

RECEIVED

3:45 pm, Mar 21, 2011 Alameda County Environmental Health

March 18, 2011

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

Dear Mr. Wickham:

The purpose of this letter is to verify that as a representative for Chevron Environmental Management Company (Chevron), I reviewed, and concur with, the comments in the *First Quarter 2011 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,

MS Bauer

Mike Bauer Project Manager

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



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

March 18, 2011

Reference No. 631916

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

Re: First Quarter 2011 Groundwater Monitoring and Sampling Report Former Signal Oil Marine Storage and Distribution Facility (Chevron Bulk Plant 20-6127) 2301-2311 Blanding Avenue Alameda, California ACEH Case No. RO0002466

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *First Quarter 2011 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 January 21, 2011 *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1 and well construction specifications are summarized in Table 2. Lancaster Laboratories' January 28, 2011 *Analytical Results* are included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF FIRST QUARTER 2011 EVENT

On January 14, 2011, G-R monitored and sampled the site wells per the established schedule. Monitoring data related to this event is included in G-R's monitoring data package (Attachment A).

Results of the current monitoring event indicate the following:

Groundwater Flow Direction

Northerly

Hydraulic Gradient

0.01 3.12 to 10.97 feet below grade

• Depth to Water

Equal Employment Opportunity Employer



March 18, 2011

	TABLE	A GROUN	DWATER A	NALYTIC	AL DATA						
Well ID											
ESLs	100	100	1	40	30	20					
MW-1RA	1,500	790	160	2	1	1					
MW-1RB	960	150	1	< 0.5	< 0.5	< 0.5					
MW-2	68	<50	< 0.5	< 0.5	< 0.5	< 0.5					
MW-3	1,000	91	< 0.5	< 0.5	< 0.5	< 0.5					
MW-4	<50	<50	< 0.5	< 0.5	< 0.5	< 0.5					
MW-5	1,800	2,100	61	4	1	6					
MW-6	560	120	3	< 0.5	< 0.5	< 0.5					
Notes: ESL Environmental screening level Concentrations in Bold exceed their respective ESL											

- 2 -

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

CONCLUSIONS AND RECOMMENDATIONS

Results of this current quarterly monitoring and sampling of wells MW-2 through MW-5 are consistent with the past four quarters. Wells MW-1RA, MW-1RB and MW-6 were sampled for the second time during this quarter. The sampling results 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).
- Concentrations are generally decreasing in site wells where concentrations are detected above groundwater ESLs.

CRA recommends continuing quarterly monitoring and sampling of current wells and recently installed wells MW-1RA, MW-1RB, and MW-6 to verify concentration trends over time.



March 18, 2011

Reference No. 631916

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

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

- 3 -

Additional Activity

CRA completed a second indoor air sampling event in November 2010 and is currently preparing a summary report. The summary report will be submitted to ACEH by March 31, 2011.

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

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Brian Silva

AA/aa/19 Encl.



Greg Barclay, PG 6260



Mr. Tom Foley

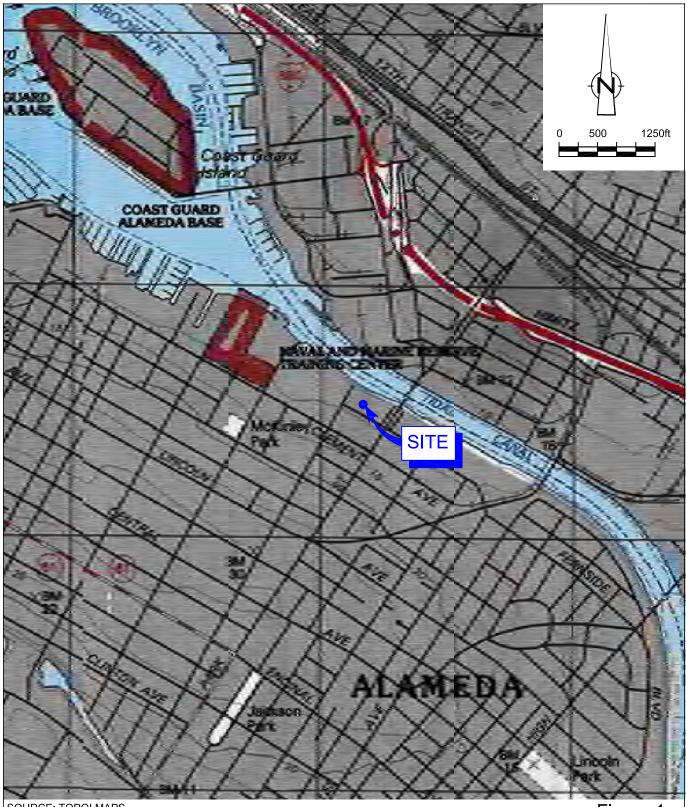
March 18, 2011

Reference No. 631916

- 4 -	
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Figure 1	Vicinity Map
Figure 2	Groundwater Elevation Contour Map – January 14, 2011
Figure 3	TPHd Concentrations in Groundwater – January 14, 2011
Figure 4	TPHg Concentrations in Groundwater – January 14, 2011
Figure 5	Benzene Concentrations in Groundwater – January 14, 2011
Table 1	Groundwater Monitoring and Sampling Data
Table 2	Well Construction Specifications
Attachment A	Monitoring Data Package
Attachment B	Laboratory Analytical Report
Attachment C	Historical Groundwater Monitoring and Sampling Data
Ms. Julie l Mr. Peter	Bauer, Chevron <i>(electronic only)</i> Beck Ball Reinhold Beck oe Wingate

FIGURES

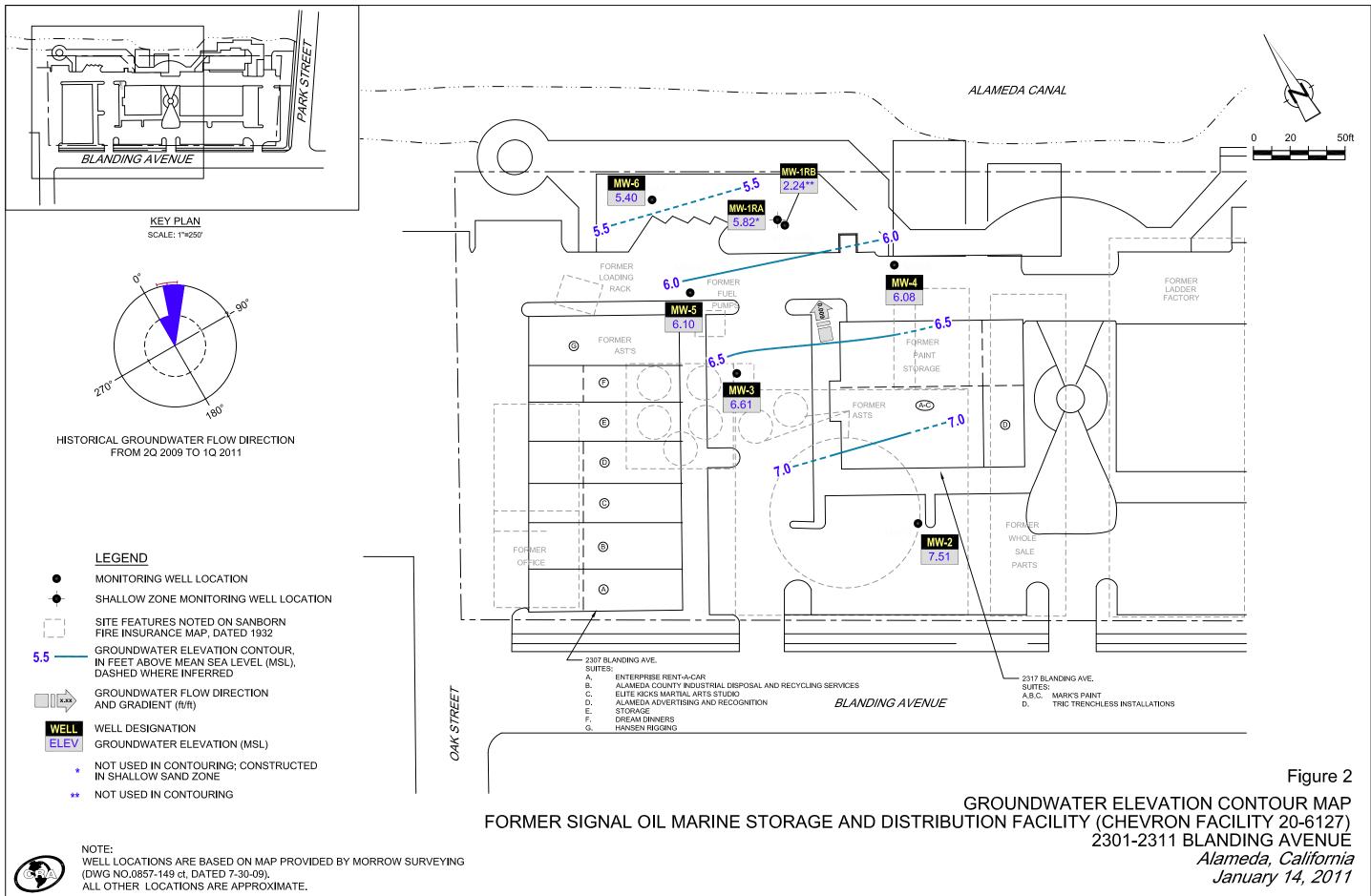


SOURCE: TOPO! MAPS.

