>                                     </del>			
COMMENTS	1211 8					
COMMENTS:	12" ema	U				
			<del></del>			
Add/Replaced I		Add	/Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #20	6127		Job Number:	386498	
Site Address:	2301-2337 B	landing	Avenue	Event Date:	7/23/12	. (inclusive)
City:	Alameda, CA			Sampler:	112	(110140140)
Well ID	MW-6_	_		Date Monitored:	7/23/n	
Well Diameter	2	_	Volu	me 3/4"= 0.0	02 1"= 0.04 2"= 0.	17 3"= 0.38
Total Depth	20.04 ft.			or (VF) 4"= 0.6		
Depth to Water	9-69 ft.	-	Check if water colu			
	10.35		7 = 1.75	_ x3 case volume :	= Estimated Purge Volun	ne:gal.
Depth to Water	w/ 80% Recharge	[(Height of	Water Column x 0.20)	+ DTWJ: 11.76	Time Started:	. (04001
Purge Equipment:		S	Sampling Equipment	•	_	(2400 hrs) :(2400 hrs)
Disposable Bailer	X		Disposable Bailer	 ×		:ft
Stainless Steel Baile			Pressure Bailer			ft
Stack Pump			/letal Filters		Hydrocarbon Thi	
Suction Pump			Peristaltic Pump		Visual Confirmati	ion/Description:
Grundfos		C	ED Bladder Pump		Skimmer / Absor	bant Sock (circle one)
Peristaltic Pump		C	Other:			om Skimmer:gal
QED Bladder Pump						om Well:gal
Other:					Water Removed:	
01 17		<del></del>				
Start Time (purge			Weather Co	. –	Clear	
Sample Time/Da		7/23/12	Water Colo	r:	_ Odor: (Y)/ N _	Luliv
Approx. Flow Ra		gpm.	Sediment D	escription: _	400	
Did well de-water	r? If	yes, Time	: Volu	ıme:	gal. DTW @ Samp	oling:
Time			Conductivity	Төпрегаture	D.O.	ORP
(2400 hr.)	Volume (gal.)	pН	(µmhos/cm - (uS)	(Q / F)	(mg/L)	(mV)
1350	1.5	7.59	565	24.1		
1325	3.5	7.40	5 79	21.5		
1330	5.6	7.32	590	21.7		
			APOPATORY	NEODMATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE		I AN	ALYSES
MW- 6	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX	
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLU	
				<del> </del>	<del>                                     </del>	
COMMENTS:						
	······································	· · · · · · · · · · · · · · · · · · ·				
A-1-1/5				× }"		
Add/Replaced L	OCK:	Add/	Replaced Plug: _	~ ~	Add/Replaced Bol	t:

### Chevron California Region Analysis Request/Chain of Custody

Lancaster dahoratories	Lancaster Laboratories Please forward the lab results directly to the Lead Consultant and co										_ Sar							s use	only Group #	010	058
Please forward the lab results directly	to the Lead Co	ónsultant	and	l co:	G-R	,					A	Anal	yses	Red	ques	ted			7		
Facility #: SS#206127-OML G-R#38649 2301-2337 BLANDING AVENU Site Address:	E, ALAMEDA	, CA			Ma	atrix		ij	þ	9		Pres	erva	tion	Coc	les	1		Preser H = HCI N = HNO <sub>3</sub>	vative Co T = Thic B = Nac	osulfate
Chevron PM: Lead Consultant:  G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568										Gel Cleanup	1635								<b>S</b> = H <sub>2</sub> SO <sub>4</sub>	O = Oth	ner
Deanna L. Harding (de	anna@grinc.c	om)	2430	_	otable	NPDES		taine		Silica Gel	3								☐ J value rep ☐ Must meet		
Consultant Prj. Mgr.: 925-551-7555	925-51	51.7899		-				er of Containe 8260 时 8021 □			13		١	B					possible for	8260 comp	oounds
Consultant Phone #: 925-551-7555 Sampler:	Fax #:	1 7000		=				8260)	GRO	DRO	TOU	tes	Method	Method					8021 MTBE C		
Sampler:				Composite			□ Air	Total Number of Containers BTEX +在西BE 8260下付 8021□	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260efull scan	Oxygenates		Dissolved Lead					Confirm all	hits by 8260	0
Sample Identification	Date Collected (	Time Collected	Grab	E S	Soil	Water		BTEX	TPH 8	TPH 8	82604		Total Lead	Dissol					□ Run c		
- CA	7/23/2	1 1 1	>			×		>	>										Comments	Remarks	,
mu-18A pnu-18B		1115	7	+	7	×	3	~	1	X	X			-	-	+	+	_	-		
mu-7.		1965	×	†	-	×	1		×	X	X				+	+	+	+	TPH-DRO V	VITH SILIC	A GEL
n)15.		1010	X			X	٤	_	X	X	X									TING 10 GF	
1117-6		11/06	Y	+	-	7	1	5 7	×	X	X			4	-	_	+		CAPRIC A	CID REVE	
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Turnaround Time Requested (TAT) (please cires of the first plant of th		Relinquis	shed t	by:				The second second		7	Date		ime			ed by:		atro	- 2	Date	Time
24 hour 4 day 5 day		Relinquis	shed	by:		The state of the s				ľ	Date	T	ime			ed by:		C/		Date	Time
Data Package Options (please circle if required)		Relinquis	shed b	by:							Date	T	ime	Received by:						Date	Time
QC Summary Type I - Full  Type VI (Raw Data) □ Coelt Deliverable not need  WIP (RWQCB)	EDF/EDD ded	Relinquis	Relinquished by Commercial Carrier: UPS FedEx Other						Received by: Date Ti				Time								
Disk		Tempera	Temperature Upon ReceiptC°					Custody Seals Intact? Yes No													

### CHEVRON #206127 (Former Signal Oil Marine Terminal) Alameda, CA

SPECIAL EVENT OF July 27, 2012



Client/Facility#:	Chevron #206127		Job Number:	386498	
Site Address:	2301-2337 Bland	ing Avenue	Event Date:	7.27.12	(inclusive)
City:	Alameda, CA		Sampler:	FT	
Well ID Well Diameter Total Depth	MW-   RA 2 12.67 ft.	Volum Factor			
Depth to Water	8:50 ft. 4-17 xVF_	Check if water colum	n is less then 0.50	ft. Estimated Purge Volume: 2.=	
Depth to Water	w/ 80% Recharge [(Heig	ht of Water Column x 0.20)	+ DTW]: <u>4-33</u>	Time Started:	(2400 hrs)
Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		Sampling Equipment: Disposable Bailer Pressure Bailer Metal Filters Peristaltic Pump QED Bladder Pump Other:		Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Descripti Skimmer/ Absorbant Sock (c Amt Removed from Skimmer Amt Removed from Well: Water Removed:	(2400 hrs)  ft  ft  ft  on:  ircle one)  gal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-water (2400 hr.)	te: 1535 / 7 - 27 te:gpm.	Sediment De	escription:	Odor: Y / DO  S - SILT 7  gal. DTW @ Sampling:  D.O. ORP  (mg/L) (mV)	3.30
	•				
SAMPLE ID  MW- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(#) CONTAINER REF		IFORMATION LABORATORY LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	
COMMENTS:	1	SLOW	LECOVER	صاد	
Add/Replaced I	Lock:	Add/Replaced Plug: _		Add/Replaced Bolt:	



