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Second Quarter 2014 Annual Groundwater Monitoring Report

Former Chevron-branded
Service Station 94612
3616 San Leandro Street
Oakland, California
Case #: RO0000233

Stantec

Prepared for:
Chevron Environmental
Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583

Prepared by:
Stantec Consulting Services Inc.
15575 Los Gatos Blvd., Building C
Los Gatos, CA 95032

July 8, 2014

Carryl MacLeod
Project Manager
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Chevron Environmental Management Company
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San Ramon, CA 94583
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July 8, 2014

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Dear Mr. Detterman:

Attached for your review is the *Second Quarter 2014 Annual Groundwater Monitoring Report* for former Chevron-branded service station 94612, located at 3616 San Leandro Street in Oakland, California (**Case #:** RO0000233). This report was prepared by Stantec Consulting Services Inc. (Stantec), upon whose assistance and advice I have relied. I declare under penalty of perjury that the information and/or recommendations contained in the attached report are true and correct, to the best of my knowledge.

If you should have any further questions, please do not hesitate to contact me or the Stantec project manager, Travis Flora, at (408) 356-6124 ext. 238, or travis.flora@stantec.com.

Sincerely,

Carryl MacLeod

Carryl MacLeod
Project Manager

July 8, 2014

Attention: **Mr. Mark Detterman**
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502

Reference: **Second Quarter 2014 Annual Groundwater Monitoring Report**
Former Chevron-branded Service Station 94612
3616 San Leandro Street, Oakland, California
Case #: RO0000233

Dear Mr. Detterman:

On behalf of Chevron Environmental Management Company (Chevron), Stantec Consulting Services Inc. (Stantec) is pleased to submit the *Second Quarter 2014 Annual Groundwater Monitoring Report* for former Chevron-branded service station 94612, which was located at 3616 San Leandro Street, Oakland, Alameda County, California (the Site - shown on **Figure 1**). This report is presented in three sections: Site Background, Second Quarter 2014 Groundwater Monitoring and Sampling Program, and Conclusions and Recommendations.

SITE BACKGROUND

The Site is a former Chevron-branded service station located on the northern corner at the intersection of San Leandro Street and 37th Avenue in Oakland, California. The Site is currently comprised of two parcels (Alameda County Assessor's Parcel Number [APN] 33-2178-9-1 and APN 33-2178-10) owned by separate private parties. A one-story commercial building occupies the northwestern parcel, while the southeastern parcel is a paved parking lot. A Chevron-branded service station operated at the Site from approximately 1967 until 1976. Stantec reviewed Alameda County Environmental Health (ACEH) files, and specific dates of operational history are unclear.

Former Site features consisted of three gasoline underground storage tanks (USTs; two 10,000-gallon and one 5,000-gallon) located in the northwestern portion of the Site, a 1,000-gallon waste oil UST located in the northern portion of the Site, two fuel dispenser islands located in the southern portion of the Site, associated product piping, and a station building with two hydraulic hoists located in the center of the Site. In 1976, the service station was closed and all Site features were removed. The Site remained a vacant lot until the existing building was constructed in approximately 1988.

Land use near the Site consists of a mixture of commercial and residential properties. The Site is bounded to the northwest by a residence, to the northeast by a Bay Area Rapid Transit (BART) parking lot and elevated rail tracks, on the southeast by 37th Avenue followed by a commercial building, and on the southwest by San Leandro Street followed by a mixed commercial and residential area.

SECOND QUARTER 2014 GROUNDWATER MONITORING AND SAMPLING PROGRAM

Gettler-Ryan Inc. (G-R) performed the Second Quarter 2014 groundwater monitoring and sampling event on May 13, 2014. G-R's standard operating procedures (SOPs) and field data sheets are included in **Attachment A**. G-R gauged depth-to-groundwater in four Site wells (VH-1 and MW-2 through MW-4) prior to collecting groundwater samples for laboratory analysis. All four Site wells were sampled this quarter. G-R indicated well VH-1 was inaccessible with the sampling truck; therefore, purging was not conducted at well VH-1 prior to sample collection.

Investigation-derived waste (IDW) generated during the Second Quarter 2014 groundwater monitoring and sampling event was transported by Clean Harbors Environmental Services to Seaport Environmental in Redwood City, California.

Groundwater Elevation and Gradient

Well construction details and a screen interval assessment for each Site well are presented in **Table 1**. Wells MW-2 through MW-4 are currently screened across the prevailing groundwater table, while the groundwater elevation in well VH-1 is measured above the upper screen interval, and the entire screen interval is currently submerged. Current and historical groundwater elevation data are presented in **Table 2**. A groundwater elevation contour map (based on Second Quarter 2014 data) is shown on **Figure 2**. The direction of groundwater flow at the time of sampling was generally towards the southwest at an approximate hydraulic gradient ranging from 0.008 to 0.018 feet per foot (ft/ft). This is generally consistent with the historical direction of groundwater flow, as shown by the Rose Diagram on **Figure 3** illustrating the direction of groundwater flow from First Quarter 1993 to present.

Schedule of Laboratory Analysis

Groundwater samples were collected and analyzed for total petroleum hydrocarbons as gasoline range organics (TPH-GRO) using United States Environmental Protection Agency (US EPA) Method 8015B (SW-846) and benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds) and methyl *tertiary*-butyl ether (MtBE) using US EPA Method 8260B (SW-846). In addition, the groundwater sample collected from well MW-3 was analyzed for total petroleum hydrocarbons as diesel range organics (TPH-DRO) both with and without silica gel cleanup using US EPA Method 8015B (SW-846).

Groundwater Analytical Results

During Second Quarter 2014, groundwater samples were collected from four Site wells (VH-1 and MW-2 through MW-4). Current and historical groundwater analytical results are included in **Table 2** through **Table 6**. A figure showing the latest groundwater analytical data plotted on a Site map is included as **Figure 4**. A TPH-GRO isoconcentration map is shown on **Figure 5**. Isoconcentration maps were not developed for benzene and MtBE as concentrations were below California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs) for groundwater that is a current or potential source of drinking water or laboratory reporting limits (LRLs). An isoconcentration map was not developed for TPH-DRO as it was only analyzed at one well this quarter.

Certified laboratory analysis reports and chain-of-custody documents are presented as **Attachment B**. Hydrographs based on current and historical groundwater elevations and

analytical results are included in **Attachment C**. A summary of Second Quarter 2014 groundwater analytical results follows:

- **TPH-GRO** was detected in three Site wells this quarter, at concentrations of 390 micrograms per liter (µg/L; well VH-1), 1,200 µg/L (well MW-3), and 2,400 µg/L (well MW-2), which are within historical limits for each respective well.

- **TPH-DRO (with silica gel cleanup)** was detected in the one Site well in which it was analyzed this quarter (well MW-3), at a concentration of 140 µg/L, which is within historical limits for this well.

- **Benzene** was detected in one Site well this quarter, at a concentration of 0.8 µg/L (well MW-2), which is equal to the historical low for this well. In addition, the concentration in well VH-1 (below the LRL of 0.5 µg/L) is a historical low.

- **Toluene** was not detected above the LRL (0.5 µg/L) in any Site well sampled this quarter. The concentration in well MW-2 (below the LRL of 0.5 µg/L) is a historical low.

- **Ethylbenzene** was not detected above the LRL (0.5 µg/L) in any Site well sampled this quarter.

- **Total Xylenes** were not detected above the LRL (0.5 µg/L) in any Site well sampled this quarter. The concentration in well MW-2 (below the LRL of 0.5 µg/L) is a historical low.

- **MtBE** was detected in three Site wells this quarter, at concentrations of 1 µg/L (well MW-3) and 2 µg/L (wells VH-1 and MW-2). The concentration in well MW-3 is within historical limits, the concentration in well MW-2 is equal to the lowest detected concentration for the well, and the concentration in well VH-1 is a historical low.

CONCLUSIONS AND RECOMMENDATIONS

Concentrations were conservatively compared to ESLs for groundwater that is a current or potential source of drinking water, and TPH-GRO and TPH-DRO (with silica gel cleanup) were observed above ESLs as follows:

- TPH-GRO concentrations exceed the ESL of 100 µg/L in wells VH-1, MW-2, and MW-3; and
- The TPH-DRO concentration (with silica gel cleanup) exceeds the ESL of 100 µg/L in well MW-3.