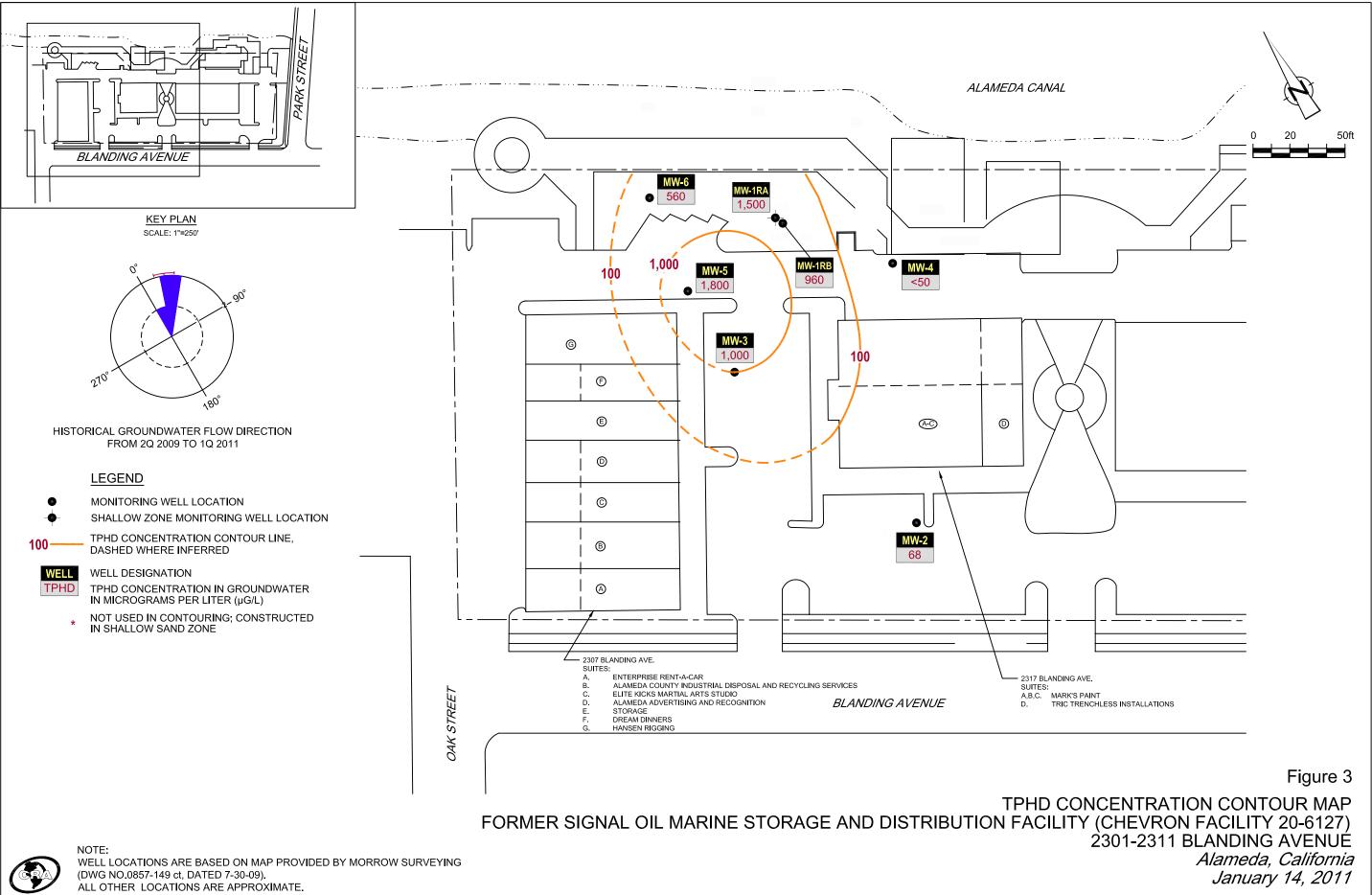
Figure 1

VICINITY MAP FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY (CHEVRON FACILITY 20-6127) 2301-2311 BLANDING AVENUE Alameda, California