Client/Facility#:	Chevron #206	127		Job Number:	386498		
Site Address:	2301-2337 Bla	nding Avenu	e	Event Date:	7.7	7.12	- (inclusive)
City:	Alameda, CA			Sampler:	F		-
Well ID Well Diameter Total Depth Depth to Water		Check if v	Volume Factor (V	s less then 0.50 k3 case volume = J	1"= 0.04 5"= 1.02 ft. Estimated Purge	2"= 0.17 3"= 0.38 ""= 1.50 12"= 5.80 Volume:	
Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [		Equipment: Bailer Bailer S Pump Ler Pump	лтwj: <u>(О. ()</u>	Time Starte Time Comp Depth to Pr Depth to W Hydrocarbo Visual Conf Skimmer / A Amt Remon	ed:	(2400 hrs)ftftftftgalgal
Approx. Flow Ra	tte: 1525/7 tte:	pm. Sees, Time: 141	ductivity	cription:	Odor: Y /	ILTY	.50
		LABOR	ATORY INF	ORMATION			
SAMPLE ID  MW-   R(3	(#) CONTAINER  ( x voa vial			LABORATORY	TPH-GRO(8015)	ANALYSES //BTEX(8260)	
COMMENTS:		Me	nu sa)	8" or			
Add/Replaced	Lock:	Add/Replac	ed Plua:		Add/Replace	d Bolt:	



Client/Facility#:	<b>Chevron #2061</b> :	27	Job Number:	386498	
Site Address:	2301-2337 Blan	ding Avenue	Event Date:	7.27.12	(inclusive)
City:	Alameda, CA		Sampler:	FT	,
Well ID Well Diameter Total Depth Depth to Water  Depth to Water  Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(He	= 2.0	0.20) + DTW]: <u>5 - 84</u>	Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickne Visual Confirmation// Skimmer / Absorbant Amt Removed from S	3"= 0.38 12"= 5.80  gal.  (2400 hrs) (2400 hrs)  ft ft ft ess: ft Description:  Sock (circle one) skimmer: gal Vell: gal
Start Time (purge Sample Time/Da Approx. Flow Rat Did well de-water Time (2400 hr.)	te: 122/7.2 te:	7.n Water 0	/_ Temperature		g:
SAMPLE ID MW-		LABORATOF EFRIG. PRESERV. 1 YES HCL	RY INFORMATION TYPE LABORATORY LANCASTER	ANAL\ TPH-GRO(8015)/BTEX(82	
COMMENTS:		EM	100 12 BK		
Add/Replaced L	_ock:	Add/Replaced Plu	ıg:	Add/Replaced Bolt:	



Client/Facility#:	Chevron #2061	27	Job Number:	386498	
Site Address:	2301-2337 Blar	nding Avenue	- Event Date:	7-27.12	(inclusive)
City:	Alameda, CA		Sampler:	Fr	
Well ID Well Diameter Total Depth Depth to Water  Depth to Water  Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(H	Fac Check if water colu	Date Monitored:    3/4" = 0.0;   4" = 0.6;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.0;   4" = 0.6;	2 1"= 0.04 2"= 0.17 3"= 6 5"= 1.02 6"= 1.50 12"= 0 ft. Estimated Purge Volume:	(2400 hrs)ftftftftftftftftftftgalgalgal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate (2400 hr.)	ate: 1255 / 7- ate: gp		or: 6000	SUNJU Odor: Y / N SILTY gal. DTW @ Sampling: _ D.O. ORP (mg/L) (mV)	4.65
		LABORATORY	MEODMATION		
SAMPLE ID	(#) CONTAINER   F	LABORATORY REFRIG.   PRESERV. TYPI	E LABORATORY	ANALYSES	
MW- 3	( x voa vial	YES HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
COMMENTS:		Ence	o Rhon	1.	
Add/Replaced	Lock:	Add/Replaced Plug	= m	Add/Poplaced Polt	



Client/Facility#:	Chevron #20	<u> </u>		Job Number:	386498	
Site Address:	2301-2337 BI	anding /	Avenue	Event Date:	7.27.n	(inclusive)
City:	Alameda, CA			Sampler:	FT	·
Well ID Well Diameter Total Depth Depth to Water		xVF	Volume Factor heck if water column	(VF) 4"= 0.66 n is less then 0.50 x3 case volume =	5 5"= 1.02 6"= 1.50 12":	= 0.38 = 5.80
Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		Sa Di Pi M Pe Q	Vater Column x 0.20) +  ampling Equipment: isposable Bailer ressure Bailer etal Filters eristaltic Pump ED Bladder Pump ther:	DTWJ: 445	Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Descr Skimmer / Absorbant Sock Amt Removed from Skimm Amt Removed from Well: Water Removed:	(2400 hrs) ftftftftftftgalgal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	ate: 1515 / 7	gpm.	Sediment De	CLRAN scription:	SUPUY Odor: Y I の POHE gal. DTW @ Sampling: _ D.O. ORP (mg/L) (mV)	
SAMPLE ID MW-	(#) CONTAINER  (a) X voa vial	REFRIG. YES	ABORATORY IN PRESERV. TYPE  HCL	FORMATION LABORATORY LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	
COMMENTS:		IMPLE	EMCO 12		OVEN WELL	•
Add/Replaced	(SEE PH	Add/	Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #20612	7	Job Number:	386498	
Site Address:	2301-2337 Bland	ing Avenue	Event Date:	7-27-12	(inclusive)
City:	Alameda, CA		Sampler:	FT	· · · · · · · · · · · · · · · · · · ·
Well ID Well Diameter Total Depth Depth to Water  Depth to Water  Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	xVF_w/ 80% Recharge [(Heig	Volument Factor  Check if water colument Factor  = 2 \ 8	nn is less then 0.50 x3 case volume = + DTW]:	5 5"= 1.02 6"= 1.50 12"  Oft.  Estimated Purge Volume:	(2400 hrs)(2400 hrs)ftft ft ft ft nption:  k (circle one) mer: galgal
Start Time (purg Sample Time/Da Approx. Flow Ra Did well de-wate (2400 hr.) 1315 1320 1325	ate: 1335 / 7-2 ate: gpm er? No If yes,  Volume (gal.) ph	. Sediment D	escription:	Odor: (V) N HS SILT  gal. DTW @ Sampling: _ D.O. ORF (mg/L) (mV	
SAMPLE ID	<del> </del>	ES HCL		ANALYSES TPH-GRO(8015)/BTEX(8260)	5
COMMENTS:		Enco	vz" or	1	
Add/Replaced	Lock:	Add/Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #2061	27	Job Number:	386498	1 2 2
Site Address:	2301-2337 Blan	ding Avenue	Event Date:	7.27.12	(inclusive)
City:	Alameda, CA		— Sampler:	FT	
Well ID	MW- <u>⟨</u>		Date Monitored:	7.27.12	
Well Diameter	2	Vo	olume 3/4"= 0.02	2 1"= 0.04 2"= 0.17 3"	'= 0.38
Total Depth	20.04 ft.		ctor (VF) 4"= 0.66		'= 5.80
Depth to Water	8.39 ft.	Check if water col	umn is less then 0.50	ft.	
	11-65 XVI	= 1.9	x3 case volume =	Estimated Purge Volume: 6	gal.
Depth to Water	w/ 80% Recharge [(He	eight of Water Column x 0.2	20) + DTWJ: 10-7		
B 5. 1	,			Time Started: Time Completed:	
Purge Equipment:		Sampling Equipme	ent:	Depth to Product:	
Disposable Bailer		Disposable Bailer		Depth to Water:	"
Stainless Steel Baile	er	Pressure Bailer		Hydrocarbori Thickness:	
Stack Pump		Metal Filters		Visual Confirmation/Desc	
Suction Pump		Peristaltic Pump			·
Grundfos Peristaltic Pump		QED Bladder Pump		Skimmer / Absorbant Soc	
QED Bladder Pump		Other:		Amt Removed from Skimi	
Other:				Amt Removed from Well:	
Outer				Water Removed:	
Start Time (purg		<del></del>	Conditions:	SUMNY	
Sample Time/Da	ate: 1505 / 7 -	27. i2 Water Co	lor: LT Cony	Odor: Y / 🐠 🔼	
Approx. Flow Ra	ate:gpi	m. Sediment	Description:	S. SILTY	
Did well de-wate	er? <u>No</u> If yes	, Time: Vo	olume:	gal. DTW @ Sampling: _	9.28
Time		Conductivity	Temperature	D.O. ORF	
(2400 hr.)	Volume (gal.)	ρΗ (μmhos/cm - 🚯		(mg/L) (mV	
1439	2.0 7.	48 621	17.4		
1443	4.0 7	44 612	17.7		<del></del>
1450	6.0 7-	39 607	17.6		
SAMPLE ID	(#) CONTAINER   R	LABORATORY EFRIG. PRESERV. TYPE	INFORMATION PE LABORATORY	ANAL VOE	
MW-	(#) CONTAINER   K	YES HCL	LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	-
	A VOU VIGI	TEO TIOE	DANOAGILIK	11 17-01(0010)/B1EX(0200)	
<del> </del>					
COMMENTS:		CIAL	D D E CAUC	· ·	
-CHMILIAIO.		3200	NRECOVER	<del></del>	
		Mon	wison X,	(IBF)	
<del></del>					
Add/Replaced	Lock:	Add/Replaced Plug	•	Add/Replaced Bolt:	