Maximum concentrations of TPH-GRO, BTEX compounds, and MtBE are generally observed in well VH-1, located approximately 6 feet from the former gasoline USTs; however, between Second Quarter 2013 and Second Quarter 2014, concentrations of TPH-GRO and BTEX compounds in well VH-1 decreased by approximately one order of magnitude. During Second Quarter 2014, the maximum concentration of TPH-GRO was observed in well MW-2, located approximately 3 feet from the former southernmost dispenser island, and concentrations of BTEX compounds and MtBE were observed below ESLs or LRLs in all four Site wells. TPH-DRO (with silica gel cleanup) was detected above the ESL in the one well in which it is analyzed (well MW-3), located approximately 4 feet from the former waste oil UST.

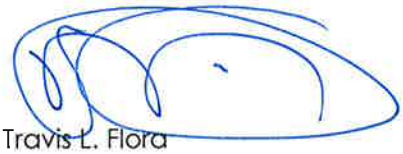
In an email dated January 24, 2014, ACEH requested a Site Conceptual Model (SCM) that identifies Site data gaps, evaluates potential conduits (utilities and wells), evaluates the Site

under the Low-Threat UST Case Closure Policy (LTCP), and includes a data gap work plan, as needed. Stantec submitted the *Site Conceptual Model and Data Gap Work Plan* to ACEH on February 28, 2014. In that report, Stantec concluded that the Site appears to satisfy LTCP criteria; however, as requested by ACEH, a scope of work was included for the advancement of two off-site soil borings for the purpose of describing lithology and the subsequent collection of groundwater samples to evaluate the down-gradient extent of petroleum hydrocarbons in groundwater within the coarse-grained soil layer reported at approximately 16 to 20 feet below ground surface (bgs).

In a letter dated May 6, 2014, ACEH generally concurred with the proposed scope of work, provided that modifications requested were addressed and incorporated during field implementation. Requested modifications included an updated well survey using California Department of Water Resources (DWR) and Alameda County Public Works (ACPW) databases, ensuring the off-site soil borings are positioned down-gradient of wells VH-1 and MW-2 along the predominant direction of groundwater flow, ensuring soil samples are collected from the borings and analyzed for signs of contamination and changes in lithology, and that special efforts and equipment are utilized to collect representative groundwater samples at a depth corresponding to the deep granular layer beneath the Site. Stantec has begun planning and scheduling the proposed investigation activities and a soil and groundwater investigation report will be submitted by September 26,, 2014.

Please feel free to contact me if you have any questions regarding the contents of this report.

Sincerely,
Stantec Consulting Services Inc.



Travis L. Flora
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Attachments:

Table 1 – Well Details / Screen Interval Assessment – Second Quarter 2014
Table 2 – Groundwater Monitoring Data and Analytical Results
Table 3 – Groundwater Analytical Results – Oxygenate Compounds
Table 4 – Groundwater Analytical Results – Metals and PPL Volatiles
Table 5 – Groundwater Analytical Results – PCBs
Table 6 – Dissolved Oxygen Levels

Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour Map – Second Quarter 2014
Figure 3 – Groundwater Flow Direction Rose Diagram – Second Quarter 2014
Figure 4 – Site Plan Showing Groundwater Concentrations – Second Quarter 2014
Figure 5 – TPH-GRO Isoconcentration Map – Second Quarter 2014

Attachment A – Gettler-Ryan Inc. Field Data Sheets and Standard Operating Procedures – Second Quarter 2014
Attachment B – Certified Laboratory Analysis Reports and Chain-of-Custody Documents
Attachment C – Hydrographs

cc:

Ms. Carryl MacLeod, Chevron Environmental Management Company, 6101 Bollinger Canyon Road, San Ramon, CA 94583 – Electronic Copy

Mr. Terry McIlraith, Vivian McIlraith Trust, 407 Castello Road, Lafayette, CA 94549

This document entitled Second Quarter 2014 Annual Groundwater Monitoring Report was prepared by Stantec Consulting Services Inc. for the account of Chevron Environmental Management Company. The material in it reflects Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec Consulting Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

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Mark Bare, P.G.
Senior Geologist

PROFESSIONAL GEOLOGIST
Mark Paul Bare
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TABLES

Table 1
Well Details / Screen Interval Assessment
Second Quarter 2014
Former Chevron-Branded Service Station 94612
3616 San Leandro Street, Oakland, California

Well ID	Date Installed	Well Type	Casing Diameter (inches)	Top of Casing (feet above msl)	Construction Well Depth (feet bgs)	Current Well Depth[1] (feet bgs)	Current Depth to Groundwater[1] (feet below TOC)	Screen Interval (feet bgs)	Screen Interval Assessment
VH-1	08/09/88	Monitoring	4	27.91	30.00	28.98	8.71	10-30	Depth-to-groundwater above screen interval.
MW-2	02/01/93	Monitoring	2	28.05	20.00	19.45	9.41	5-20	Depth-to-groundwater within screen interval.
MW-3	02/01/93	Monitoring	2	29.04	20.00	18.03	9.03	5-20	Depth-to-groundwater within screen interval.
MW-4	08/15/95	Monitoring	2	27.27	20.00	17.84	8.29	7-20	Depth-to-groundwater within screen interval.

Notes:
bgs = below ground surface
msl = mean sea level
TOC = top of casing
[1] = As measured prior to groundwater sampling on May 13, 2014.

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
VH-1												
08/10/88	--	13.00	--	--	--	11,000	3,300	200	520	540	--	--
06/01/89	--	10.32	--	--	--	15,000	2,200	120	540	310	--	--
09/15/89	--	15.69	--	--	--	5,600	1,900	90	350	160	--	--
12/08/89	--	14.77	--	--	--	11,000	1,900	69	270	99	--	--
03/07/91	--	11.26	--	--	--	4,500	820	39	120	77	--	--
09/24/91	--	12.98	--	--	--	3,300	520	19	39	27	--	--
01/08/92	--	13.77	--	--	--	5,000	600	34	81	76	--	--
04/20/92	--	8.18	--	--	--	7,400	670	60	110	140	--	--
03/26/93	27.85	6.71	21.14	--	--	4,900	600	40	72	94	--	--
05/27/93	27.85	8.58	19.27	--	--	13,000	1,600	120	230	220	--	--
08/18/93	27.85	10.46	17.39	--	--	2,700	210	10	8.1	18	--	--
11/03/93	27.85	12.57	15.28	--	--	4,600	680	42	35	68	--	--
02/10/94	27.85	9.08	18.77	--	--	1,900	260	19	22	29	--	--
05/12/94	27.85	8.09	19.76	--	--	2,000	390	28	3.9	29	--	--
08/26/94	27.85	10.75	17.10	--	--	4,900	500	<5.0	23	31	--	--
11/14/94	27.85	9.45	18.40	--	--	760	69	<2.0	<2.0	2.2	--	--
02/01/95	27.85	5.97	21.88	--	--	1,300	120	5.9	<0.5	13	--	--
05/12/95	27.85	7.71	20.14	--	--	4,400	460	31	45	49	--	--
08/22/95	27.85	9.26	18.59	--	--	2,900	310	15	28	32	--	--
12/19/95	27.85	8.80	19.05	--	--	930	53	<2.5	<2.5	<2.5	39	--
01/31/96	27.85	5.50	22.35	--	--	3,700	320	<10	41	40	180	--
04/30/96	27.85	8.04	19.81	--	--	3,900	270	<20	<20	<20	120	--
08/01/96	27.85	9.18	18.67	--	--	2,700	140	11	18	28	200	--
10/30/96	27.85	10.76	17.09	--	--	2,700	140	<12	<12	<12	280	--
02/07/97	27.85	8.10	19.75	--	--	220	13	0.6	<0.5	1.6	15	--
05/07/97	27.85	9.52	18.33	--	--	5,200	33	12	21	26	330	--
07/22/97	27.85	10.42	17.43	--	--	4,200	80	<10	16	24	400	--
11/03/97	27.85	11.00	16.85	--	--	2,400	150	6.8	6.5	9.5	510	--
01/28/98	27.85	7.10	20.75	--	--	850	69	4.8	5.0	11	38/48[12]	--
05/08/98	27.85	7.71	20.14	--	--	4,200	200	30	40	42	310/200[12]	--
07/29/98	27.85	9.45	18.40	--	--	3,800	54	10	27	30	35/290[12]	--
11/06/98	27.85	10.70	17.15	--	--	4,800	100	20	12	23	360/210[12]	--
02/09/99[5]	27.85	5.98	21.87	--	--	2,950	79.5	<10	<10	<10	435/312[12]	--
05/13/99	27.85	8.14	19.71	--	--	4,180	147	12.8	16.5	20.3	433/245[12]	--
09/07/99	27.85	9.91	17.94	--	--	2,750	57.6	<5.0	6.53	<5.0	297/233[12]	--
11/24/99	27.85	10.49	17.36	--	--	2,550	38	3.18	2.54	5.21	216[1,12]	--
02/25/00	27.85	6.65	21.20	--	--	120	2.7	<0.5	<0.5	<0.5	20.5/11.9[12]	--