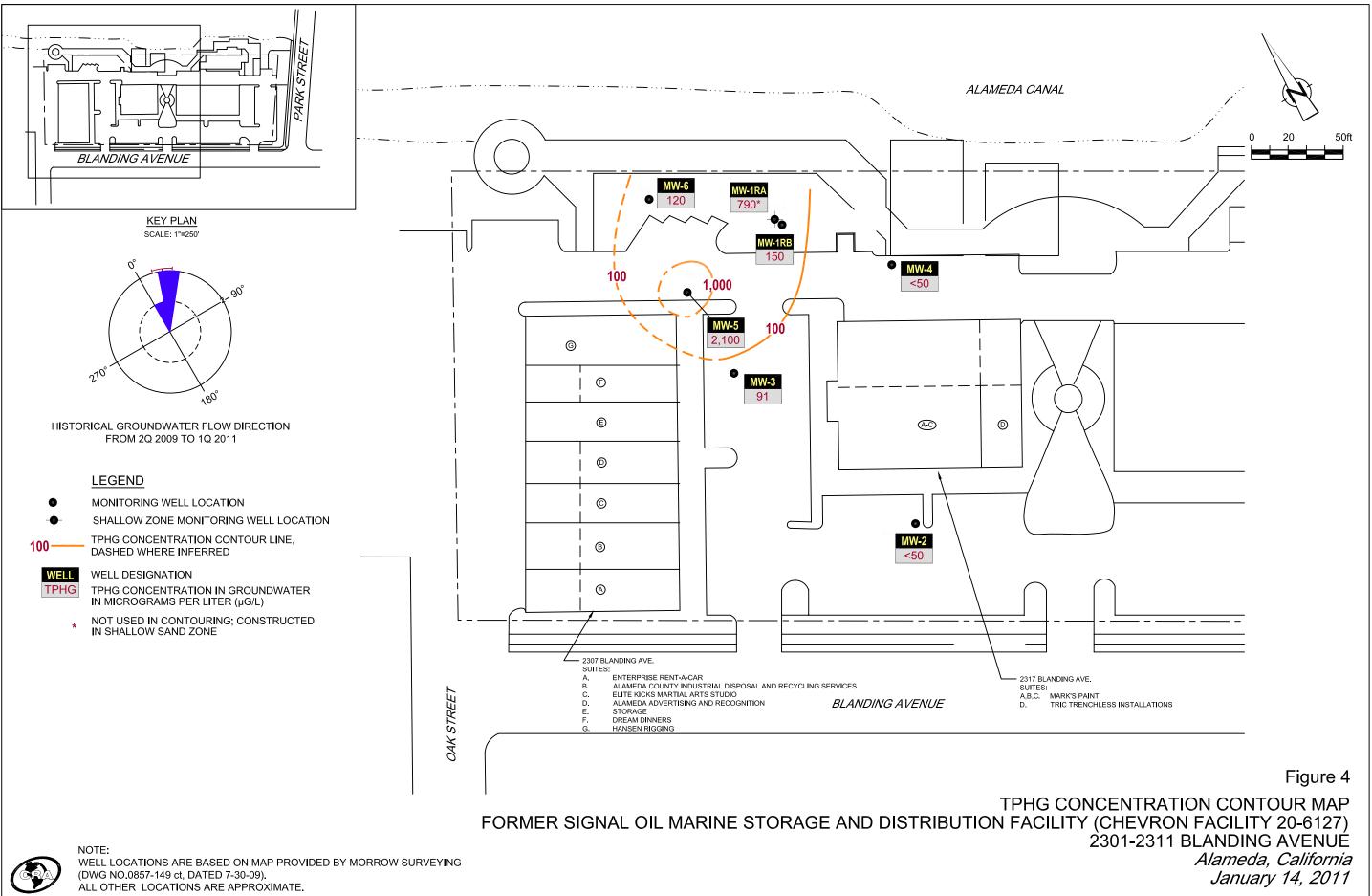
631916-GN-EM001 DEC 23/2010



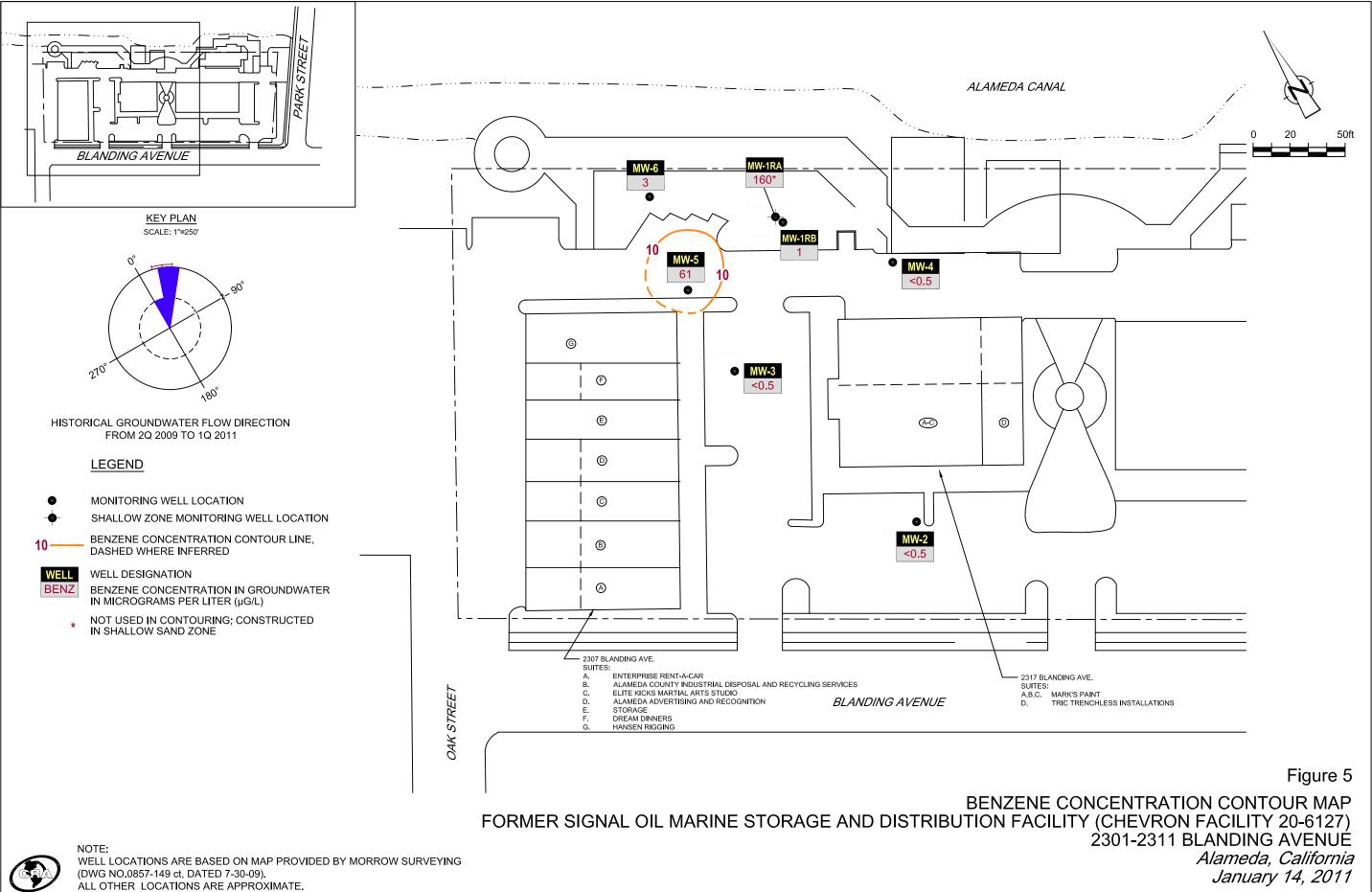
631916-95(019)GN-EM002 FEB 11/2011



631916-95(019)GN-EM003 MAR 8/2011



631916-95(019)GN-EM004 MAR 8/2011



631916-95(019)GN-EM005 MAR 8/2011

TABLES

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY CHEVRON BULK PLANT 20-6127 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

	·				Н	IYDROCARBON	IS		PRIMARY VOCS					
Location	Date	ТОС	DTW	GWE	TPH-DRO	, TPH-DRO w/ Si Gel	ТРН-СКО	B	T	Е	X	MTBE by SW8260		
	Units	ft	ft	ft-amsl	µg∕L	µg∕L	µg/L	µg/L	µg/L	µg∕L	µg∕L	µ g/L		
MW-1 MW-1	07/21/2010 10/22/2010 ¹	13.49 13.49	9.47 -	4.02	440 -	-	65 J -	<0.5 -	<0.5 -	<0.5 -	<0.5 -	<0.5		
MW-1RA MW-1RA	10/28/2010 01/14/2011	13.02 13.02	9.23 7.20	3.79 5.82	-	4,000 1,500	6,400 790	830 160	22 2	65 1	20 1	- -		
MW-1RB MW-1RB	10/28/2010 01/14/2011	13.21 13.21	9.00 10.97	4.21 2.24	-	1,600 960	650 150	3 1	<0.5 <0.5	0.8 <0.5	<0.5 <0.5	-		
MW-2 MW-2 MW-2	07/21/2010 10/22/2010 10/28/2010 ²	10.63 10.63 10.63	4.12 4.31 3.65	6.51 6.32 6.98	65 J - -	- 58 -	<50 <50 -	<0.5 <0.5 -	<0.5 <0.5 -	<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-3	07/21/2010	10.72	5.09	5.63	640	-	65 J	0.6 J	< 0.5	<0.5	< 0.5	-		
MW-3	10/22/2010	10.72	5.32	5.40	-	570	73	<0.5	< 0.5	< 0.5	< 0.5	-		
MW-3	10/28/2010 ²	10.72	4.74	5.98	-	-	-	-	-	-	-	-		
MW-3	01/14/2011	10.72	4.11	6.61	-	1,000	91	<0.5	<0.5	<0.5	<0.5	-		
MW-4	07/21/2010	11.40	6.72	4.68	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-		

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY CHEVRON BULK PLANT 20-6127 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

				10						
Location Date To	DC DTW	GWE	OND-H4T	TPH-DRO w/Si Gel	TPH-GRO	В	Т	E	X	MTBE by SW8260
Units	ft ft	ft-amsl	µg/L	µg∕L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4 10/22/2010 11	.40 6.87	4.53	-	91	<50	<0.5	<0.5	<0.5	<0.5	-
2	.40 6.38	5.02	-	-	-	-	-	-	-	-
	.40 5.32	6.08	-	<50	<50	<0.5	<0.5	<0.5	<0.5	-
MW-5 07/21/2010 10	0.50 5.76	4.74	2,000	-	1,500	80	2	1	2	-
MW-5 10/22/2010 10	5.94	4.56	-	1,500	830	47	<0.5	1	< 0.5	-
MW-5 10/28/2010 ² 10	0.50 5.17	5.33	-	-	-	-	-	-	-	-
MW-5 01/14/2011 10	.50 4.40	6.10	-	1,800	2,100	61	4	1	6	-
MW-6 10/28/2010 12	.98 8.35	4.63	-	300	620	7	<0.5	1	2	-
MW-6 01/14/2011 12		5.40	-	560	120	3	<0.5	<0.5	<0.5	-
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	-

Abbreviations and Notes:

TOC = Top of Casing

DTW = Depth to Water

GROUNDWATER MONITORING AND SAMPLING DATA FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY CHEVRON BULK PLANT 20-6127 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

					H	IYDROCARBON	IS			PRIM	IARY VOC	CS
Location	Date	тос	DTW	GWE	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	В	Т	Ε	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	µg∕L	µg/L	µg∕L	µg∕L	µg/L	µg/L	µg∕L	µg∕L

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

 μ 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 = Xylene

MTBE = Methyl tert butyl ether

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit

- * TOC elevations for all wells were surveyed on July 30, 2009, by Morrow Surveying. Vertical Datum is NAVD 88 from GPS observations. TOC elevations were surveyed on January 25, 2001, by Virgil Chacez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).
- ¹ Destroyed and re-installed as MW-1RB.
- ² Monitored only for the 10/28/10 Special Event

TABLE 2

WELL CONSTRUCTION SPECIFICATIONS FORMER SIGNAL OIL MARINE STORAGE AND DISTRIBUTION FACILITY (CHEVRON BULK PLANT 20-6127) 2301-2311 BLANDING AVENUE ALAMEDA, CALIFORNIA

				Casing				
Well ID	Date	ТОС	Total Depth	Diameter ¹	Slot Size	Screen Interval	Filter Pack	Status
	Installed		(fbg)	(inches)	(inches)	(fbg)	(fbg)	
<u>Monitoring</u>	Wells							
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
<u>Sub-Slab Va</u>	apor Probes							
VP-7	7/17/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-8	7/17/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-9	7/22/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-10	7/22/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-11	7/17/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-12	7/22/2009	NS	0.5	0.25	NA	NA	NA	Vapor only
VP-13	7/22/2009	NS	0.5	0.25	NA	NA	NA	Vapor only

Abbreviations / Notes

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

¹ = Schedule 40 PVC casing material

fbg = Feet below grade

NA = Not applicable

NS = Not surveyed

ATTACHMENT A

MONITORING DATA PACKAGE



TRANSMITTAL

January 21, 2011 G-R #386498

TO: Mr. Brian Silva Conestoga-Rovers & Associates 10969 Trade Center Drive, Suite 107 Rancho Cordova, California 95670

FROM: Deanna L. Harding Project Coordinator Gettler-Ryan Inc. 6747 Sierra Court, Suite J Dublin, California 94568 RE: Chevron #206127 2301-2337 Blanding Avenue Alameda, California (Former Signal Oil Marine Terminal)

WE HAVE ENCLOSED THE FOLLOWING:

COPIES

DESCRIPTION

VIA PDF

Groundwater Monitoring and Sampling Data Package First Quarter Event of January 14, 2011

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 Blandir	ng Avenue				Job #: Event Date:		4 -11		
WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seał (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)		REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-IRA	0.K	0.12	0.K	0.16	0.12	0.1C	0.1C	N	N	8" Morrison /2	No
MW-IRB								1		8" Morrison/2 8" morrison/2	
mw.2										12" EMCO/2	
MW-3										11	
mw.4			·							F	
mw-5				,			(/	,	11	
MW-6	V	\checkmark	V	V	\checkmark	V	V	V	V	8" Morrison/2	V
						·					
										······	
l Comments							L				

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 IWM to Chemical Waste Management located in Kettleman Hills, California.