# Chevron California Region Analysis Request/Chain of Custody

Lancaster	1277	15 1	For Lancaster Laborator Acct. #: Sample #											only	Group #	#: <u>0</u>	10	091					
Laboratories Please forward the lab results directly	to the Lead C	Consultan	t and	cc: G	6-R.						A	naly	/ses	Rec	lues	ted			7				
Facility #: SS#206127-OML G-R#38649				_	Matri	x					Р	res	erva	tion	Co	les				Prese	rvative	e Cod	es
Site Address 2301-2337 BLANDING AVENU	E, ALAMED	A, CA						H	H	۵				_						HCI			sulfate
Chevron PM: MB Lead	Consultant: CF	RASB	Silv	a	1		(0			Cleanup										HNO <sub>3</sub>		= NaO = Othe	
Chevron PM: MB Lead Consultant: CRASB Silva Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568					Potable		iner			l ge										value rep			
Consultant Prj. Mgr.: Deanna L. Harding (de	anna@grinc.	com)			Pot		Containers	₩ 8021 🗆		Silica									I Z N	lust meet ossible fo	lowest or 8260	detect	ion limits ounds
						4	of C	8260	2	DRO 🗆			Method	Method			ı			1 MTBE			
Consultant Phone #925-551-7555  Sampler: FRAUL TERRILON,				0			nber	28	OD G	OD DI	ے	Oxygenates	M							onfirm hi	ghest h	it by 82	260
				posit	1	Air	Nur	TATE OF	015 M	<b>TPH 8015 MOD</b>	III sca	Oxyg	ead	/ed Le						onfirm al			et hit
Sample Identification	Date Collected	Time Collected	Grab	Composite	Water	O Iio	Total Number of	BTEX	TPH 8015 MOD GRO	PH 8	8260 full scan		Total Lead	Dissolved Lead						un		_	
QA	7.27.12				W		2	Ż	X					Ĭ					Cor	nments	/ Rem	arks	
Val. 1 to a	1	535					7		~/				$\dashv$	4	4	_	4						
MW-IRA		525		+	+	H	6	X	メ				+	+	+	+	$\dashv$	+	-				
MW-2		222	X	+			6	Z	Z				$\dashv$	+	+	+	+			PH-DRO			
MW-3	9	1322	X				6	X	X											CAPRIC			
Mw- 4 Mw- 5		335	X	+		Н	6	X	1	$\dashv$	_	_	$\dashv$	+	+	_	4		-	SU	RROGA	ATE	
MW-6	4	1505	<del>\frac{1}{2}</del>	+	A		10	人 人	Z	+	$\dashv$		$\dashv$	+	+	+	-	+					
						$\square$					_		4		4	+	4						
			$\vdash$	+		H				$\dashv$	-		$\dashv$	+	$\dashv$	+	+	+	-				
Turnaround Time Requested (TAT) (please cir	cle)	Relinqui	ished t	ру:	)	-		,		, 0	ate	Ţ	me	Re	ceiv	ed by		R		2 )-	7 D	ate	Time
STD. TAT 72 hour 48 hou	•	Relinqui	ishod t								10/7		030		to,	- VC	211	10-5	and the same of th	2	7.	12	1635
24 hour 4 day 5 day		Heilildu	SHEU L	Jy.							ate	"	me	He	CelV	ed by	•				D	ate	Time
Data Package Options (please circle if required)		Relinqui	shed t	oy:						D	ate	Ti	me	Re	ceiv	ed by	:				D	ate	Time
QC Summary Type I - Full	C Summary Type I - Full EDF/EDD Relinquished by					al Car	rrier:					-		Received by:					D	ate	Time		
Type VI (Raw Data)	100	UPS		FedE	x	C	Other,							340									
Disk	-	Tempera	ature l	Jpon R	eceipt								_ C°	Cu	stod	y Sea	als Ir	tact?	Ye	s No			

## 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

August 07, 2012

Project: 206127

Submittal Date: 07/25/2012 Group Number: 1324410 PO Number: 0015094797 Release Number: BAUER State of Sample Origin: CA

Client Sample Description	<u>Lancaster Labs (LLI) #</u>
QA-T-120723 NA Water	6732585
MW-1RA-W-120723 Grab Water	6732586
MW-1RB-W-120723 Grab Water	6732587
MW-3-W-120723 Grab Water	6732588
MW-5-W-120723 Grab Water	6732589
MW-6-W-120723 Grab Water	6732590

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	CRA	Attn: Brian Silva
COPY TO	CNA	Aun. Diian Silva



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

Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



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Page 1 of 1

Sample Description: QA-T-120723 NA Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 QA

LLI Sample # WW 6732585 LLI Group # 1324410

Account # 10904

Project Name: 206127

Collected: 07/23/2012 Chevron

L4310

Submitted: 07/25/2012 10:20 6001 Bollinger Canyon Rd.