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3616 San Leandro Street
Oakland, California

WELL ID/ DATE		TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
		Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
VH-1 (cont)													
05/10/00		27.85	8.09	19.76	--	--	1,400[8]	63	3.3	3.1	4.9	230/110[12]	--
7/31/00[11]		27.85	9.55	18.30	--	--	360[8]	22	2.7	1.6	3.1	100/88[12]	--
10/30/00[11]		27.85	9.94	17.91	--	--	987[10]	47.0	1.00	<0.500	1.80	153/130[12]	--
02/05/01		27.91	8.68	19.23	--	--	2,670	42.7	<5.00	<5.00	<5.00	225/160[12]	--
05/07/01[11]		27.91	8.30	19.61	--	--	1,800[6]	100	8.2	10	7.9	440/110[12]	--
08/06/01[11]		27.91	9.82	18.09	--	--	1,000[6]	67	6.1	2.1	7.1	270/140[12]	--
11/12/01[11]		27.91	10.62	17.29	--	--	220	1.2	<0.50	<0.50	<1.5	63/61[12]	--
02/11/02[11]		27.91	8.08	19.83	--	--	1,700	33	<5.0	6.3	3.8	64/52[12]	--
05/13/02[11]		27.91	8.70	19.21	--	--	2,700	54	4.1	5.6	6.2	100/80[12]	--
08/09/02[11]		27.91	9.41	18.50	--	--	2,400	37	2.4	1.2	3.4	86/89[12]	--
11/07/02[11]		27.91	10.57	17.34	--	--	150	1.3	<0.50	<0.50	<1.5	56/50[12]	--
02/04/03[11]		27.91	8.28	19.63	--	--	1,700	40	3.1	7.8	5.0	100/53[12]	--
05/05/03[11]		27.91	7.50	20.41	--	--	2,100	44	3.4	3.7	5.2	96/62[12]	--
09/06/03[11,14]		27.91	9.60	18.31	--	--	690	7	0.6	<0.5	0.6	59	--
11/14/03[11,14]		27.91	9.92	17.99	--	--	1,000	3	0.6	2	0.7	47	--
02/13/04[14,15]		27.91	7.93	19.98	--	--	2,400	30	2	4	3	47	--
05/13/04[14]		27.91	8.67	19.24	--	--	1,900	49	4	3	5	74	--
08/17/04[14]		27.91	9.65	18.26	--	--	1,800	11	1	0.9	2	58	--
11/10/04		27.91	INACCESSIBLE		--	--	--	--	--	--	--	--	--
02/08/05[14]		27.91	7.83	20.08	--	--	2,700	26	3	4	5	48	--
06/03/05[14]		27.91	8.20	19.71	--	--	3,100	40	5	6	9	45	--
08/05/05[14]		27.91	10.10	17.81	--	--	2,500	34	4	0.6	6	46	--
12/02/05[14]		27.91	8.98	18.93	--	--	3,500	69	7	2	8	57	--
03/03/06[14]	NP[18]	27.91	7.25	20.66	--	--	4,100	37	6	6	8	40	--
05/31/06[14]	NP[18]	27.91	8.17	19.74	--	--	4,100	33	5	3	8	34	--
08/18/06[14]		27.91	9.12	18.79	--	--	3,300	23	4	1	5	33	--
11/17/06[14]		27.91	9.27	18.64	--	--	3,200	18	3	0.6	3	33	--
02/09/07[14]	NP[18]	27.91	8.38	19.53	--	--	3,600	23	4	2	5	28	--
05/11/07[14]	NP[18]	27.91	8.38	19.53	--	--	3,200	14	3	1	5	26	--
08/10/07[14]	NP[18]	27.91	9.50	18.41	--	--	2,400	10	2	0.6	3	21	--
11/08/07[14]	NP[18]	27.91	9.66	18.25	--	--	3,000	10	2	0.5	2	18	--
02/07/08[14]	NP[18]	27.91	7.15	20.76	--	--	4,000	14	3	5	5	14	--
05/02/08[14]	NP[18]	27.91	8.95	18.96	--	--	3,000	14	3	2	4	17	--
07/31/08[14]	NP[18]	27.91	9.68	18.23	--	--	2,700	13	2	0.8	3	14	--
11/13/08[14]	NP[18]	27.91	10.18	17.73	--	--	2,500	6	1	<0.5	1	12	--
02/02/09[14]	NP[18]	27.91	9.91	18.00	--	--	4,000	7	1	<0.5	1	12	--
05/01/09[14]	NP[18]	27.91	9.16	18.75	--	--	3,900	20	3	3	6	15	--
08/10/09[14]	NP[18]	27.91	9.67	18.24	--	--	1,400	6	1	<0.5	1	11	--
01/29/10[14]	NP[18]	27.91	7.23	20.68	--	--	3,700	24	4	5	5	13	--

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID/ DATE		TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
	Groundwater ESL				100	100	100	1	40	30	20	5	100
VH-1 (cont)													
08/23/10[14]	NP[18]	27.91	9.28	18.63	--	--	3,600	18	3	2	4	9	--
08/22/11[14]		27.91	9.28	18.63	--	--	3,400	12	2	0.8	3	7	--
05/10/12[14]	NP[18]	27.91	8.26	19.65	--	--	3,100	12	3	2	4	6	--
05/08/13[14]	NP[18]	27.91	8.98	18.93	--	--	3,500	12	2	1	5	5	--
05/13/14[14]	**NP[18]**	**27.91**	**8.71**	**19.20**	**--**	**--**	**390**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2**	**--**
MW-2													
02/16/93		27.51	--	--	--	--	9,200	720	110	250	170	--	--
03/26/93		27.51	7.62	19.89	--	--	--	--	--	--	--	--	--
05/27/93		27.51	9.47	18.04	--	--	360	5.3	2.1	1.8	2.5	--	--
08/18/93		27.51	11.05	16.46	--	--	9,400	1,100	76	110	100	--	--
11/03/93		27.51	12.95	14.56	--	--	8,600	390	20	2.7	120	--	--
02/10/94		27.51	9.79	17.72	--	--	2,700	370	38	44	41	--	--
05/12/94		27.51	8.92	18.59	--	--	3,800	650	76	15	62	--	--
08/26/94		27.51	11.37	16.14	--	--	16,000	1,300	270	28	120	--	--
11/14/94		27.51	10.03	17.48	--	--	5,100	390	10	43	27	--	--
02/01/95		27.51	7.04	20.47	--	--	6,900	520	82	170	110	--	--
05/12/95		27.51	8.75	18.76	--	--	7,700	510	83	110	100	--	--
08/22/95		27.51	10.16	17.35	--	--	4,500	220	16	61	47	--	--
12/19/95		27.51	9.46	18.05	--	--	2,900	240	<10	19	18	220	--
01/31/96		27.51	5.60	21.91	--	--	3,900	320	18	72	39	<25	--
04/30/96		27.51	8.83	18.68	--	--	5,600	200	36	55	47	170	--
08/01/96		27.51	10.26	17.25	--	--	6,200	190	15	62	59	220	--
10/30/96		27.51	11.48	16.03	--	--	5,700	190	<25	67	36	260	--
02/07/97		27.51	9.40	18.11	--	--	8,300	210	34	70	59	330	--
05/07/97		27.51	9.94	17.57	--	--	6,900	190	12	38	37	530	--
07/22/97		27.51	11.15	16.36	--	--	10,000	18	25	62	41	630	--
11/03/97		27.51	11.58	15.93	--	--	6,500	260	8.5	26	14	590/9.6[4,12]	--
01/28/98		27.51	8.13	19.38	--	--	6,700	65	13	67	54	280/94[12]	--
05/08/98		27.51	8.62	18.89	--	--	5,500	91	38	43	61	220/62[12]	--
07/29/98		27.51	10.45	17.06	--	--	3,600	41	8.9	3.6	14	16/94[12]	--
11/06/98		27.51	11.62	15.89	--	--	6,900	77	<5.0	14	17	290/110[12]	--
02/09/99[5]		27.51	6.90	20.61	--	--	8,070	75.6	<10	<10	<10	397/144[12]	--
05/13/99		27.51	9.30	18.21	--	--	5,890	120	<5.0	12.5	26.6	401/69.4[12]	--
09/07/99		27.51	10.94	16.57	--	--	5,820	41.2	<5.0	14.6	<5.0	260/145[12]	--
11/24/99		27.51	11.53	15.98	--	--	5,940	40.9	<10	10.8	<10	120[1,12]	--
02/25/00		27.51	6.51	21.00	--	--	6,370	101	9.37	39.8	33.2	321/121[12]	--
05/10/00		27.51	9.02	18.49	--	--	6,100[8]	110	13	27	31	560/120[12]	--