N;\California\forms\chevron-SOP-Sept. 2009



Client/Facility#:	Chevron #206127	Job Number:	386498	
Site Address:	2301-2337 Blanding Avenue	Event Date:	1-14-11	— (inclusive)
City:	Alameda, CA	Sampler:	Jec	_ (
Well ID	MW-IRA	Date Monitored:	1-14-11	
Well Diameter	2 in.	Volume 3/4"= 0.02		
Total Depth		Factor (VF) 4"= 0.66		0
Depth to Water		column is less then 0.50	-	
Donth to Mator			Estimated Purge Volume: 3	gal.
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	v/ 80% Recharge [(Height of Water Column x (Sampling Equipr Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pum Other:	nent:	Time Started: Time Completed: Depth to Product: Depth to Vater: Hydrocarbon Thickness: Visual Confirmation/Description Skimmer / Absorbant Sock (circ Amt Removed from Skimmer: Amt Removed from Well: Water Removed: Product Transferred to:	le one)
Start Time (purge)			loudy	
		olor: <u>clear</u>		¥
Approx. Flow Rate			one	1
Did well de-water	? If yes, Time: \	/olume: ga	al. DTW @ Sampling: <u>7</u> .	59
Time (2400 hr.) 1224 1229 1235	Volume (gal.) pH Conductivity $(\mu mhos/cm (\mu))$ 1 (6.62 1480 2 6.68 1491 3 6.74 1491	S) (C) (F)	D.O. ORP (mg/L) (mV)	

SAMPLE ID	(#) CONTAINER	REFRIG.	ABORATORY IN PRESERV. TYPE	LABORATORY	ANALYSES
MW- IRA	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)
					· · · · · · · · · · · · · · · · · · ·
					<u>i </u>
AMENTS:					

Add/Replaced Lock: _____

Add/Replaced Plug: _____

Add/Replaced Bolt: _____



Client/Facility#:	Chevron #20	06127		Job Number:	386498	
Site Address:	301-2337 B	landing	Avenue	Event Date:	1-14-11	(inclusive)
	lameda, CA			Sampler:	Joe	(inclusive)
Well ID	MW-IR	B	l	Date Monitored:	1-14-11	
Well Diameter	2 in		Volum	ne 3/4"= 0.0		
Total Depth	19.96 ft.	_	Factor			
Depth to Water	10.97 ft.		Check if water colum			
	8-99	xVF Ø.	17 = 1.53	x3 case volume	= Estimated Purge Volume: 4.	5 gal.
Depth to Water w/	80% Recharge	e [(Height of V	Vater Column x 0.20) -	+ DTW]: <u>12.7</u>	26	
Purge Equipment:			empline Faultances		Time Started:	(2400 hrs)
Disposable Bailer	/		ampling Equipment: isposable Bailer		Time Completed:	(2400 hrs)
Stainless Steel Bailer			ressure Bailer		Depth to Water:	ft
Stack Pump			iscrete Bailer		Hydrocarbon Thickness: Visual Confirmation/Descripti	ft
Suction Pump		P	eristaltic Pump			
Grundfos			ED Bladder Pump		Skimmer / Absorbant Sock (c Amt Removed from Skimmer	ircle one) : gal
Peristaltic Pump		0	ther:		Amt Removed from Well:	gai
QED Bladder Pump Other:					Water Removed: Product Transferred to:	
Start Time (purge):	1140		Weather Cor	ditional	n1_1	
Sample Time/Date:		-14-11			Odor: Q/N Marter	1
Approx. Flow Rate:		gpm.	Sediment De		None None	ete
Did well de-water?		•.	Volun		gal. DTW @ Sampling: _/	0 ((
		<i>yee, mile.</i>		ic	gai. DTW @ Sampling	0.6/
Time (2400 hr.)	Volume (gal.)	рН	Conductivity (umhos/cm - uS)	Temperature	D.O. ORP	
(2400 111.)	6	1 10	· · · ·	(©/F)	(mg/L) (mV)	
-114s	115 -	6.67	1587	11.3		
1156	4.5	6.10		+7>	<u> </u>	_
		au	1010			
		·····			<u> </u>	
041401 T 10			ABORATORY IN			
SAMPLE ID (#)	CONTAINER	REFRIG. YES	PRESERV. TYPE	LABORATORY	ANALYSES	
	x 500ml ambers	YES	HCL NP	LANCASTER LANCASTER	TPH-GRO(8015)/BTEX(8260) TPH-DRO w/sgc (8015)	

COM	MENTS:	Moni	tored	well	general	times.	Well	 VOCN	close to	
the	estus	ry			-			 		
		/						 		Av

Add/Replaced Lock: _____

Add/Replaced Bolt:



Client/Facility#:	Chevron #20612	.7	Job	Number:	386498				
Site Address:	2301-2337 Bland	ting Avenue	Eve	nt Date:	1-14	1-11	<u></u>	(inclusive)	
City:	Alameda, CA		Sam	pler:	500				
Well ID	<u>MW-2</u>		Date M	onitored:	1-14	-11			
Well Diameter	<u>2</u> in.		Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38		
Total Depth	15.60 ft.		Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80		
Depth to Water	<u>3.12 ft.</u>	Check if water							
	12.48 XVF	0.17 = 2.	12 x3 cas	e volume = E	stimated Purg	ge Volume:_	65	gal.	
Depth to Water	w/ 80% Recharge [(Hei	ght of Water Column x	0.20) + DTWJ:	>.6/	-				
Purge Equipment:	/	Sampling Equip	ment:		Time Sta	rted: mpleted:		(2400 hrs) (2400 hrs)	
Disposable Bailer		Disposable Bailer			Depth to	Product:	/	ft	
Stainless Steel Bailer		Pressure Bailer			Depth to	Water: bon Thickne		ft	
Stack Pump	<u></u>	Discrete Bailer			Visual Co	onfirmation/E	Description:	ft	
Suction Pump		Peristaltic Pump			Skimmer	/ Absorbant	Sock (circle o		
Grundfos Peristaltic Pump		QED Bladder Pun			Amt Rem	oved from S	kimmer:	gal	
QED Bladder Pump		Other:			Amt Rem Water Re		Vell:	gal	
Other:						ransferred t	o:		
					L				
Start Time (purge)	: 0805	Weathe	r Conditions		ordy				
	e: 083511-14		Color:	<u> </u>	Odor: Y / (N)			
Approx. Flow Rat		_	nt Descriptio		lone				
Did well de-water		Time:	•		I. DTW @	Sampling	1 3.70	<u> </u>	
				gu		oamping			
Time (2400 hr.)	Volume (gal.) pH	Conductivity (µmhos/cm ل		erature / F)	D.O. (mg/L)		ORP (mV)		
0813	2 7.4	0 1735	2 10	6.5					
0820	4 7.3	1746	2 - 10	.7 _					
0826	6.5 7.3	4 1743	⊨	Elle _					

			ABORATORY IN	FORMATION	
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 2	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)
	-				
MENTS:					
	14				

COMMENTS:

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

<u>80</u>



Client/Facility#:	Chevron #206127	Job Number:	386498	
Site Address:	2301-2337 Blanding Avenue	Event Date:	1-14-11	- (inclusive)
City:	Alameda, CA	Sampler:	Joe	_(
Well ID Well Diameter Total Depth Depth to Water Depth to Water w Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	MW-3 2 in. 17.91 ft. 4.11 ft. 13.80 xVF 0.17 2 180% Recharge [(Height of Water Column Sampling Equ Disposable Ba Pressure Baile Discrete Bailer Peristaltic Pum QED Bladder F	Date Monitored: Volume $3/4"=0.02$ Factor (VF) $4"=0.66$ er column is less then 0.50 35 x3 case volume = E $x 0.20$ + DTVJ: $6 \cdot 8 \cdot 7$ Jipment:	1-(4-1) 1"= 0.04 2"= 0.17 3"= 0.38 5"= 1.02 6"= 1.50 12"= 5.80 ft.	_ gal. (2400 hrs) (2400 hrs) ft ft ft ft ft ft ft ft
Peristaltic Pump QED Bladder Pump Other:	Other:		Amt Removed from Well: Water Removed: Product Transferred to:	gal
Start Time (purge) Sample Time/Date Approx. Flow Rate Did well de-water?	e: <u>091511-14-</u> // Wate e:gpm. Sedin	r Color: <u> </u>	Ddor: ØIN <u>light</u> None al. DTW @ Sampling: <u>4.5</u>	3
Time (2400 hr.) 0850 0856 0904	Volume (gal.) pH Conducti $(\mu mhos/cm)$ 5 7.36 186 7.30 186 7.30 186 7.30 186 7.30 186 1.86	-60 (0/F) -60 - 17.7 -6 - 17.2	D.O. ORP (mg/L) (mV)	