Reported: 08/07/2012 15:53 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 Vo	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 Additional sample volume received on 8/01/12 for volatiles analyses. Sample was collected on 7/27/12.

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	9	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D122171AA	08/04/2012 1	6:41	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D122171AA	08/04/2012 1	6:41	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6-	SW-846 8015B	1	12215A07A	08/03/2012 1	19:08	Catherine J	1
	C12						Schwarz	
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/03/2012 1	19:08	Catherine J Schwarz	1



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Page 1 of 1

Sample Description: MW-1RA-W-120723 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-1RA

LLI Sample # WW 6732586 LLI Group # 1324410 Account # 10904

Project Name: 206127

Collected: 07/23/2012 11:45 by JH Chevron

L4310

Submitted: 07/25/2012 10:20 6001 Bollinger Canyon Rd.

Reported: 08/07/2012 15:53 San Ramon CA 94583

### BAA1A

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	640	5	10
10943	Ethylbenzene		100-41-4	20	0.5	1
10943	Toluene		108-88-3	9	0.5	1
10943	Xylene (Total)		1330-20-7	7	0.5	1
GC Vol	Latiles TPH-GRO N. CA water	<b>SW-846</b> C6-C12	8015B n.a.	<b>ug/1</b> 4,800	<b>ug/1</b> 250	5
GC Pet	roleum	SW-846	8015B	ug/l	ug/l	
Hydrod	carbons TPH-DRO water C10-C		n.a.	6,000	50	1
	croleum carbons w/Si	SW-846	8015B	ug/l	ug/l	
02216	TPH-DRO water C10-C The reverse surroga	,		1,000 at <1%.	50	1

#### General Sample Comments

State of California Lab Certification No. 2501 Additional sample volume received on 8/01/12 for volatiles analyses. Sample was collected on 7/27/12 at 15:35 by FT.

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 Ti	me		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D122171AA	08/04/2012	18:35	Kevin A Sposito	1
10943	BTEX 8260B Water	SW-846 8260B	1	D122191AA	08/06/2012	17:18	Daniel H Heller	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D122171AA	08/04/2012	18:35	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	D122191AA	08/06/2012	17:18	Daniel H Heller	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12215A07A	08/04/2012	02:42	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/04/2012	02:42	Catherine J Schwarz	5
08269	TPH-DRO water C10-C28	SW-846 8015B	1	122080011A	07/27/2012	18:05	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	122080012A	07/30/2012	19:17	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	122080012A	07/26/2012	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	122080011A	07/26/2012	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-1RB-W-120723 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-1RB

LLI Sample # WW 6732587 LLI Group # 1324410 Account # 10904

Project Name: 206127

Reported: 08/07/2012 15:53

Collected: 07/23/2012 12:50 by JH Chevron

L4310

Submitted: 07/25/2012 10:20 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
10943 10943 10943	Volatiles Benzene Ethylbenzene Toluene	SW-846	71-43-2 100-41-4 108-88-3	ug/1 89 0.8 1	ug/l 0.5 0.5 0.5	1 1 1
10943 GC Vol 01728	Xylene (Total)  Latiles  TPH-GRO N. CA water	<b>SW-846</b> C6-C12	1330-20-7 <b>8015B</b> n.a.	0.7 <b>ug/1</b> 990	0.5 <b>ug/l</b> 50	1
Hydrod	croleum carbons TPH-DRO water C10-C	<b>SW-846</b>	8015B	ug/1 2,700	<b>ug/1</b> 50	1
	carbons w/Si TPH-DRO water C10-C The reverse surroga		el n.a.	ug/l N.D. at <1%.	<b>ug/1</b> 50	1

#### General Sample Comments

State of California Lab Certification No. 2501 Additional sample volume received on 8/01/12 for volatiles analyses. Sample was collected on 7/27/12 at 15:25 by FT.

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		Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D122171AA	08/04/2012	17:27	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D122171AA	08/04/2012	17:27	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	12215A07A	08/03/2012	20:23	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/03/2012	20:23	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	122080011A	07/27/2012	16:57	Christine E Dolman	. 1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	122080012A	07/30/2012	19:40	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	122080012A	07/26/2012	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	122080011A	07/26/2012	22.00	Elaine F Stoltzfus	1



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Sample Description: MW-3-W-120723 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-3

LLI Sample # WW 6732588 LLI Group # 1324410 Account # 10904

Project Name: 206127

Collected: 07/23/2012 09:05 by JH Chevron

L4310

Submitted: 07/25/2012 10:20 L4310 6001 Bollinger Canyon Rd.

Reported: 08/07/2012 15:53 San Ramon CA 94583

## BAA03

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 Xylene (Total)	SW-846	8260B 71-43-2 100-41-4 108-88-3 1330-20-7	ug/1 N.D. N.D. N.D. N.D.	ug/1 0.5 0.5 0.5 0.5	1 1 1
GC Vol	atiles TPH-GRO N. CA water	<b>SW-846</b> C6-C12	8015B n.a.	<b>ug/1</b> N.D.	<b>ug/1</b> 50	1
Hydro	croleum carbons TPH-DRO water C10-C	<b>SW-846</b>	8015B	ug/l 1,200	<b>ug/1</b> 50	1
	croleum carbons w/Si TPH-DRO water C10-C The reverse surroga		el n.a.	ug/l N.D. at <1%.	ug/1 50	1

#### General Sample Comments

State of California Lab Certification No. 2501 Additional sample volume received on 8/01/12 for volatiles analyses. Sample was collected on 7/27/12 at 12:55 by FT.

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		Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D122171AA	08/04/2012	18:58	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D122171AA	08/04/2012	18:58	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	12215A07A	08/03/2012	20:48	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/03/2012	20:48	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	122080011A	07/27/2012	17:20	Christine E Dolman	. 1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	122080012A	07/30/2012	20:02	Christine E Dolman	. 1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	122080012A	07/26/2012	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	122080011A	07/26/2012	22.00	Elaine F Stoltzfus	1



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Sample Description: MW-5-W-120723 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-5

LLI Sample # WW 6732589 LLI Group # 1324410 Account # 10904

Analysis Report

Project Name: 206127

Reported: 08/07/2012 15:53

Collected: 07/23/2012 10:10 by JH Chevron

L4310

Submitted: 07/25/2012 10:20 6001 Bollinger Canyon Rd.

San Ramon CA 94583

### BAA05

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS 10943 10943 10943 10943	Volatiles Benzene Ethylbenzene Toluene Xylene (Total)	SW-846	8260B 71-43-2 100-41-4 108-88-3 1330-20-7	ug/1 48 0.7 3	ug/1 0.5 0.5 0.5 0.5	1 1 1
	latiles	<b>SW-846</b> C6-C12		ug/1 1,800	<b>ug/1</b> 50	1
Hydro	carbons TPH-DRO water C10-C	<b>SW-846</b>	8015B n.a.	<b>ug/1</b> 4,300	<b>ug/1</b> 50	1
	carbons w/Si TPH-DRO water C10-C The reverse surroga		el n.a.	<b>ug/l</b> 380 at <1%.	<b>ug/1</b> 50	1

#### General Sample Comments

State of California Lab Certification No. 2501 Additional sample volume received on 8/01/12 for volatiles analyses. Sample was collected on 7/27/12 at 13:35 by FT.