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
MW-2 (cont)												
07/31/00[11]	27.51	10.33	17.18	--	--	3,000[8]	75	14	28	28	200/130[12]	--
10/30/00[11]	27.51	10.56	16.95	--	--	6,810[10]	162	<5.00	8.05	<15.0	372/140[12]	--
02/05/01[11]	28.05	9.58	18.47	--	--	5,860	28.4	6.86	16.2	11.8	285/140[12]	--
05/07/01[11]	28.05	9.20	18.85	--	--	4,700[6]	120	15	30	42	540/88[12]	--
08/06/01[11]	28.05	10.74	17.31	--	--	3,700[6]	120	<20	28	33	490/110[12]	--
11/12/01[11]	28.05	11.45	16.60	--	--	7,000	29	<10	27	22	93/98[12]	--
02/11/02[11]	28.05	9.06	18.99	--	--	5,900	43	15	24	27	90/86[12]	--
05/13/02[11]	28.05	9.64	18.41	--	--	5,500	26	5.2	23	26	120/47[12]	--
08/09/02[11]	28.05	10.29	17.76	--	--	5,700	26	3.7	26	50	100/69[12]	--
11/07/02[11]	28.05	11.27	16.78	--	--	5,900	33	4.4	23	21	<100/69[12]	--
02/04/03[11]	28.05	9.13	18.92	--	--	5,400	22	4.7	13	14	<50/55[12]	--
05/05/03[11]	28.05	8.38	19.67	--	--	4,500	23	4.7	12	15	<50/31[12]	--
09/06/03[11,14]	28.05	10.40	17.65	--	--	3,200	13	2	7	7	54	--
11/14/03[11,14]	28.05	10.62	17.43	--	--	4,000	11	2	7	6	55	--
02/13/04[14,15]	28.05	8.79	19.26	--	--	6,200	6	2	8	8	31	--
05/13/04[14]	28.05	9.56	18.49	--	--	3,200	6	3	13	11	34	--
08/17/04[14]	28.05	10.48	17.57	--	--	4,300	7	1	6	5	46	--
11/10/04[14]	28.05	9.53	18.52	--	--	3,000	5	1	6	7	37	--
02/08/05[14]	28.05	8.71	19.34	--	--	4,700	3	2	10	8	22	--
06/03/05[14]	28.05	9.01	19.04	--	--	4,100	4	3	15	11	23	--
08/05/05[14]	28.05	9.76	18.29	--	--	3,500	4	1	<0.5	8	23	--
12/02/05[14]	28.05	9.64	18.41	--	--	2,900	4	2	3	3	24	--
03/03/06[14]	28.05	8.04	20.01	--	--	3,800	5	6	4	5	9	--
05/31/06[14]	28.05	9.01	19.04	--	--	4,600	2	1	3	3	8	--
08/18/06[14]	28.05	9.91	18.14	--	--	4,300	2	1	11	7	14	--
11/17/06[14]	28.05	9.95	18.10	--	--	4,600	2	0.7	7	4	14	--
02/09/07[14]	28.05	9.10	18.95	--	--	3,600	1	0.6	3	3	9	--
05/11/07[14]	28.05	9.12	18.93	--	--	3,600	2	1	5	5	8	--
08/10/07[14]	28.05	10.20	17.85	--	--	3,600	1	1	7	4	9	--
11/08/07[14]	28.05	10.35	17.70	--	--	3,600	2	0.7	5	2	7	--
02/07/08[14]	28.05	7.92	20.13	--	--	5,000	1	1	5	3	5	--
05/02/08[14]	28.05	9.49	18.56	--	--	3,300	1	0.9	3	2	4	--
07/31/08[14]	28.05	10.35	17.70	--	--	3,000	2	0.6	2	1	5	--
11/13/08[14]	28.05	10.81	17.24	--	--	3,800	2	0.5	2	0.8	4	--
02/02/09[14]	28.05	9.97	18.08	--	--	3,500	2	0.6	2	1	5	--
05/01/09[14]	28.05	9.70	18.35	--	--	3,900	2	1	4	3	4	--
08/10/09[14]	28.05	10.38	17.67	--	--	3,100	2	0.8	2	1	4	--
01/29/10[14]	28.05	7.98	20.07	--	--	3,200	1	0.8	2	1	5	--
08/23/10[14]	28.05	10.03	18.02	--	--	3,500	1	0.6	1	0.7	3	--

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WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
MW-2 (cont)												
08/22/11[14]	28.05	9.73	18.32	--	--	3,700	1	0.6	1	0.9	3	--
05/10/12[14]	28.05	8.95	19.10	--	--	2,600	0.8	0.8	1	1	2	--
05/08/13[14]	28.05	9.66	18.39	--	--	2,800	0.9	0.5	0.5	0.7	2	--
05/13/14[14]	**28.05**	**9.41**	**18.64**	**--**	**--**	**2,400**	**0.8**	**<0.5**	**<0.5**	**<0.5**	**2**	**--**
MW-3												
02/16/93	28.50	--	--	--	--	3,500	<0.5	8.1	4.6	7.7	--	--
03/26/93	28.50	7.18	21.32	--	--	--	--	--	--	--	--	--
05/27/93	28.50	9.33	19.17	--	--	4,200	580	84	150	100	--	--
08/18/93	28.50	12.00	16.50		1,400	910	12	3.7	6.2	3.8	--	<5,000
11/03/93	28.50	13.29	15.21	--	--	5,300	29	1.9	0.6	27	--	--
02/10/94	28.50	9.63	18.87	--	<50	63	<0.5	0.7	<0.5	<0.5	--	--
05/12/94	28.50	8.77	19.73	--	84	<50	<0.5	0.5	<0.5	<0.5	--	--
08/26/94	28.50	11.42	17.08	--	--	2,100	12	<0.5	5.0	0.5	--	--
11/14/94	28.50	10.07	18.43	--	--	140	0.78	<0.5	<0.5	<0.5	--	--
02/01/95	28.50	6.29	22.21	--	<50	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/95	28.50	8.07	20.43	--	540[2]	330	13	1.1	1.9	0.69	--	--
08/22/95	28.50	9.95	18.55	--	550[2]	980	32	<1.0	<1.0	<1.0	--	--
12/19/95	28.50	9.40	19.10	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/31/96	28.50	5.05	23.45	--	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/30/96	28.50	8.40	20.10	--	240[2]	320	2.4	<0.5	0.75	<0.5	7.8	--
08/01/96	28.50	9.80	18.70	--	470[2]	980	9.6	<0.5	0.98	2.2	54	--
10/30/96	28.50	11.48	17.02	--	760[2]	2,000	14	<10	<10	<10	140	--
02/07/97	28.50	8.60	19.90	--	61[2]	200[2]	<0.5	<0.5	<0.5	<0.5	8.9	--
05/07/97	28.50	9.01	19.49	--	550[2]	3,500	14	3.9	3.6	8.0	160	--
07/22/97	28.50	11.12	17.38	--	800[2]	3,500	55	<10	<10	<10	150	--
11/03/97	28.50	11.51	16.99	--	910[2]	4,100	140	<5.0	<5.0	<5.0	380	--
01/28/98	28.50	7.34	21.16	--	--	1,100	24	<1.2	<1.2	2.8	33/6.1[12]	--
05/08/98	28.50	8.06	20.44	--	250[2]	990	3.6	7.7	0.7	2.2	37/7.5[12]	--
07/29/98	28.50	10.25	18.25	--	290[2]	1,200	13	<0.5	<0.5	1.4	11/28[12]	--
11/06/98	28.50	11.39	17.11	--	390[2]	2,600	5.3	<2.5	<2.5	3.0	91/41[12]	--
02/09/99[5]	28.50	6.10	22.40	--	184[2]	406	<1.0	4.03	<1.0	<1.0	17.7/1.97[12]	--
05/13/99	28.50	9.12	19.38	--	--	615	13.8	1.05	<0.5	<0.5	43.5/21.2[12]	--
09/07/99	28.50	10.73	17.77	--	528[2]	2,710	<5.0	<5.0	<5.0	<5.0	96.3/57.9[12]	--
11/24/99	28.50	11.13	17.37	--	1,070[2]	5,530	<5.0	<5.0	5.59	<5.0	66[1,12]	--
02/25/00	28.50	6.28	22.22	--	--	189	4.68	<0.5	<0.5	<0.5	11.9/<2.0[12]	--
03/01/00	28.50	6.70	21.80	--	380[2]	--	--	--	--	--	--	--
05/10/00	28.50	8.60	19.90	--	830[7]	1,600[6]	22	<10	<10	<10	100/51[12]	--