			_ABORATORY IN	FORMATION	
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 3	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)

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



Client/Facility#:	Chevron #20612	7	Job Number:	386498		
Site Address:	2301-2337 Blanc	ling Avenue	Event Date:	1-14-1	1	— (inclusive)
City:	Alameda, CA		Sampler:	Joe		(
Well ID	<u>MW-4</u>		Date Monitored:	1-14-11		<u> </u>
Well Diameter	2 in.	[Volume 3/4"= 0.0		0.17 3"= 0.3	· ·
Total Depth	20.23 ft.	l	Factor (VF) 4"= 0.6		1.50 12"= 5.8	0
Depth to Water	<u>5,32 ft.</u>		column is less then 0.5		2	
Depth to Water w			53 x3 case volume =		ume: <u>8</u>	gal.
	// 80% Recharge [(Hei	gnt of water Column x	0.20) + DTVVj: <u>0 /)</u>			
Purge Equipment:		Sampling Equip	ment:	Time Started:_ Time Complete	ed:	(2400 hrs) (2400 hrs)
Disposable Bailer		Disposable Bailer		Depth to Produ		ft
Stainless Steel Bailer		Pressure Bailer		Depth to Wate Hydrocarbon T		ft
Stack Pump		Discrete Bailer	. <u></u>		ation/Description	n:
Suction Pump Grundfos		Peristaltic Pump QED Bladder Pun		Skimmer / Abs	orbant Sock (cir	cle one)
Peristaltic Pump		Other:		Amt Removed	from Skimmer:	gal
QED Bladder Pump				Water Remove		gal
Other:				Product Transf	erred to:	
Start Time (purge)	1350	Weathe	er Conditions:	cloudy		
Sample Time/Date	: 162011-1	<u>//</u> Water 0	Color: clear	Odor: Ý / 😡		
Approx. Flow Rate	e: <u> </u>	Sedime	nt Description:	None		
Did well de-water?	2 If yes,	Time:	Volume:	gal. DTW @ San	npling: <u>6</u> ,	24
Time (2400 hr.)	Volume (gal.) pH	Conductivity (µmhos/cm - إ		D.O. (mg/L)	ORP (mV)	
1356	7.1	2 1890	17.5			
1600	5 7.1		17.4			-
1607	<u> </u>	6 1934	17.3			
	<u> </u>					-

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES					
MW- 4	🖌 🖌 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)					
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)					

COMMENTS:

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



Site Address:			Job Number:	386498	
	2301-2337 Bland	ling Avenue	Event Date:	1-14-11	— (inclusive)
City:	Alameda, CA		Sampler:	Joe	` ´´
Well ID	MW- 5		Date Monitored:	1-14-11	
Well Diameter	2 in.	Volum	ne 3/4"= 0.02	1"= 0.04 2"= 0.17 3"= 0.3	
Total Depth	17.93 ft.		r (VF) 4"= 0.66		
Depth to Water	4.40 ft.	Check if water colum	n is less then 0.50	ft.	·····
	<u>13,53</u> xVF w/ 80% Recharge [(Heig	<i>9./7</i> = <u>2.30</u> ght of Water Column x 0.20) Sampling Equipment: Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pump Other:	x3 case volume = E + DTW]: <u>7.10</u>	Estimated Purge Volume: 7	cle one) gal gal
Approx. Flow Rat): <u>/ 3/0</u> te: <u>/ 342 / 1- 14</u> te:gpm ?lf yes,	. Sediment De	escription:	lovdy Odor: PIN <u>Mordo</u> แรกะ al. DTW @ Sampling: <u>ร</u> .	16
Time (2400 hr.)	Volume (gal.) pH	Conductivity (µmhos/cm - µຽ)⊃	Temperature (D.O. ORP (mg/L) (mV)	
1315	2 6.7	11 2095	16.6		

LABORATORY INFORMATION									
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES				
MW- ST	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)				
	2_ x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)				
	<u> </u>								
	I								

COMMENTS:

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



Client/Facility#:	Chevron #206127	Job Number:	386498	
Site Address:	2301-2337 Blanding Avenue	Event Date:	1-14-11	- (inclusive)
City:	Alameda, CA	Sampler:	Joe	-
Well ID Well Diameter Total Depth Depth to Water Depth to Water w Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristattic Pump QED Bladder Pump Other:	20.04 ft. Fac. 7.58 ft. Check if water colu 12.46 xVF 0.17 = 2.14 w/ 80% Recharge [(Height of Water Column x 0.20 Sampling Equipmen Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pump Other:)) + DTW]: <u>[0,07</u>	5"= 1.02 6"= 1.50 12"= 5.80 ft. Estimated Purge Volume:	gal. (2400 hrs) ft ft ft ft ft ft gal gal
Start Time (purge) Sample Time/Dat Approx. Flow Rate Did well de-water (2400 hr.) <u>1103</u> <u>1117</u>	e: <u>//30 / /_/4-</u> // Water Colo e: gpm. Sediment D	escription:	Dodor: 0/N /. ¹ . 4. 4. 7 Dodor: 0/N /. ¹ . 4. 4. 7 Doc. 0RP (mg/L) (mV)	29

		L	ABORATORY IN	FORMATION	
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 6	👂 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)
	<u> </u>				
	<u>├</u>				
					I
MMENTS:					

COMMENTS:

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

	Chevro	on Co	alifo	m	ia	Re	gi	ioi	٦,	٩n	al	ysi	s I	Re	q	ue	est,	:/C	Chain oi	f Cu	sto
Lancaster Laboratories	1 1811.	-\$6			A	occt. #	ŧ:			s	F Samp	or Lai le #	ncas	ster L	aboı	rator	ies u	Se O	nly Group #:	005	522
		/					1	_			Ana	alyse	s R	eque	ested	d	1				
Facility #: SS#206127-OML G-R#3864	98 Global ID#	T0601974	4728	Π	Matrix	c			1		Pre	eserv	atio	on Co	odes	3			Preserva	tive Co	des
2301-2337 BLANDING AVEN Site Address: Chevron PM: MB Lead G-R, Inc., 6747 Sierra Co Consultant/Office: Deanna L. Harding (co Consultant Pri, Mgr.:	JE, ALAMED Consultant: urt, Suite J, D eanna@grinc	DA, CA RASB Dublin, CA com)			Detable		Containers	8260\[8021]		Silica Gel Cleanup			3						$H = HCI$ $N = HNO_3$ $S = H_2SO_4$ $J value report$ $Must meet low possible for 82$	ing neede vest detec	OH er ed
Consultant Phone #:925-551-7555 Sampler:		Time Collected	Grab Composite	Soil		oil 🗆 Air	Total Number of Containers	BTEX-SHITBE 8260	TPH 8015 MOD GRO	TPH 8015 MOD DROVE	8260 full scan	Oxygenates Total Lead Method	Pee						8021 MTBE Cor Confirm higher Run oxy Run oxy	st hit by 8 s by 8260 's on high) Iest hit
		Conected		0	>		2				60								Comments / P	ally states	_
	1-14-11	1245		_	1.		8	~	V					-							
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Turnaround Time Requested (TAT) (please c	rcle) <	Relinqui	shed by:							Da	12. 12.	Time	12	Recei	1	by:				Date	Time
STD. TAT 72 hour 48 ho 24 hour 4 day 5 day	Ir	Relinqui	shed by:	5				1		Da	45 I	Time		Recel	Ived	by:	-A Ind		N-K-1	Date	Time
Data Package Options (please circle if required)		Relinqui	shed by:							Da	ite	Time	1	Rece	ived	by:	0			Date	Time
QC Summary Type I - Full Type VI (Raw Data) Coelt Deliverable not ner WIP (RWQCB)	EDF/EDD	UPS		edEx			rier: ther_							Recel						Date	Time
Disk		Tempera	ature Up	on Re	aceipt							C	0 0	Custo	dv S	pale	Intact	12	Ves No		

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

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



Analysis 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:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Prepared for:

Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

January 28, 2011

Project: 206127

Submittal Date: 01/19/2011 Group Number: 1229577 PO Number: 0015060859 Release Number: BAUER State of Sample Origin: CA

Client Sample Description QA-T-110114 NA Water MW-1RA-W-110114 Grab Water MW-1RB-W-110114 Grab Water MW-2-W-110114 Grab Water MW-3-W-110114 Grab Water MW-4-W-110114 Grab Water MW-5-W-110114 Grab Water

Lancaster Labs (LLI)

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

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





Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

Roh Chi-

Robin C. Runkle Senior Specialist





Page 1 of 1

Sample Description: QA-T-110114 NA Water Facility# 206127 Job# 386498 GRD 2301-2337 Blanding-Alameda T06019744728 QA

LLI Sample # WW 6186065 LLI Group # 1229577 Account # 10904

Project Name: 206127

Collected: 01/14/2011

Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

6127Q

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	F110211AA	01/21/2011 13:28	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110211AA	01/21/2011 13:28	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 19:15	Butch A Sokolowsk	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 19:15	Butch A Sokolowsk	i 1