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		Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D122171AA	08/04/2012	19:21	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D122171AA	08/04/2012	19:21	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	12215A07A	08/03/2012	21:14	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/03/2012	21:14	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	122080011A	07/27/2012	17:42	Christine E Dolman	1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	122080012A	07/30/2012	20:25	Christine E Dolman	1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	122080012A	07/26/2012	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	122080011A	07/26/2012	22:00	Elaine F Stoltzfus	1



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Sample Description: MW-6-W-120723 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-6

LLI Sample # WW 6732590

LLI Group # 1324410 Account # 10904

Project Name: 206127

Reported: 08/07/2012 15:53

Collected: 07/23/2012 14:00 by JH Chevron

L4310

Submitted: 07/25/2012 10:20 6001 Bollinger Canyon Rd.

San Ramon CA 94583

### BAA06

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	<b>8260B</b> 71-43-2 100-41-4 108-88-3	<b>ug/1</b> 9 N.D. N.D.	<b>ug/1</b> 0.5 0.5 0.5	1 1 1
10943 GC Vol	Xylene (Total) .atiles	SW-846	1330-20-7 <b>8015B</b>	0.6 ug/l	0.5 <b>ug/1</b>	1
01728 GC Pet	TPH-GRO N. CA water	C6-C12 SW-846	n.a. 8015B	450 ug/l	50 <b>ug/l</b>	1
Hydrod	carbons TPH-DRO water C10-C		n.a.	1,600	50	1
	croleum carbons w/Si TPH-DRO water C10-C	<b>SW-846</b>		ug/1	<b>ug/1</b> 50	1
02210	The reverse surrogar	,				-

#### General Sample Comments

State of California Lab Certification No. 2501 Additional sample volume received on 8/01/12 for volatiles analyses. Sample was collected on 7/27/12 at 15:05 by FT.

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 Tir	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D122171AA	08/04/2012	19:43	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D122171AA	08/04/2012	19:43	Kevin A Sposito	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	12215A07A	08/03/2012	21:39	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/03/2012	21:39	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	122080011A	07/27/2012	16:34	Christine E Dolman	. 1
02216	TPH-DRO water C10-C28 w/Si Gel	SW-846 8015B	1	122080012A	07/30/2012	20:47	Christine E Dolman	. 1
11172	DRO by 8015 w/ Silica Gel Ext	SW-846 3510C	1	122080012A	07/26/2012	22:00	Elaine F Stoltzfus	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	122080011A	07/26/2012	22:00	Elaine F Stoltzfus	1



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## Quality Control Summary

Client Name: Chevron Group Number: 1324410

Reported: 08/07/12 at 03:53 PM

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

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

## Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: D122171AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample number N.D. N.D. N.D. N.D. N.D.	er(s): 673 0.5 0.5 0.5 0.5	32585-6732 ug/l ug/l ug/l ug/l	590 95 93 95 94		77-121 79-120 79-120 77-120		
Batch number: D122191AA Benzene	Sample numbe	er(s): 673 0.5	32586 ug/l	97	88	77-121	9	30
Batch number: 12215A07A TPH-GRO N. CA water C6-C12	Sample numbe	er(s): 673 50.	32585-6732 ug/l	590 116	119	75-135	3	30
Batch number: 122080011A TPH-DRO water C10-C28	Sample numbe	er(s): 673 50.	32586-6732 ug/l	590 100	94	56-122	6	20
Batch number: 122080012A TPH-DRO water C10-C28 w/Si Gel	Sample numbe	er(s): 673 50.	32586-6732 ug/l	590 88	81	50-124	7	20

## Sample Matrix Quality Control

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

<u>Analysis Name</u>	MS <u>%REC</u>	MSD %REC	MS/MSD <u>Limits</u>	<u>RPD</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP Conc	DUP <u>RPD</u>	Dup RPD Max
Batch number: D122171AA	Sample	number(s)	: 6732585	-673259	0 UNSP	K: 6732587			
Benzene	465 (2)	753 (2)	72-134	27	30				
Ethylbenzene	102	105	71-134	3	30				
Toluene	103	109	80-125	5	30				
Xylene (Total)	100	101	79-125	1	30				

## Surrogate Quality Control

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

Analysis Name: UST VOCs by 8260B - Water

Batch number: D122171AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

#### \*- 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: 1324410

Reported: 08/07/12 at 03:53 PM

## Surrogate Quality Control

Limits:	80-116	77-113	80-113	78-113	
MSD	97	101	99	100	
MS	98	101	100	101	
LCS	98	102	99	99	
Blank	98	100	100	96	
6732590	97	97	100	99	
6732589	97	100	101	102	
6732588	100	100	100	99	
6732587	97	99	99	97	
6732586	98	98	100	101	
6732585	99	102	99	95	

Analysis Name: UST VOCs by 8260B - Water

Batch number: D122191AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
Blank	102	99	99	95	
LCS	99	101	99	97	
LCSD	99	103	99	98	
Limits	80-116	77-113	80-113	78-113	

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

Batch number: 12215A07A

Trifluorotoluene-F

Limits: 63-135

Analysis Name: TPH-DRO water C10-C28

Batch number: 122080011A Orthoterphenyl

Limits: 50-154

Analysis Name: TPH-DRO water C10-C28 w/Si Gel

Batch number: 122080012A

### \*- 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: 1324410

Reported: 08/07/12 at 03:53 PM

Surrogate Quality Control

	Orthoterphenyl	
6732586	88	
6732587	90	
6732588	76	
6732589	85	
6732590	82	
Blank	86	
LCS	95	
LCSD	93	
Limits:	50-154	

<sup>\*-</sup> Outside of specification

<sup>(1)</sup> The result for one or both determinations was less than five times the LOQ.

<sup>(2)</sup> The unspiked result was more than four times the spike added.