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	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
MW-3 (cont)												
07/31/00[11]	28.50	10.07	18.43	--	490[7]	2,200[6]	76	10	<5.0	13	230/52[12]	--
10/30/00[11]	28.50	10.53	17.97	--	580[9]	3,320[10]	<5.00	<5.00	<5.00	<15.0	147/64[12]	--
02/05/01[11]	29.04	9.26	19.78	--	--	3,960	<5.00	6.02	<5.00	<5.00	159/70[12]	--
05/07/01[11]	29.04	8.75	20.29	--	--	2,800[6]	61	12	<10	20	230/49[12]	--
05/10/01[11]	29.04	8.83	20.21	--	390[13]	--	--	--	--	--	--	--
08/06/01[11]	29.04	10.45	18.59	--	870[7]	1,600[6]	39	14	1.3	5.6	130/43[12]	--
11/12/01[11]	29.04	11.22	17.82	--	1,400	3,100	3.6	23	2.3	5.6	40/46[12]	--
02/11/02[11]	29.04	8.38	20.66	--	700	4,000	10	<5.0	4.2	5.5	44/42[12]	--
05/13/02[11]	29.04	9.20	19.84	--	730	2,500	18	<5.0	<5.0	5.2	44/32[12]	--
08/09/02[11]	29.04	10.17	18.87	--	560	2,700	17	<5.0	<5.0	<10	45/33[12]	--
11/07/02[11]	29.04	11.13	17.91	--	660	2,600	24	<5.0	2.0	4.8	51/37[12]	--
02/04/03[11]	29.04	8.60	20.44	--	370	2,200	13	1.5	2.7	5.0	<50/24[12]	--
05/05/03[11]	29.04	7.82	21.22	--	580	2,100	14	1.8	2.0	3.9	<20/19[12]	--
09/06/03[11,14]	29.04	10.25	18.79	--	780	1,800	2	0.6	0.6	1	28	--
11/14/03[11,14]	29.04	10.52	18.52	--	860	2,000	1	0.6	0.6	0.9	30	--
02/13/04[14,15]	29.04	8.28	20.76	--	590	3,600	1	0.6	1	2	21	--
05/13/04[14]	29.04	9.17	19.87	--	670	1,600	1	<0.5	0.5	1	20	--
08/17/04[14]	29.04	10.25	18.79	--	900	2,500	1	<0.5	<0.5	0.7	25	--
11/10/04[14]	29.04	9.23	19.81	--	780	1,500	1	0.6	0.5	1	27	--
02/08/05[14]	29.04	8.12	20.92	--	530	2,500	1	0.6	2	3	11	--
06/03/05[14]	29.04	8.57	20.47	--	600	1,700	1	<0.5	0.7	1	9	--
08/05/05[14]	29.04	10.60	18.44	--	530[16]	980	0.6	<0.5	<0.5	0.8	9	--
12/02/05[14]	29.04	9.58	19.46	--	1,400[17]	2,400	1	2	0.8	1	7	--
03/03/06[14]	29.04	7.58	21.46	--	530	2,300	0.8	1	<0.5	1	4	--
05/31/06[14]	29.04	8.53	20.51	--	480	2,700	0.6	<0.5	<0.5	0.8	4	--
08/18/06[14]	29.04	9.71	19.33	--	410	2,700	<0.5	<0.5	<0.5	0.6	6	--
11/17/06[14]	29.04	9.81	19.23	--	390	2,600	<0.5	<0.5	<0.5	1	4	--
02/09/07[14]	29.04	8.88	20.16	--	640	2,100	<0.5	<0.5	<0.5	1	3	--
05/11/07[14]	29.04	8.71	20.33	--	350	1,400	<0.5	<0.5	<0.5	2	2	--
08/10/07[14]	29.04	9.98	19.06	--	340	1,300	<0.5	<0.5	<0.5	1	2	--
11/08/07[14]	29.04	10.11	18.93	--	440	1,400	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/08[14]	29.04	7.28	21.76	--	320	2,100	<0.5	0.7	1	2	0.7	--
05/02/08[14]	29.04	9.18	19.86	--	260	1,300	<0.5	<0.5	<0.5	<0.5	2	--
07/31/08[14]	29.04	10.13	18.91	--	500	2,900	<0.5	<0.5	<0.5	<0.5	1	--
11/13/08[14]	29.04	10.58	18.46	--	880	1,800	<0.5	<0.5	<0.5	<0.5	2	--
02/02/09[14]	29.04	9.58	19.46	--	310[19]	2,000	<0.5	<0.5	<0.5	<0.5	2	--
05/01/09[14]	29.04	9.40	19.64	--	51[20]	1,500	<0.5	<0.5	<0.5	<0.5	2	--
08/10/09[14]	29.04	10.21	18.83	--	470	1,300	<0.5	<0.5	<0.5	<0.5	3	--
01/29/10[14]	29.04	7.39	21.65	--	420	2,600	<0.5	<0.5	2	1	1	--