Page 1 of 1

Sample Description: MW-1RA-W-110114 Grab Water LLI Sample # WW 6186066 Facility# 206127 Job# 386498 GRD LLI Group # 1229577 2301-2337 Blanding-Alameda T06019744728 MW-1RA Account # 10904

Project Name: 206127

Collected: 01/14/2011 12:45 by JA

Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

6127A

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	160	0.5	1
10943	Ethylbenzene		100-41-4	1	0.5	1
10943	Toluene		108-88-3	2	0.5	1
10943	Xylene (Total)		1330-20-7	1	0.5	1
GC Vol	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	790	50	1
GC Ext w/Si G	ractable TPH Sel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	1,500	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	P110271AA	01/27/2011 12:54	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110271AA	01/27/2011 12:54	Nicholas R Rossi	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 20:05	Butch A Sokolowsk:	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 20:05	Butch A Sokolowsk:	i 1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110200014A	01/21/2011 17:11	Melissa McDermott	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1





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Sample Description: MW-1RB-W-110114 Grab Water LLI Sample # WW 6186067 Facility# 206127 Job# 386498 GRD LLI Group # 1229577 2301-2337 Blanding-Alameda T06019744728 MW-1RB Account # 10904

Project Name: 206127

Collected:	01/14/2011	12:08	by JA
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Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

6127B

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	1	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	150	50	1
GC Ext w/Si (ractable TPH Hel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	960	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	F110211AA	01/21/2011 14:32	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110211AA	01/21/2011 14:32	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 20:31	Butch A Sokolowsk	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 20:31	Butch A Sokolowsk	i 1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110200014A	01/21/2011 17:33	Melissa McDermott	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1





Page 1 of 1

Sample Description:	MW-2-W-110114 Grab Water	LLI Sample	# WW 6186068
	Facility# 206127 Job# 386498 GRD	LLI Group	# 1229577
	2301-2337 Blanding-Alameda T06019744728 MW-2	Account	# 10904

Project Name: 206127

Collected:	01/14/2011	08:35	by JA
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Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 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	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1
GC Ext w/Si (ractable TPH Hel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	68	50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality $% \left({{\left[{{{\rm{A}}} \right]}_{{\rm{A}}}} \right)$ 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	F110211AA	01/21/2011 14:54	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110211AA	01/21/2011 14:54	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 20:56	Butch A Sokolowsk:	L 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 20:56	Butch A Sokolowsk:	i 1
06610	TPH-DRO CA C10-C28 w/ Si	SW-846 8015B	1	110200014A	01/21/2011 17:55	Melissa McDermott	1
11180	Gel Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1





Page 1 of 1

Sample Description:	MW-3-W-110114 Grab Water	LLI Sample	# WW 6186069
	Facility# 206127 Job# 386498 GRD	LLI Group	# 1229577
	2301-2337 Blanding-Alameda T06019744728 MW-3	Account	# 10904

Project Name: 206127

Collected:	01/14/2011	09:15	by JA
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Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

61273

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	91	50	1
GC Ext w/Si (ractable TPH Hel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	1,000	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	F110211AA	01/21/2011 15:15	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110211AA	01/21/2011 15:15	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 21:21	Butch A Sokolowsk	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 21:21	Butch A Sokolowsk	i 1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110200014A	01/21/2011 19:23	Melissa McDermott	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1





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Sample Description:	MW-4-W-110114 Grab Water	LLI Sample	# WW 6186070
	Facility# 206127 Job# 386498 GRD	LLI Group	# 1229577
	2301-2337 Blanding-Alameda T06019744728 MW-4	Account	# 10904

Project Name: 206127

Collected: 01/14/2011 16:20 by J	Joilectea:	2011 16:20 D	/ JA
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Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

61274

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1
GC Ext w/Si (ractable TPH Gel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F110201AA	01/20/2011 13:11	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110201AA	01/20/2011 13:11	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 21:46	Butch A Sokolowsk:	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 21:46	Butch A Sokolowsk:	i 1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110200014A	01/21/2011 18:17	Melissa McDermott	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1





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Sample Description:	MW-5-W-110114 Grab Water	LLI Sample	# WW 6186071
	Facility# 206127 Job# 386498 GRD	LLI Group	# 1229577
	2301-2337 Blanding-Alameda T06019744728 MW-5	Account	# 10904

Project Name: 206127

Collected:	01/14/2011	13:42	by JA
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Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

61275

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	61	0.5	1
10943	Ethylbenzene		100-41-4	1	0.5	1
10943	Toluene		108-88-3	4	0.5	1
10943	Xylene (Total)		1330-20-7	6	0.5	1
GC Vol	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	2,100	50	1
GC Ext w/Si (ractable TPH Sel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	1,800	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F110201AA	01/20/2011 13:32	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110201AA	01/20/2011 13:32	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 22:12	Butch A Sokolowsk:	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 22:12	Butch A Sokolowsk:	i 1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110200014A	01/21/2011 18:39	Melissa McDermott	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1





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Sample Description: MW-6-W-11	.0114 Grab Water	LLI Sample	# WW 6186072
Facility	206127 Job# 386498 GRD	LLI Group	# 1229577
2301-2337	Blanding-Alameda T06019744728 MW-6	Account	# 10904

Project Name: 206127

Submitted: 01/19/2011 09:40 Reported: 01/28/2011 18:56 Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

61276

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	3	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	120	50	1
GC Ext w/Si (ractable TPH Gel	SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28	w/ Si Gel	n.a.	560	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F110201AA	01/20/2011 13:53	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110201AA	01/20/2011 13:53	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11020A07A	01/20/2011 22:37	Butch A Sokolowsk	i 1
01146	GC VOA Water Prep	SW-846 5030B	1	11020A07A	01/20/2011 22:37	Butch A Sokolowsk	i 1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110200014A	01/21/2011 19:01	Melissa McDermott	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110200014A	01/20/2011 16:15	Timothy J Attenberger	1



Analysis Report

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Quality Control Summary

Client Name: Chevron Reported: 01/28/11 at 06:56 PM Group Number: 1229577

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

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: F110201AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numb N.D. N.D. N.D. N.D. N.D.	er(s): 61: 0.5 0.5 0.5 0.5 0.5	86070-6186 ug/l ug/l ug/l ug/l ug/l	072 93 93 97 97		79-120 79-120 79-120 80-120		
Batch number: F110211AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numb N.D. N.D. N.D. N.D. N.D.	er(s): 618 0.5 0.5 0.5 0.5 0.5	86065,6186 ug/l ug/l ug/l ug/l ug/l	067-61860 98 96 99 100	69	79-120 79-120 79-120 80-120		
Batch number: P110271AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numb N.D. N.D. N.D. N.D. N.D.	er(s): 61: 0.5 0.5 0.5 0.5 0.5	86066 ug/l ug/l ug/l ug/l	101 102 106 105		79-120 79-120 79-120 80-120		
Batch number: 11020A07A TPH-GRO N. CA water C6-C12	Sample numb N.D.	er(s): 613 50.	86065-6186 ug/l	072 109	109	75-135	0	30
Batch number: 110200014A TPH-DRO CA C10-C28 w/ Si Gel	Sample numb N.D.	er(s): 618 32.	86066-6186 ug/l	072 85	83	52-126	3	20

Sample Matrix Quality Control

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

Analysis Name	MS <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	<u>RPD</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: F110201AA	Sample	number(s)	: 6186070	-618607	2 UNSP	K: P185430			
Benzene	98	101	80-126	3	30				
Ethylbenzene	96	102	71-134	5	30				
Toluene	101	103	80-125	1	30				
Xylene (Total)	102	104	79-125	2	30				
Batch number: F110211AA	Sample	number(s)	: 6186065	,618606	57-6186	069 UNSPK: B	2186074		
Benzene	101	101	80-126	1	30				
Ethylbenzene	100	101	71-134	1	30				
Toluene	102	101	80-125	0	30				
Xylene (Total)	102	102	79-125	1	30				

*- Outside of specification

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

(2) The unspiked result was more than four times the spike added.