# Chevron California Region Analysis Request/Chain of Custody

4	La	ncas	ter
1	<b>L</b> a	bora	tories

1L AMBER 672412-62

For Lancaster Laboratories use only

Acct. #: 10904 | Sample # 6732585-90 | Group #: 010058

Please forward the lab results directly to the Lead C		e: G-R.	Γ			A	nalyse	s Requested	70#136	2441	0
Facility #: SS#206127-OML G-R#386498 Global ID# Site Address: SS#206127-OML G-R#386498 Global ID	T06019744728 A. CA	Matrix		HIA			reserv	ation Codes	Preserv H = HCl	ative Cod	
Chevron PM: MB Lead Consultant:  G-R. Inc., 6747 Sierra Court, Suite J, Du  Consultant/Office: Deanna L. Harding (deanna@grinc.)  Consultant Prj. Mgr.:  Consultant Phone #: 925-551-7555  Sampler: Fax #: 925-5  Date	l <del>  </del>	er of Containers	BTEX + (	Silica Gel Cleanup	ALESON TOPA - DRU	Oxygenates Total Lead Method	ead	N = HNO <sub>3</sub> S = H <sub>2</sub> SO <sub>4</sub> ☐ J value report Must meet lot possible for 8 8021 MTBE Co. ☐ Confirm high ☐ Confirm all hit ☐ Run ox ☐ Run ox	B = NaC O = Oth ting neede west detect 260 comp infirmation est hit by 8 ts by 8260 y's on high	OH er etion limits ounds 3260 est hit	
Sample Identification  Collected  MU-IRA  MW-IRB  MW-3  MW-6	х х х	2 66 60 60 60 60 60 60 60 60 60 60 60 60		XXXX				TPH-DRO WI REQUESTI COLUMN CL CAPRIC AC SURF	Remarks TH SILICA NG 10 GR LEAN-UP V	GEL AM VITH	
Turnaround Time Requested (TAT) (please circle)  72 hour 48 hour  24 hour 4 day 5 day	Relinquished by:	fur		24	7		Time 1600 Time 163		23.	Date JULI 2 Date	Time 1234 Time
Data Package Options (please circle if required)  QC Summary Type I - Full EDF/EDD  Type VI (Raw Data) □ Coelt Deliverable not needed  WIP (RWQCB)  Disk		ier: her_			Date	Time	Received by:	W Yes No	Date Date	Time Time	

# Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories Please forward the lab results directly to	7-2712 the Lead Co	) - 6 ( Insultant	o { and co	∷ <b>G</b> -F	<b>A</b> c	cct. #:	109	104				<u>(</u>	aster <del>740</del> 73 Requ	258	'S - '	ries us - 3 10	se o	13 244	<del>77</del> 8		_
Facility #: S\$#206127-OML G-R#386498 G Site Address: 2301-2337 DLANDING AVENUE.			4728	М	atrix		H	1-1		P	rese	erva	ion (	Code	es			Preserva H = HCl	tive Coc T = Thio	sulfate	1
Chevron PM: ME Lead Cor Consultant/Office: Deanna L. Harding (deann Consultant Prj. Mgr.: Deanna L. Harding (deann Consultant Phone #925-551-7555 Fampler: FRAULTERRINGS)	na@grinc.cc <b>ax #</b> : <u>925-55</u>	om) 1-7899	osite			Oil ☐ Air Total Number of Containers	8260	TPH 8015 MOD GRO	TPH 8015 MOD DRO Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method						vest detec 260 compositismation est hit by 8 s by 8260	er d tion limits ounds 260	,
MW-IRA HW-IRB HW-2 MW-3 MW-4 MW-5 MW-6	27 n 13 13 13 13 13 13	535 23 23 255 255 335 505	X X X X X X X			Oil	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	E X X X X X X X X X X X X X X X X X X X	4	826		Tota						Comments / F WW 2 4 MV Separate Silva fm TPH-DRO WH REQUESTIN COLUMN CU CAPRIC ACK	lemarks V-4 (e Ly pe P8/2/ TH SILICA IO 10 GRA EANLUP VA	porte PB. 12 GEL AM	d
Turnaround Time Requested (TAT) (please circle) STD. TAT 72 hour 48 hour 24 hour 4 day 5 day			hed by:	Ka	They	ide de la companya de	). 305	7	21 De 3//	112	Tin /63	235 ne 3カ	Rece	eived	by:	Go CE	_	J 27.	Date  Dull  Date	Time 1635 Time	
WIP (RWQCB)				Relinquished by Commercial Carrier:				Date Time Received by:  Received by:  C° Custody Seals Intact? Yes				Yes No	Date Date	Time							



## **Explanation of Symbols and Abbreviations**

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

RL N.D.	Reporting Limit none detected	BMQL MPN	Below Minimum Quantitation Level 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

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

ppb parts per billion

Dry weight basis

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

Data Qualifiers:

C - result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

	Organic Qualifiers		Inorganic Qualifiers
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		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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#### 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

August 09, 2012

Project: 206127

Submittal Date: 08/01/2012 Group Number: 1325778 PO Number: 0015094797 Release Number: BAUER State of Sample Origin: CA

Client Sample Description Lancaster Labs (LLI) #

MW-2-W-120727 Grab Water 6740149 MW-4-W-120727 Grab Water 6740151

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 CRA Attn: Brian Silva

COPY TO



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Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



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Page 1 of 1

Sample Description: MW-2-W-120727 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-2

LLI Sample # WW 6740149

LLI Group # 1325778 Account # 10904

Project Name: 206127

Submitted: 08/01/2012 09:35

Reported: 08/09/2012 20:14

Collected: 07/27/2012 12:22 by FT Chevron

L4310

6001 Bollinger Canyon Rd.

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

#### 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	9	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P122202AA	08/07/2012 1	L0:13	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P122202AA	08/07/2012 1	L0:13	Anita M Dale	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	12215A07A	08/04/2012 0	00:35	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/04/2012 0	00:35	Catherine J Schwarz	1



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Page 1 of 1

Sample Description: MW-4-W-120727 Grab Water

Facility# 206127 Job# 386498 GRD

2301-2337 Blanding-Alameda T06019744728 MW-4

LLI Group # 1325778 Account # 10904

LLI Sample # WW 6740151

Project Name: 206127

Reported: 08/09/2012 20:14

Collected: 07/27/2012 15:15 by FT Chevron

L4310

Submitted: 08/01/2012 09:35 6001 Bollinger Canyon Rd.

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 Vo	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P122202AA	08/07/2012 10:	11 Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P122202AA	08/07/2012 10:	11 Anita M Dale	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	12215A07A	08/04/2012 01:	01 Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215A07A	08/04/2012 01:	O1 Catherine J Schwarz	1



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## Quality Control Summary

Client Name: Chevron Group Number: 1325778

Reported: 08/09/12 at 08:14 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 %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: P122202AA	Sample numb	er(s): 674	0149,6740	151				
Benzene	N.D.	0.5	ug/l	102		77-121		
Ethylbenzene	N.D.	0.5	ug/l	93		79-120		
Toluene	N.D.	0.5	ug/l	99		79-120		
Xylene (Total)	N.D.	0.5	ug/l	98		77-120		
Batch number: 12215A07A	Sample numb	er(s): 674	0149,6740	151				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	116	119	75-135	3	30

## Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: P122202AA	Sample	number(s)	: 6740149	,67401	51 UNSP	K: 6740151			
Benzene	105	103	72-134	2	30				
Ethylbenzene	97	95	71-134	2	30				
Toluene	101	100	80-125	2	30				
Xylene (Total)	99	98	79-125	1	30				

### Surrogate Quality Control

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

Analysis Name: UST VOCs by 8260B - Water

Batch number: P122202AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6740149	102	101	96	90
6740151	102	101	97	91
Blank	100	102	97	90
LCS	101	106	97	93
MS	101	100	96	94
MSD	100	103	96	94
Limits:	80-116	77-113	80-113	78-113

### \*- Outside of specification

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



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Page 2 of 2

## Quality Control Summary

Group Number: 1325778 Client Name: Chevron

Reported: 08/09/12 at 08:14 PM

Surrogate Quality Control

Analysis Name: TPH-GRO N. CA water C6-C12 Batch number: 12215A07A  $\,$ 

Trifluorotoluene-F

6740149 6740151 72 Blank 81 LCS 91 LCSD 88

63-135 Limits:

<sup>\*-</sup> Outside of specification

<sup>(1)</sup> The result for one or both determinations was less than five times the LOQ.