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	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
MW-3 (cont)												
08/23/10[14]	29.04	9.70	19.34	--	410	2,000	<0.5	<0.5	<0.5	<0.5	2	--
08/22/11[14]	29.04	9.96	19.08	<41/<40[21]	500/250[21]	2,500	<0.5	<0.5	<0.5	<1	2	--
05/10/12[14]	29.04	8.50	20.54	--	350/160[21]	1,300	<0.5	<0.5	<0.5	<0.5	1	--
05/08/13[14]	29.04	9.40	19.64	--	460/140[21,22]	1,700	<0.5	<0.5	<0.5	<0.5	2	--
05/13/14[14]	**29.04**	**9.03**	**20.01**	**--**	**200/140[21,22]**	**1,200**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**1**	**--**
MW-4												
08/22/95	27.27	9.11	18.16	--	--	9,600	100	<10	<10	<10	--	--
12/19/95	27.27	8.30	18.97	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/31/96	27.27	5.60	21.67	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/30/96	27.27	7.00	20.27	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/01/96	27.27	9.15	18.12	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/30/96	27.27	10.74	16.53	--	--	110	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/07/97	27.27	7.80	19.47	--	--	80	<0.5	<0.5	<0.5	<0.5	4.1	--
05/07/97	27.27	5.85	21.42	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
07/22/97	27.27	10.05	17.22	--	--	150	<0.5	<0.5	<0.5	<0.5	<2.5	--
11/03/97	27.27	10.72	16.55	--	--	52	0.9	<0.5	<0.5	<0.5	--[3]	--
01/28/98	27.27	6.51	20.76	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0[12]	--
05/08/98	27.27	7.02	20.25	--	--	56	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0[12]	--
07/29/98	27.27	8.95	18.32	--	--	<50	0.9	<0.5	<0.5	<0.5	<2.5/<2.0[12]	--
11/06/98	27.27	10.59	16.68	--	--	72	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0[12]	--
02/09/99	27.27	5.86	21.41	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0/<1.1[12]	--
05/13/99	27.27	7.95	19.32	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0/<2.0[12]	--
09/07/99	27.27	9.48	17.79	--	--	70.2	<0.5	<0.5	<0.5	<0.5	<2.0/<1.0[12]	--
11/24/99	27.27	10.05	17.22	--	--	227	<0.5	<0.5	<0.5	<0.5	<0.5[12]	--
02/25/00	27.27	INACCESSIBLE		--	--	--	--	--	--	--	--	--
03/01/00	27.27	6.17	21.10	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0[12]	--
05/10/00	27.27	INACCESSIBLE - CAR PARKED OVER WELL				--	--	--	--	--	--	--
07/31/00	27.27	9.37	17.90	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0[12]	--
10/30/00	27.27	9.47	17.80	--	--	54.0[10]	<0.500	<0.500	<0.500	<1.50	<2.50/<2.0[12]	--
02/05/01	27.27	INACCESSIBLE - CAR PARKED OVER WELL				--	--	--	--	--	--	--
05/07/01	27.27	7.81	19.46	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0[12]	--
08/06/01	27.27	9.78	17.49	--	--	<50	1.1	0.52	<0.50	1.1	6.0/<2.0[12]	--
11/12/01	27.27	10.41	16.86	--	--	93	<0.50	<0.50	<0.50	<1.5	<2.5/<2[12]	--
02/11/02	27.27	7.64	19.63	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[12]	--
05/13/02	27.27	8.32	18.95	--	--	54	<0.50	0.84	<0.50	<1.5	<2.5/<2[12]	--
08/09/02	27.27	9.25	18.02	--	--	54	<0.50	<0.50	<0.50	<1.5	<2.5/<2[12]	--
11/07/02	27.27	10.42	16.85	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[12]	--

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
MW-4 (cont)												
02/04/03	27.27	7.75	19.52	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<0.5[12]	--
05/05/03	27.27	6.90	20.37	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5/<0.5[12]	--
09/06/03[14]	27.27	9.50	17.77	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/14/03[14]	27.27	9.80	17.47	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/13/04[14]	27.27	7.36	19.91	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/13/04[14]	27.27	8.28	18.99	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/17/04[14]	27.27	9.63	17.64	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/10/04[14]	27.27	8.46	18.81	--	--	52	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/08/05[14]	27.27	7.20	20.07	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/03/05[14]	27.27	7.61	19.66	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/05/05[14]	27.27	9.44	17.83	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/02/05[14]	27.27	8.35	18.92	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/03/06[14]	27.27	6.45	20.82	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/31/06[14]	27.27	7.51	19.76	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/18/06[14]	27.27	8.42	18.85	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/17/06[14]	27.27	8.96	18.31	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/09/07[14]	27.27	7.73	19.54	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/11/07[14]	27.27	7.60	19.67	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/10/07[14]	27.27	9.01	18.26	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/08/07[14]	27.27	9.26	18.01	--	--	<50	<0.5	<0.5	<0.5	1	1	--
02/07/08[14]	27.27	6.38	20.89	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/02/08[14]	27.27	8.12	19.15	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
07/31/08[14]	27.27	9.28	17.99	--	--	75	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/13/08[14]	27.27	9.93	17.34	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/02/09[14]	27.27	9.02	18.25	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/01/09[14]	27.27	8.29	18.98	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/10/09[14]	27.27	9.50	17.77	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
01/29/10[14]	27.27	6.57	20.70	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/23/10[14]	27.27	8.96	18.31	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/22/11[14]	27.27	8.85	18.42	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/10/12[14]	27.27	7.55	19.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/08/13[14]	27.27	8.58	18.69	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/13/14[14]	**27.27**	**8.29**	**18.98**	**--**	**--**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**
TRIP BLANK												
05/27/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
08/18/93	--	--	--	--	1,400	<50	<0.5	<0.5	<0.5	<1.5	--	<5,000
11/03/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

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WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TOG (µg/L)
	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
TRIP BLANK (cont)												
02/10/94	--	--	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/94	--	--	--	--	84	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/14/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/22/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/19/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/31/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/30/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/01/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
10/30/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/07/97	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
05/07/97	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
07/22/97	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/28/98	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0[12]	--
05/08/98	--	--	--	--	--	--	--	--	--	--	<2.0[12]	--
07/29/98	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0[12]	--
11/06/98	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/09/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--
05/13/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0/<2.0[12]	--
09/07/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--
11/24/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/25/00	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/01/00	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
05/10/00	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
07/31/00	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
10/30/00	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.50	<2.50	--
02/05/01	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--
05/07/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
05/10/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
08/06/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
QA				--								
11/12/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
02/11/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
05/13/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
08/09/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
11/07/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
02/04/03	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--

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	Groundwater ESL			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**	**100**
QA (cont)				--								
05/05/03	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
09/06/03[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/14/03[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/13/04[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/13/04[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/17/04[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/10/04[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/08/05[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/03/05[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/05/05[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/02/05[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/03/06[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/31/06[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/18/06[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/17/06[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/09/07[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/11/07[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/10/07[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/08/07[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/08[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/02/08[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
07/31/08[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/13/08[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/02/09[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/01/09[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/10/09[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/08/13[14]	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/13/14[14]	**--**	**--**	**--**	**--**	**--**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**

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EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 10, 2000 were compiled from reports prepared by Blaine Tech Services, Inc.
Groundwater monitoring data and laboratory analytical results from May 10, 2000 to May 10, 2012 were provided by Gettler-Ryan Inc.
Current groundwater monitoring data was provided by Gettler-Ryan Inc. Current laboratory analytical results were provided by Eurofins Lancaster Laboratories.

TOC = Top of Casing
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Mean sea level
DTW = Depth to Water
TPH = Total Petroleum Hydrocarbons
MO = Motor Oil
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MtBE = Methyl tertiary-butyl ether
TOG = Total Oil and Grease
(µg/L) = Micrograms per liter
NP = No purge
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank

ESL = California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Level for groundwater that is a current or potential source of drinking water

* TOC elevations were re-surveyed on March 8, 2001, by Virgil Chavez Land Surveying. The benchmark for the survey was a City of Oakland benchmark, being a cut square top of curb at the centerline return at the northwest corner of East 14th and 37th Avenue, (Benchmark Elevation = 38.21 feet, NGVD 29).

[1] Lab could not get a good ion chromatogram match for MtBE. See laboratory report.

[2] Chromatogram pattern indicates an unidentified hydrocarbon.

[3] No value for MtBE could be determined; see lab report for analyses.

[4] Confirmation run.

[5] ORC was installed.

[6] Laboratory report indicates gasoline C6-C12.

[7] Laboratory report indicates unidentified hydrocarbons <C16.

[8] Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.

[9] Laboratory report indicates unidentified hydrocarbons >C16.

[10] Laboratory report indicates hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

[11] ORC in well.

[12] MtBE by EPA Method 8260.

[13] Laboratory report indicates unidentified hydrocarbons C9-C17.

[14] BTEX and MtBE by EPA Method 8260.

[15] ORC removed from well.

[16] Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It eludes in the TPH-DRO range earlier and later than #2 fuel.

[17] Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It eludes in the TPH-DRO range earlier than #2 fuel.

[18] No purge; unable to access well with truck.

[19] Laboratory report indicates the LCS/LCSD recovery for the TPH-DRO analysis is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.

[20] Laboratory report indicates the surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction. Therefore, all results are reported from the original extract. The TPH-DRO result for the reextraction was 190 ug/L.

[21] Analyzed with silica gel cleanup.

[22] Laboratory report indicates the reverse surrogate, capric acid, is present at <1%.