Analysis Report

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Page 2 of 3

Quality Control Summary

Client Name: Chevron Reported: 01/28/11 at 06:56 PM Group Number: 1229577

Sample Matrix Quality Control

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

	MS	MSD	MS/MSD		RPD B	KG	DUP	DUP	Dup RPD
Analysis Name	%REC	%REC	Limits	RPD	MAX C	onc	Conc	RPD	Max
Batch number: P110271AA	Sample	number(s)	: 6186066	UNSPK:	P190759				
Benzene	107	107	80-126	0	30				
Ethylbenzene	107	109	71-134	2	30				
Toluene	111	113	80-125	2	30				
Xylene (Total)	109	112	79-125	3	30				

Surrogate Quality Control

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

	Name: UST VOCs by mber: F110201AA	8260B - Water		
bacchi na	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6186070	107	103	96	90
6186071	104	99	96	95
6186072	105	102	96	93
Blank	106	101	96	90
LCS	105	100	96	97
MS	105	104	97	98
MSD	105	104	97	97
Limits:	80-116	77-113	80-113	78-113
	Name: UST VOCs by	8260B - Water		
Batch nu	mber: F110211AA		T 1 10	
	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6186065	107	98	94	90
6186067	103	100	97	95
6186068	108	104	96	90
6186069	104	101	96	96
Blank	109	104	96	91
LCS	106	100	96	97
MS	105	102	99	97
MSD	105	100	98	97
Limits:	80-116	77-113	80-113	78-113
Analysis	Name: UST VOCs by	8260B - Water		
Batch nu	mber: P110271AA			
	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6186066	94	99	103	93
Blank	94	101	104	90
LCS	95	102	103	92
MS	94	102	103	91
MSD	93	102	104	91

*- 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: 1229577

Reporte	d: 01/28/11 at	06:56 PM			
			Surrogate	Quality	Control
Limits:	80-116	77-113	80-113	78-113	
-	Name: TPH-GRO N. nber: 11020A07A	CA water C6-C12			

	Trifluorotoluene-F
6186065 6186066 6186067 6186068 6186079 6186070 6186071 6186072 Blank LCS LCSD	91 96 92 93 92 153* 92 92 105 101
Limits: Analysis Batch nu	63-135 Name: TPH-DRO CA C10-C28 w/ Si Gel mber: 110200014A Orthoterphenyl
6186066 6186067 6186068 6186069 6186070 6186071 6186072 Blank LCS LCSD	82 85 81 89 81 80 85 77 98 102
Limits:	59-131

*- Outside of specification

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

(2) The unspiked result was more than four times the spike added.

Lancaster Laboratories			orni							Forlor					Chain of Custor
V. Laboratories	1011	-y0		A		<u></u>	10	1		pie # <u>(</u> nalyse:				-72	<u>Group #: 000022</u> 7 1229577
				Potable NPDES		I otal Number of Containers	TPH 8015 MOD GRO	TPH 8015 MOD DRO 🕅 Silica Gel Cleanup		Oxygenates Oxygenates ead Method	Method	Code			Preservative Codes H = HCI T = Thiosulfate N = HNO3 B = NaOH S = H2SO4 O = Other J value reporting needed Must meet lowest detection limit possible for 8260 compounds 8021 MTBE Confirmation Confirm highest hit by 8260 Confirm all hits by 8260 Second
Sample Identification QA MW-IRA MW-IRA	Collected	Collected Ö E 1245 1 1	Soil	Water			1	マ マ マ	8260 full scan	Oxyy Total Lead	Dissolved Lead				Run oxy's on highest hit Run oxy's on all hits Comments / Remarks
<u>MW-2</u> <u>MW-3</u> <u>MW-4</u> <u>MW-5</u> <u>MW-6</u>		0835 0915 1620 1342 1 1130						ママン							Please forward the lab results directly to the Lead Consultant and cc: G-R.
				<u> </u>											
Turnaround Time Requested (TAT) (please cir STD TAT 72 hour 48 hou 24 hour 4 day 5 day	•	Relinguished by	\sim						Date	Time 09 Time	∕/₧	ceive	1 by: //EF	2-R4	AN FRIDGE OV-17-11 DATE
Fype VI (Raw Data) ☐ Coelt Deliverable not nee VIP (RWQCB)	EDF/EDD		Comn	nercia	l Carrie Ott	ier	•	TA+	-// Date //	Time 1639	Re		5¢}		Date Time
Disk		Temperature Up	on Re	ceipt_		0.0	• - li	2	·	C	' Cu	stody	Seals	Intact?	Yes No

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client. Explanation of Symbols and Abbreviations

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

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

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estimated value The result is \geq the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
- **ppm** parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight
basisResults printed under this heading have been adjusted for moisture content. This increases the analyte weight
concentration to approximate the value present in a similar sample without moisture. All other results are reported
on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

Table 1 Groundwater Monitoring Data and Analytical Results Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California

WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	B	Т	E	x	MTBE
DATE	(1.)	(fL)	(msl)	(µg/L)	(pg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1										
01/23/01		7.16		1,100 ^{2,3}	5,210 ⁴	868	<50.0	<50.0	<50.0	<250
04/09/01	10.62	8.12	2.50	1,200 ⁶	3,000 ⁵	920	<20	<20	<20	<100
07/30/01	10.62	9.15	1.47	550 ^{3,8}	2,000 ⁷	730	13	<5.0	<5.0	<25
10/08/01	10.62	7.86	2.76	2,200 ⁹	1,200	120	2.4	5.9	6.4	<2.5
01/13/02	10.62	7.02	3.60	3,300 ³	930	320	0.78	0.87	3.8	<2.5
04/08/02	10.62	9.60	1.02	1,200 ³	960	50	1.4	2.6	9.0	<2.5
07/31/02	10.62	9.27	1.35	2,800 ³	930	64	1.4	1.9	11	<5.0
10/15/02	10.62	8.00	2.62	1,000 ³	620	25	0.78	1.4	4.3	<2.5
01/14/03	10.62	7.05	3.57	960 ³	1,600	20	1.3	1.3	<1.5	<2.5
04/15/03	10.62	8.02	2.60	920 ³	870	56	1	1.4	3.1	<2.5
07/16/03 ¹⁰	10.62	10.08	0.54	1,400 ³	780	85	1	0.8	0.7	<0.5
10/18/03 ¹⁰	10.62	8.51	2.11	1,200 ³	640	42	0.8	<0.5	0.5	<0.5
01/22/0410	10.62	8.95	1.67	1,500 ³	440	18	<0.5	<0.5	<0.5	<0.5
04/23/04 ¹⁰	10.62	8.95	1.67	2,200 ³	410	10	<0.5	<0.5	<0.5	<0.5
07/23/04 ¹⁰	10.62	9.21	1.41	1,800 ³	400	6	<0.5	<0.5	<0.5	<0.5
10/22/0410	10.62	8.36	2.26	2,200 ³	150	2	<0.5	<0.5	<0.5	<0.5
01/28/0510	10.62	7.09	3.53	1,200 ³	55	8	<0.5	<0.5	<0.5	<0.5
04/26/0510	10.62	7.84	2.78	480 ³	<50	5	<0.5	<0.5	<0.5	<0.5
07/15/05 ¹⁰	10.62	8.12	2.50	610 ^{3,11}	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05 ¹⁰	10.62	8.07	2.55	920 ^{3,12}	<50	10	<0.5	<0.5	<0.5	<0.5
01/12/0610	10.62	6.98	3.64	960 ^{3,12}	<50	6	<0.5	<0.5	<0.5	<0.5
04/13/06 ¹⁰	10.62	7.04	3.58	1,200 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06 ¹⁰	10.62	7.13	3.49	1,200 ³	92	14	<0.5	<0.5	<0.5	<0.5
10/17/06 ¹⁰	10.62	7.64	2.98	990 ³	<50	3	<0.5	<0.5	<0.5	<0.5
01/16/07 ¹⁰	10.62	7.09	3.53	840 ³	83	4	<0.5	<0.5	<0.5	<0.5
04/17/07 ¹⁰	10.62	7.11	3.51	1,200 ³	57	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07 ¹⁰	10.62	7.41	3.21	1,100 ³	120	8	<0.5	<0.5	<0.5	<0.5
10/16/07 ¹⁰	10.62	7.55	3.07	750 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08 ¹⁰	10.62	6.98	3.64	1,700 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08 ¹⁰	10.62	7.36	3.26	1,100 ³	62	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08 ¹⁰	10.62	7.89	2.73	580 ³	93	3	<0.5	<0.5	<0.5	<0.5
10/15/0810	10.62	7.46	3.16	740 ³	56	0.7	<0.5	<0.5	0.8	<0.5

Table 1 Groundwater Monitoring Data and Analytical Results Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California

WELL ID/	TQC*	DTW	GWE	TPH-DRO	TPH-GRO	B	T	E	x	MTBE
DATE	(fl.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1 (cont)										
01/21/0910	10.62	7.19	3.43	3905	<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	820 ³	66	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2										
06/30/09 ¹	10.63	3.80	6.83	•=						-
07/03/0914	10.63	3.91	6.72	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	1.4
10/01/09 ¹⁴	10.63	4.11	6.52	<50 ³	<50	<0.5	<0.5	<0.5	< 0.5	-
01/19/10 ¹⁴	10.63	3.90	6.73	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	-
04/26/10 ¹⁴	10.63	4.08	6.55	< 50 ³	<50	<0.5	<0.5	<0.5	<0.5	14
MW-3										
06/30/09 ¹	10.72	4.61	6.11	-						-
07/03/09 ¹⁴	10.72	4.57	6.15	170 ³	310	1	<0.5	2	<0.5	-
10/01/09 ¹⁴	10.72	5.22	5.50	1,000 ³	52	<0.5	<0.5	<0.5	<0.5	
01/19/10 ¹⁴	10.72	4.84	5.88	1,800 ³	120	2	<0.5	<0.5	<0.5	-
04/26/10 ¹⁴	10.72	4.86	5.86	1,700 ³	170	2	<0.5	<0.5	<0.5	
MW-4										
06/30/09 ¹	11.40	6.02	5.38							
07/03/09 ¹⁴	11.40	5.85	5.55		-50					1977
10/01/09 ¹⁴	11.40	6.95	5.55 4.45	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	-
01/19/10 ¹⁴	11.40	6.22		370 ³	<50	<0.5	<0.5	<0.5	<0.5	-
01/19/10 04/26/10 ¹⁴	11.40	6.22 6.61	5.18	110 ³	<50	<0.5	<0.5	<0.5	<0.5	**
U*#/ #0/ IU	11.40	0.01	4.79	210 ^{5,17}	<50	<0.5	<0.5	<0.5	<0.5	-