<sup>(2)</sup> The unspiked result was more than four times the spike added.

# Chevron California Region Analysis Request/Chain of Custody

							$\simeq$											
Lancaster Laboratories Please forward the lab results dire	6727 ectly to the Lead	-12 -6 I Consultan	G at and	cc: G	ρ i-R.	Acct.	#:	/0 <i>9</i>	04	!	Sam	ple #	6	740	Labora / 46 ~	tories (	use o	Only Group #: 010091
Facility #:SS#206127-OML G-R#38	6498 Global ID	#T0601974	14728	T	Matrix	x					Р	rese	rva	tion C	odes			Preservative Codes
Site Address: 2301-2337 BLANDING AVE	ENUE, ALAME	DA, CA			1	T 1		H	H	Cleanup								H = HCI T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other
Consultant/Office:  G-R. Inc., 6747 Sierra  Deanna L. Harding	Court, Suite J,	Dublin, CA	94568		Potable NPDES		Containers	<b>⊠</b> 8021□		Silica Gel Cl								J value reporting needed Must meet lowest detection limits possible for 8260 compounds
Consultant Phone #925-551-7555  Sampler: FRANC TERRING				Soil		Air	Number of	8260 🗙	TPH 8015 MOD GRO	8015 MOD DRO	full scan	)xygenates	ead Method	d Lead Method				8021 MTBE Confirmation Confirm highest hit by 8260 Confirm all hits by 8260
Sample Identification	Date Collected	Time Collected	Grab	Soil	Water	□ Iö	Total	BTEX	TPH 80	TPH 80	8260 fu		Total Le	Dissolved Lead				☐ Run oxy's on highest hit ☐ Run oxy's on all hits

Consultant Pri. Mgr.:  Consultant Phone #925-551-7555  Sampler:  FRANT TERRING  Sample Identification  QA  MW-IRB  MW-3  MW-4  MW-5  MW-6	Date Collected	51-7899	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Composite	Water	Oil 🗆 Air	Number of	BTEX BEX BEX BEX BEX BEX BEX BEX BEX BEX B	SI DOMO GOND SIN THAN 8015 MOD DHO SI		Oxygenates	Total Lead Method —	Dissolved Lead Method —	possible for  8021 MTBE Co  Confirm high Confirm all h Run ON Run ON Comments / ONLY MW KPOLEC TPH-DRO W REQUEST COLUMN C CAPRIC AC SURI	nfirmation est hit by 8 its by 8260 y's on high y's on all h Remarks -2 & M IN HOLLING TH SILICA NG 10 GR LEAN-UP V	est hit its W-4 S Samy Va Sh GEL 8 P
Turnaround Time Requested (TAT) (please cires STD. TAT 72 hour 48 hour 4 day 5 day		Relinquis Retinquis	<u> </u>	- 1) v://	t	-	<u></u>		7 2	Date Date	14 (C	me 035 me 325	Received by: Received by: Received by:	27	Date Date	Time 1635 Time
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 ded	Relinguis Relinquis UPS Temperat	hed by	y Communication	<u> </u>		ier:	9		Date		meC°	Received by:  Received by:  Custody Seals Intact?	VYes No	Date Date	Time



## **Explanation of Symbols and Abbreviations**

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

RL N.D.	Reporting Limit none detected	BMQL MPN	Below Minimum Quantitation Level 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

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

ppb parts per billion

Dry weight basis

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

Data Qualifiers:

C - result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

	Organic Qualifiers		Inorganic Qualifiers
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		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.

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

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## 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, Camo					
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 <sup>4</sup>	868	<50.0	<50.0	<50.0	<250
04/09/01	10.62	8.12	2.50	1,200 <sup>6</sup>	3,000 <sup>5</sup>	920	<20	<20	<20	<100
07/30/01	10.62	9.15	1.47	550 <sup>3,8</sup>	2,000 <sup>7</sup>	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 <sup>3</sup>	960	50	1.4	2.6	9.0	<2.5
07/31/02	10.62	9.27	1.35	2,800 <sup>3</sup>	930	64	1.4	1.9	H	<5.0
10/15/02	10.62	8.00	2.62	1,000 <sup>3</sup>	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 <sup>3</sup>	870	56	1	1.4	3.1	<2.5
07/16/03 <sup>10</sup>	10.62	10.08	0.54	1,400 <sup>3</sup>	780	85	1	0.8	0.7	<0.5
10/18/03 <sup>10</sup>	10.62	8.51	2.11	1,200 <sup>3</sup>	640	42	0.8	<0.5	0.5	<0.5
01/22/0410	10.62	8.95	1.67	1,500 <sup>3</sup>	440	18	<0.5	<0.5	<0.5	<0.5
04/23/04 <sup>10</sup>	10.62	8.95	1.67	2,200 <sup>3</sup>	410	10	<0.5	<0.5	<0.5	<0.5
07/23/0410	10.62	9.21	1.41	1,800 <sup>3</sup>	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 <sup>10</sup>	10.62	7.09	3.53	1,200 <sup>3</sup>	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 <sup>10</sup>	10.62	8.12	2.50	610 <sup>3,11</sup>	<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
01/12/0610	10.62	6.98	3.64	960 <sup>3,12</sup>	<50	6	<0.5	<0.5	<0.5	<0.5
04/13/06 <sup>10</sup>	10.62	7.04	3.58	1,200 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06 <sup>10</sup>	10.62	7.13	3.49	1,200 <sup>3</sup>	92	14	<0.5	<0.5	<0.5	<0.5
10/17/06 <sup>10</sup>	10.62	7.64	2.98	990 <sup>3</sup>	<50	3	<0.5	<0.5	<0.5	<0.5
01/16/07 <sup>10</sup>	10.62	7.09	3.53	840 <sup>3</sup>	83	4	<0.5	<0.5	<0.5	<0.5
04/17/07 <sup>10</sup>	10.62	7.11	3.51	1,200 <sup>3</sup>	57	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07 <sup>10</sup>	10.62	7.41	3.21	1,100 <sup>3</sup>	120	8	<0.5	<0.5	<0.5	<0.5
10/16/07 <sup>10</sup>	10.62	7.55	3.07	750 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08 <sup>10</sup>	10.62	6.98	3.64	1,700 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08 <sup>10</sup>	10.62	7.36	3.26	1,100 <sup>3</sup>	62	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08 <sup>10</sup>	10.62	7.89	2.73	580 <sup>3</sup>	93	3	<0.5	<0.5	<0.5	<0.5
10/15/08 <sup>10</sup>	10.62	7.46	3.16	740 <sup>3</sup>	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	Ť	E	X	MTBE
DATE	(fl.)	(ft.)	(msl)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(µg/L)
MW-1 (cont)									The state of the s	
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
								1,444		7.5
MW-2										
06/30/09 <sup>1</sup>	10.63	3.80	6.83	94			••	**		-
07/03/0914	10.63	3.91	6.72	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	1
10/01/09 <sup>14</sup>	10.63	4.11	6.52	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	
01/19/10 <sup>14</sup>	10.63	3.90	6.73	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	-
04/26/10 <sup>14</sup>	10.63	4.08	6.55	< <b>50</b> <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	1.4
MW-3										
06/30/09 <sup>1</sup>	10.72	4.61								
07/03/09 <sup>14</sup>	10.72	4.61 4.57	6.11	3						-
10/01/09 <sup>14</sup>	10.72		6.15	1703	310	1	<0.5	2	<0.5	-
01/19/10 <sup>14</sup>	10.72	5.22 4.84	5.50	1,000 <sup>3</sup>	52	<0.5	<0.5	<0.5	<0.5	
)4/26/10 <sup>14</sup>	10.72		5.88	1,8003	120	2	<0.5	<0.5	<0.5	-
J-4/20/10	10.72	4.86	5.86	1,700 <sup>3</sup>	170	2	<0.5	<0.5	<0.5	
MW-4										
06/30/09 <sup>1</sup>	11.40	6.02	5.38							
07/03/09 <sup>14</sup>	11.40	5.85	5.55	<50 <sup>3</sup>	<50	<0.5	<0.5	-0.6	 -0.5	197
0/01/0914	11.40	6.95	4.45	370 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	-
01/19/10 <sup>14</sup>	11.40	6.22	5.18	370 110 <sup>3</sup>	<50 <50	<0.5	<0.5	<0.5	<0.5	See.
	11.40	6.61	4.79	210 <sup>5,17</sup>	-30	~0.3	<0.5	< 0.5	< 0.5	94