Table 1 Groundwater Monitoring Data and Analytical Results Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California

WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	r in the second s	E	X	мтве
DATE	<i>(f</i> L)	(FL)	(msl)	(µg/L)	(#g/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-5					·····					
06/30/09	10.50	5.20	5.30	-		-		-		
07/03/0914	10.50	5.17	5.33	1103	930	33	2	0.6	3	
10/01/0914	10.50	5.66	4.84	2,5003	1,800	57	3	0.9	5	÷
01/19/1014	10.50	5.48	5.02	2,6003	2,200	74	4	1	5	
04/26/1014	10.50	5.91	4.59	1,7003	2,200	94	4	2	5	
				4,700					3	÷
CS-2										
07/30/01	-	-	~	140 ^{3,5}	<50	<0.50	<0.50	-0.50	<i>(</i>) <i>5</i> 0	~ ~ ~
10/08/01	-	-		53 ⁹	<50	<0.50	<0.50	<0.50 <0.50	<0.50	<2.5
01/13/02	-		-	<50 ³	<50	<0.50	<0.50	<0.50	<1.5 <1.5	<2.5
04/08/02		2		~30 77 ³	<50	<0.50	<0.50	<0.50	<1.5 <1.5	<2.5
07/31/02	**			<50 ³	<50	<0.50	<0.50	<0.50	<1.5 <1.5	<2.5 <2.5
10/15/02	-	÷.		<50 ³	<50	<0.50	<0.50	<0.50	<1.5	
01/14/03	-	-	-	<50 ³	<50	<0.50	<0.50	<0.50	<1.5	<2.5 <2.5
04/15/03	-	-	-	<50 ³	<50	<0.5	<0.50	<0.5	<1.5	<2.5 <2.5
07/16/03 ¹⁰	_		-	<50 ³	<50	<0.5	0.7	<0.5	0.6	<2.5 <0.5
10/18/0310	-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
01/22/04 ¹⁰	-	-	4	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
04/23/04 ¹⁰	- 6-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
07/23/04 ¹⁰	-			<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
10/22/0410	-	-	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/05 ¹⁰	-			<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/0510	-			<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
07/15/05 ¹⁰	-	-		<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05 ¹⁰		<u></u>	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	
01/12/06 ¹⁰	-	-	14	<50 ³	<50	<0.5	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
)4/13/06 ¹⁰			÷.	<50 ³	<50	<0.5	<0.5	<0.5	<0.5 <0.5	<0.5 <0.5
07/13/06 ¹⁰	÷	-	14	140 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
10/17/06 ¹⁰	1.1	-		<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
01/16/07 ¹⁰	-	4	-	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
04/17/07 ¹⁰	-	-	-4	<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5

Table 1 Groundwater Monitoring Data and Analytical Results Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California

WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	B	X	MTBE
DATE	(fl.)	(fl.)	(msl)	(µg/L)	(<i>ag/L</i>)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CS-2 (cont)										
07/17/07 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/16/07 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08 ¹⁰				85 ³	<50	<0.5	<0.5	<0.5	<0.5	< 0.5
04/16/08 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
)1/21/09 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/15/09 ¹⁰				86 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/03/09 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/01/09 ¹⁰				<50 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/19/10 ¹⁰				210 ^{3,16}	<50	<0.5	<0.5	<0.5	<0.5	<0.5
FRIP BLANK										
rb-lb										
01/23/01			-		<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
4/09/01				-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/30/01		-		÷	<50	<0.50	<0.50	< 0.50	<0.50	<2.5
QA										
0/08/01	-			-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
1/13/02	-	-	-		<50	<0.50	<0.50	<0.50	<1.5	<2.5
4/08/02	-			-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
07/31/02		-	-	÷* 1	<50	<0.50	<0.50	<0.50	<1.5	<2.5
0/15/02	+-			**	<50	<0.50	<0.50	<0.50	<1.5	<2.5
1/14/03		-			<50	<0.50	<0.50	<0.50	<1.5	<2.5
4/15/03		-	-		<50	<0.5	<0.5	<0.5	<1.5	<2.5
7/16/03 ¹⁰		-			<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/18/03 ¹⁰	0.000	-	-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/22/04 ¹⁰		-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/23/04 ¹⁰			-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/23/04 ¹⁰		-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/22/04 ¹⁰	-	-			<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1 Groundwater Monitoring Data and Analytical Results Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California

WELL ID/	TOC*	DTW	GWE	TPH-DRO	TPH-GRO	В	T	E	X	MTBE
ATE	(fL)	(ft.)	(msl)	(µg/L)	(ag/L)	(ng/L)	(µg/L)	(µg/L)	(Hg/L)	(µg/L)
A (cont)										
1/28/0510	-				<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/26/05 ¹⁰					<50	<0.5	< 0.5	<0.5	<0.5	< 0.5
7/15/05 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	< 0.5
0/14/05 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/12/06 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	< 0.5
4/13/0610					<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/13/06 ¹⁰		**			<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/17/0610					<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/16/07 ¹⁰		••			<50	<0.5	<0.5	<0.5	<0.5	< 0.5
4/17/07 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/17/07 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/16/07 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/16/0810					<50	<0.5	<0.5	<0.5	<0.5	< 0.5
4/16/08 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/16/08 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
0/15/0810					<50	< 0.5	<0.5	< 0.5	<0.5	< 0.5
1/21/09 ¹⁰					<5013	<0.5	<0.5	<0.5	<0.5	<0.5
4/15/09 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
7/03/09 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	< 0.5
0/01/09 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/19/10 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/26/10 ¹⁰					<50	<0.5	<0.5	<0.5	<0.5	<0.5

EXPLANATIONS:

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

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

* TOC elevations for all wells were surveyed on July 30, 2009, by Morrow Surveying. Vertical Datum is NAVD 88 from GPS observations. TOC elevations were surveyed on January 25, 2001, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).

- ¹ Well development performed.
- ² Laboratory report indicates unidentified hydrocarbons <C16.
- ³ Analyzed with silica gel cleanup.
- ⁴ Laboratory report indicates weathered gasoline C6-C12.
- ⁵ Laboratory report indicates discrete peaks.
- ⁶ Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.
- ⁷ Laboratory report indicates gasoline C6-C12.
- ⁸ Laboratory report indicates unidentified hydrocarbons C9-C24.
- ⁹ Analysis performed without silica gel cleanup although was requested on the Chain of Custody.
- ¹⁰ BTEX and MTBE by EPA Method 8260.
- ¹¹ Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel.
- ¹² Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.
- ¹³ Laboratory report indicates the original analysis was performed on an instrument where the ending calibration standard failed the method criteria. The sample was originally analyzed approximately 60 minutes after the LCS/LCSD. The LCS/LCSD showed good GRO recovery and the surrogate recovery for this sample was 85%. The sample was reanalyzed from a vial with headspace since only 1 vial was submitted. The results for the original and the reanalysis were similar. The reanalysis was reported.
- ¹⁴ BTEX by EPA Method 8260.
- ¹⁵ Laboratory report indicates DRO was detected in the method blank at a concentration of 38 µg/L. Results from the reextraction are within limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.
- ¹⁶ Laboratory report indicates DRO was detected in the method blank at a concentration of 38 μg/L. Results from the reextraction are within limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The DRO result for the reextract is 96 μg/L.
- ¹⁷ Laboratory report indicates DRO was detected in the method blank at a concentration of 47 μg/L. Results from the reextraction are within limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

Table 2 Groundwater Analytical Results - Metals Chevron #206127 (Former Signal Oil Marine Terminal) 2301-2337 Blanding Avenue Alameda, California																	
WELL ID/	(1)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)(k)	Arsenic (7,84)	Barium	(1) Beryllium	(7, ⁶⁴) (2, ⁶⁴)	(7/841)	(丁/8市) (丁/8市)	Copper	(1/g/L)	Malybdeaum	lag(L)	(μg/L)	Janes (1, 81)	(hg/L)	(7/ Vanadium	Sinc (Ag/L)	(T/ Mercury
MW-2 07/03/09	<9.7	<7.2	28.1	<1.4	<2.0	14.6	<2.1	<2.7	<6.9	<4.9	10.6	<8.9	<2.3	<14.0	12.6	11.6	<0.056
MW-3 07/03/09	<9.7	<7.2	143	<1.4	<2.0	8.5	<2.1	3.3	<6.9	<4.9	7.8	<8.9	<2.3	<14.0	13.8	18.8	<0.056
MW-4 07/03/09	-<9.7	<7.2	83.5	<1.4	<2.0	10.0	<2.1	<2.7	<6.9	<4.9	4.5	<8.9	<2.3	<14.0	6.3	15.8	<0.056
MW-5 07/03/09	<9.7	32.7	148	<1.4	<2.0	<3.4	<2.1	3.1	<6.9	<4.9	3.6	<8.9	<2.3	<14.0	<2.5	19.2	<0.056

EXPLANATIONS

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

ANALYTICAL METHODS:

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