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

2301-2337 Blanding Avenue Alameda, California

					riameua, Camo					
WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	E	X	MTBE
DATE	(fi.)	(ft)	(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	20	**	Team		-	-	
07/03/0914	10.50	5.17	5.33	1103	930	33	2	0.6	3	<b>A</b>
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 <sup>3</sup>	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 <sup>3,5</sup>	<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		(94)		<50 <sup>3</sup>	<50	< 0.50	<0.50	<0.50	<1.5	<2.5
04/08/02		-	**	77 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
07/31/02	22	140	4	<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
10/15/02	100	64		<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/14/03	-	140		<50 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/15/03	**	-	-	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<1.5	<2.5
07/16/03 10	-	177		<50 <sup>3</sup>	<50	<0.5	0.7	<0.5	0.6	<0.5
10/18/0310	-	()	-	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/0410		-	-	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/23/0410	4	-	-	<50 <sup>3</sup>	<50	<0.5	< 0.5	<0.5	<0.5	<0.5
07/23/0410	-	-	1.44	<50 <sup>3</sup>	<50	< 0.5	< 0.5	<0.5	<0.5	<0.5
10/22/0410	-		-	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/0510		***		<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/0510	-	-	-	<50 <sup>3</sup>	<50	<0.5	< 0.5	< 0.5	<0.5	<0.5
07/15/05 <sup>10</sup>	-	***	-	<50 <sup>3</sup>	<50	< 0.5	< 0.5	<0.5	<0.5	<0.5
10/14/0510		-	-	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/12/0610	-	-	24	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/13/06 <sup>10</sup>	-	-	+	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06 <sup>10</sup>	0.00	-	4	140 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/17/06 <sup>10</sup>	-	22		<50 <sup>3</sup>	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
01/16/07 <sup>10</sup>	-	-	4	<50 <sup>3</sup>	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
04/17/07 <sup>10</sup>	- <del></del> -	-	4	<50 <sup>3</sup>	<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 <sup>10</sup>				<50 <sup>3</sup>	<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
10/16/0710				<50 <sup>3</sup>	<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 <sup>10</sup>				<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08 <sup>10</sup>				<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08 <sup>10</sup>	••			<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/09 <sup>10</sup>				<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/15/09 <sup>10</sup>	••			86 <sup>3</sup>	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
07/03/09 <sup>10</sup>		••	••	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/01/0910	••	••	••	<50 <sup>3</sup>	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/19/10 <sup>10</sup>	••			210 <sup>3,16</sup>	<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		-	-		<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
QA										
10/08/01	-		-	-	<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 <sup>10</sup>	144			4	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
10/18/03 <sup>10</sup>	-	-	-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04 <sup>10</sup>	,	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/ <b>2</b> 3/04 <sup>10</sup>		**	-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/23/04 <sup>10</sup>	**	-		-	<50	<0.5	< 0.5	< 0.5	<0.5	<0.5
10/22/04 <sup>10</sup>			**	-	<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 (msl)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Β (μg/L)	T (µg/L)	E (µg/L)	Χ (μg/L)	MTBE (µg/L)
QA (cont)										
)1/28/05 <sup>10</sup>	••		••	60-400	<50	<0.5	<0.5	<0.5	<0.5	< 0.5
4/26/05 <sup>10</sup>				••	<50	<0.5	<0.5	<0.5	<0.5	< 0.5
7/15/05 <sup>10</sup>	**		-	e-e	<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
0/14/05 <sup>10</sup>	**			••	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
I/12/06 <sup>10</sup>					<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
4/13/06 <sup>10</sup>					<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5
7/13/06 <sup>10</sup>					<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5
0/1 <b>7</b> /06 <sup>10</sup>	••				<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1/16/07 <sup>10</sup>	••	••			<50	< 0.5	< 0.5	< 0.5	<0.5	< 0.5
1/17/07 <sup>10</sup>	••				<50	< 0.5	<0.5	< 0.5	<0.5	< 0.5
7/17/07 <sup>10</sup>				**	<50	< 0.5	< 0.5	< 0.5	<0.5	< 0.5
)/16/07 <sup>10</sup>					<50	< 0.5	<0.5	<0.5	<0.5	<0.5
/16/08 <sup>10</sup>			••		<50	<0.5	<0.5	< 0.5	<0.5	<0.5
I/16/08 <sup>10</sup>		**			<50	<0.5	<0.5	< 0.5	<0.5	<0.5
7/16/08 <sup>10</sup>					<50	<0.5	<0.5	< 0.5	<0.5	<0.5
0/15/08 <sup>10</sup>	••				<50	< 0.5	< 0.5	< 0.5	<0.5	<0.5
I/21/09 <sup>10</sup>				••	<50 <sup>13</sup>	<0.5	< 0.5	< 0.5	<0.5	<0.5
I/15/09 <sup>10</sup>				**	<50	<0.5	<0.5	< 0.5	<0.5	<0.5
7/03/09 <sup>10</sup>				••	<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/01/0910				••	<50	<0.5	< 0.5	<0.5	<0.5	<0.5
/19/10 <sup>10</sup>				••	<50	<0.5	< 0.5	<0.5	<0.5	<0.5
4/26/10 <sup>10</sup>					<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

(#g/L)	(µg/L)	(1.4 Services	order fire (1997)	Cpg(L)	(A8/L)	Copper	(Lyg/L)	(Lg/L) Melyhdenum	Nicket	Selenium (Ag/L)	(//g/L)	(ng/L)	mπipsus/ (μg/L)	ουίζ (μg/L)	ζιουσο (μg/L)
<7.2	28.1	<1.4									1.0	4161.211	1.0.	- N G FV	110
<7.2	28,1	<1.4	<2.0	14.6											
				4 1.00	<2.1	<2.7	<6.9	<4.9	10.6	<8.9	<2.3	<14.0	12.6	11.6	<0.056
<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
<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
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