Table 3
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID	DATE	ETHANOL *(µg/L)*	TBA *(µg/L)*	DIPE *(µg/L)*	EtBE *(µg/L)*	TAME *(µg/L)*
Groundwater ESL		**NE**	**12**	**NE**	**NE**	**NE**
VH-1	02/05/01	<500	<50	<2.0	<2.0	<2.0
MW-2	02/05/01	<500	<50	<2.0	<2.0	<2.0
MW-3	02/05/01	<500	<50	<2.0	<2.0	<2.0
	08/22/11	<50	<5	<0.5	<0.5	<0.5

Table 3
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

EXPLANATIONS:

TBA = Tertiary-Butyl Alcohol
DIPE = Di-Isopropyl Ether
EtBE = Ethyl Tertiary-Butyl Ether
TAME = Tertiary-Amyl Methyl Ether
(µg/L) = Micrograms per liter
-- = Not Analyzed
ESL = California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Level for groundwater that is a current or potential source of drinking water
NE = ESL not established

ANALYTICAL METHOD:
EPA Method 8260 for Oxygenate Compounds

Table 4
Groundwater Analytical Results - Metals and PPL Volatiles
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID/ DATE	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)	n-Butylbenzene (µg/L)	sec-Butylbenzene (µg/L)	tert-Butylbenzene (µg/L)	Naphthalene (µg/L)
Groundwater ESL	**0.25**	**50**	**2.5**	**8.2**	**81**	**NE**	**NE**	**NE**	**6.1**
MW-3									
08/22/11	2.6	173	8.3	308	123	3	3	4	2

EXPLANATIONS:

(µg/L) = Micrograms per liter
PPL = priority pollutant list
ESL = California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Level for groundwater that is a current or potential source of drinking water
NE = ESL not established

Only metals and PPL volatiles with historically detected concentrations are shown.

ANALYTICAL METHODS:

PPL volatiles by EPA Method 8260B
Wear metals by EPA Method 6010B

Table 5
Groundwater Analytical Results - PCBs
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID/ DATE	PCB- 1016 (µg/L)	PCB- 1221 (µg/L)	PCB- 1232 (µg/L)	PCB- 1242 (µg/L)	PCB- 1248 (µg/L)	PCB- 1254 (µg/L)	PCB- 1260 (µg/L)
MW-3							
08/22/11	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.15

EXPLANATIONS:

(µg/L) = Micrograms per liter
PCBs = Polychlorinated Biphenyls

ANALYTICAL METHODS:

PCBs by EPA Method 8082

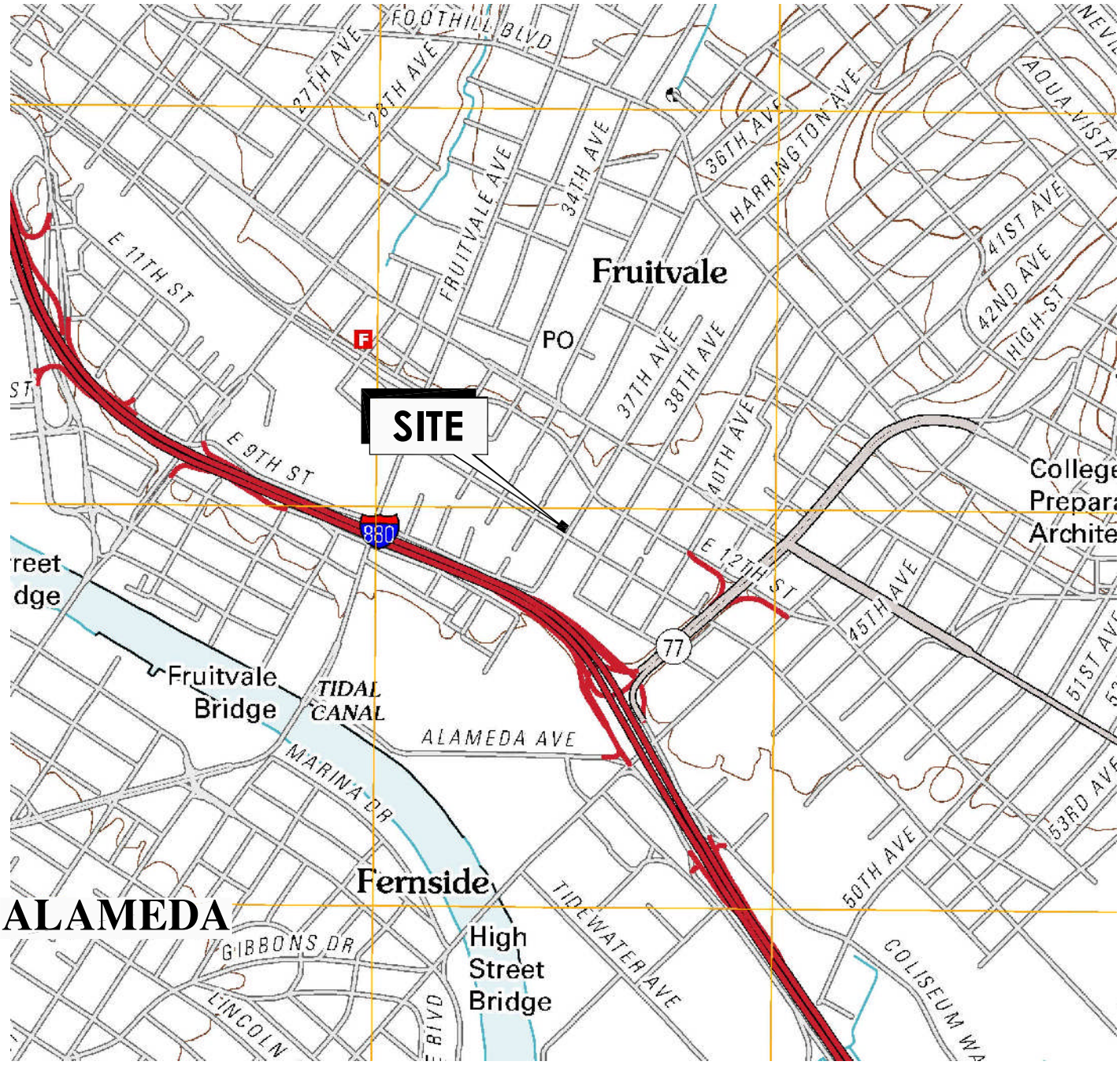
Table 6
Dissolved Oxygen Levels
Former Chevron-branded Service Station 94612
3616 San Leandro Street
Oakland, California

WELL ID	DATE	PRE-PURGE D.O. *(mg/L)*
VH-1	05/10/00	0.90
	07/31/00	1.25
	10/30/00	1.97
	05/07/01	1.10
	08/06/01	1.40
	11/12/01	0.90
	02/11/02	1.10
	05/13/02	0.70
MW-2	05/10/00	0.57
	07/31/00	1.26
	10/30/00	1.25
	05/07/01	0.90
	08/06/01	1.10
	11/12/01	0.80
	02/11/02	0.60
	05/13/02	0.80
MW-3	05/10/00	1.56
	07/31/00	1.46
	10/30/00	1.18
	05/07/01	0.70
	08/06/01	0.90
	11/12/01	0.50
	02/11/02	0.80
	05/13/02	1.80
MW-4	07/31/00	0.64
	10/30/00	0.97
	05/07/01	0.50
	08/06/01	0.70
	11/12/01	1.00
	02/11/02	1.00
	05/13/02	2.90

EXPLANATIONS:

D.O. = Dissolved Oxygen
(mg/L) = Milligrams per liter
-- = Not Measured

FIGURES

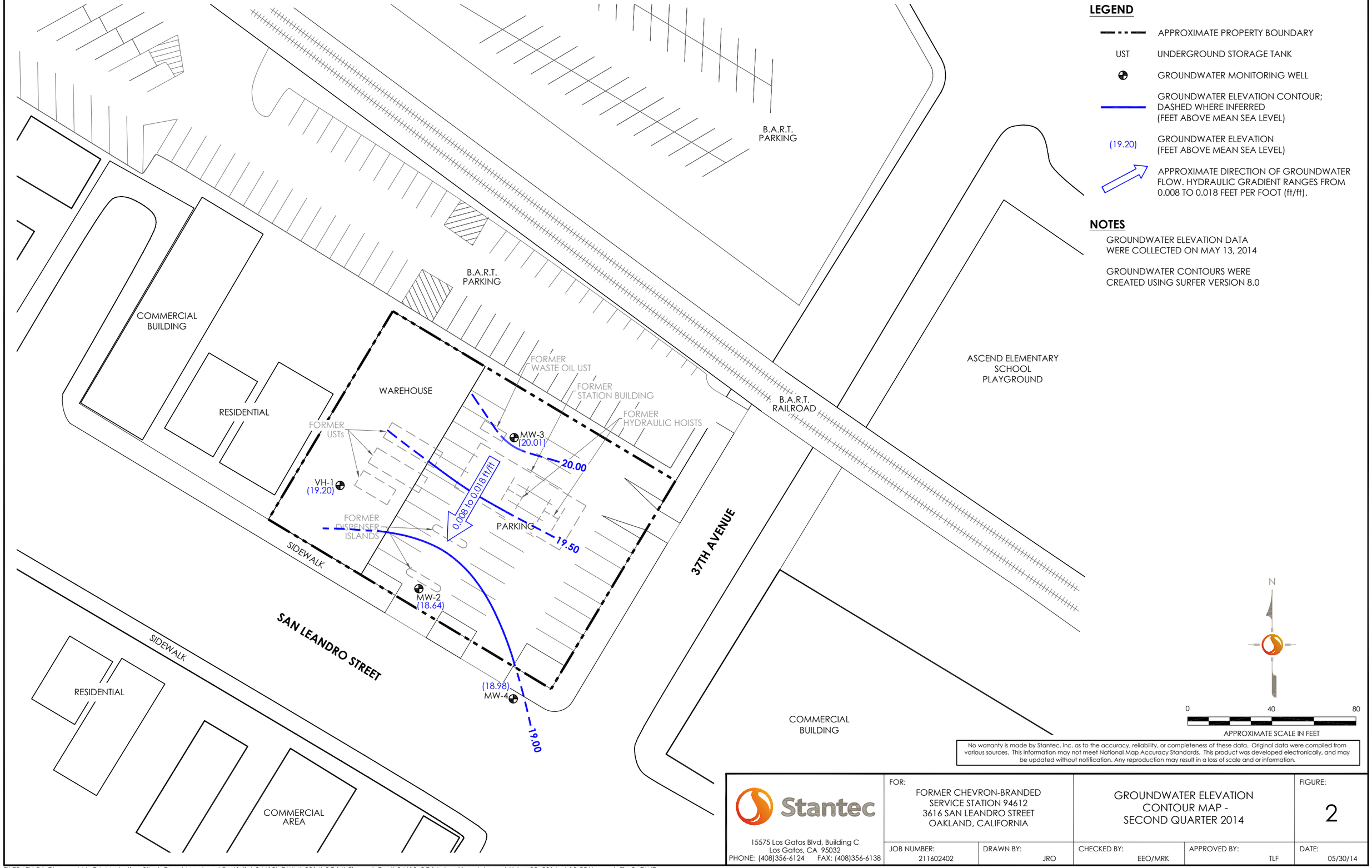


REFERENCE: USGS 7.5 MINUTE QUADRANGLE; OAKLAND EAST, CALIFORNIA; 2012

Stantec
15575 Los Gatos Blvd, Building C
Los Gatos, CA 95032
PHONE: (408)356-6124 FAX: (408)356-6138

FOR:		SITE LOCATION MAP		FIGURE:
FORMER CHEVRON-BRANDED SERVICE STATION 94612 3616 SAN LEANDRO STREET OAKLAND, CALIFORNIA				1
JOB NUMBER: 211602402	DRAWN BY: JRO	CHECKED BY: EEO/MRK	APPROVED BY: TLF	DATE: 05/30/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\94612\GWM\2014\2Q14\Figures\Cad\94612_2Q14.dwg | jopalekopsahl | May 28, 2014 at 13:07 | Layout: Fig 1_SLM



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR; DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- (19.20) — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW. HYDRAULIC GRADIENT RANGES FROM 0.008 TO 0.018 FEET PER FOOT (ft/ft).

NOTES

GROUNDWATER ELEVATION DATA WERE COLLECTED ON MAY 13, 2014

GROUNDWATER CONTOURS WERE CREATED USING SURFER VERSION 8.0

Stantec
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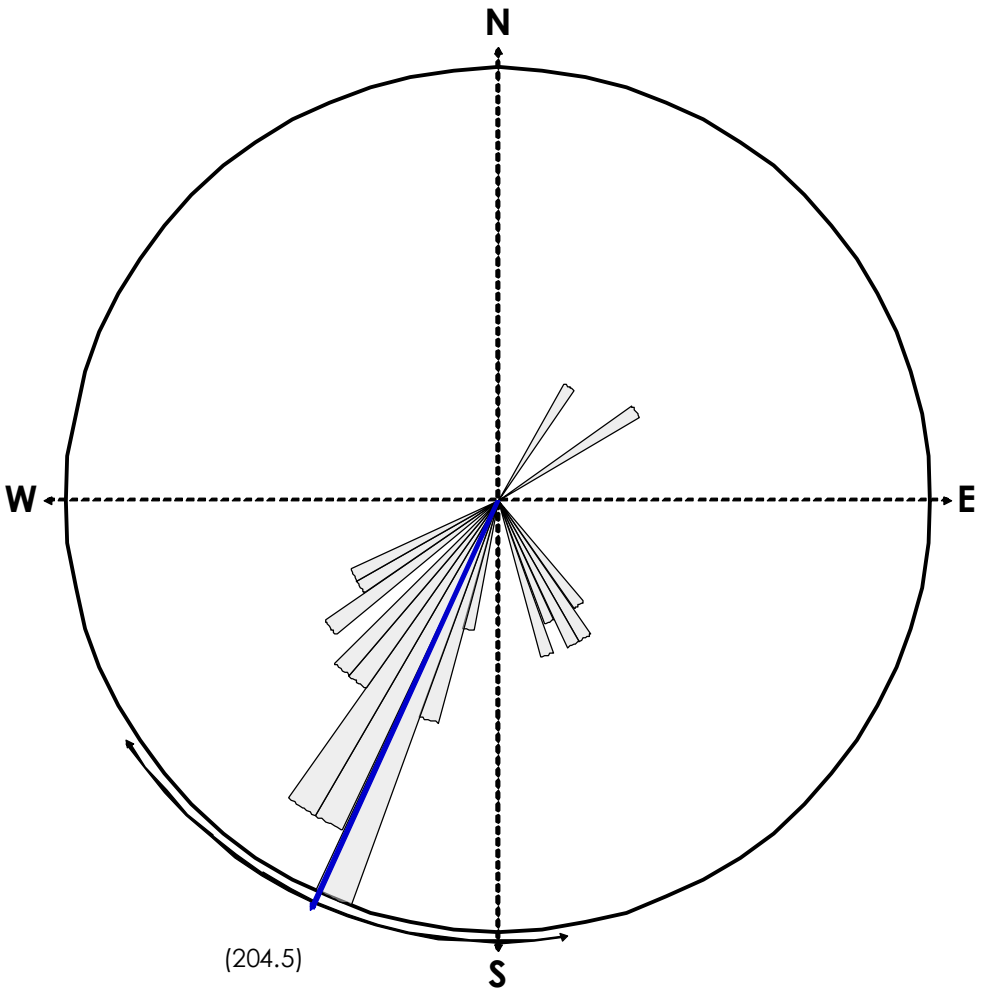
FOR:				FIGURE:
FORMER CHEVRON-BRANDED SERVICE STATION 94612 3616 SAN LEANDRO STREET OAKLAND, CALIFORNIA		GROUNDWATER ELEVATION CONTOUR MAP - SECOND QUARTER 2014		2
JOB NUMBER: 211602402	DRAWN BY: JRO	CHECKED BY: EEO/MRK	APPROVED BY: TLF	DATE: 05/30/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\94612\GWM\2014\2Q14\Figures\Cad\94612_2Q14.dwg | jopalekopsahl | Jun 02, 2014 at 13:55 | Layout: Fig 2_GWE



EQUAL AREA PLOT

Number of Points	62
Class Size	5
Vector Mean	204.54
Vector Magnitude	51.65
Consistency Ratio	0.83

NOTE: ROSE DIAGRAM IS BASED ON THE DIRECTION OF GROUNDWATER FLOW BEGINNING FIRST QUARTER 1993.

Stantec
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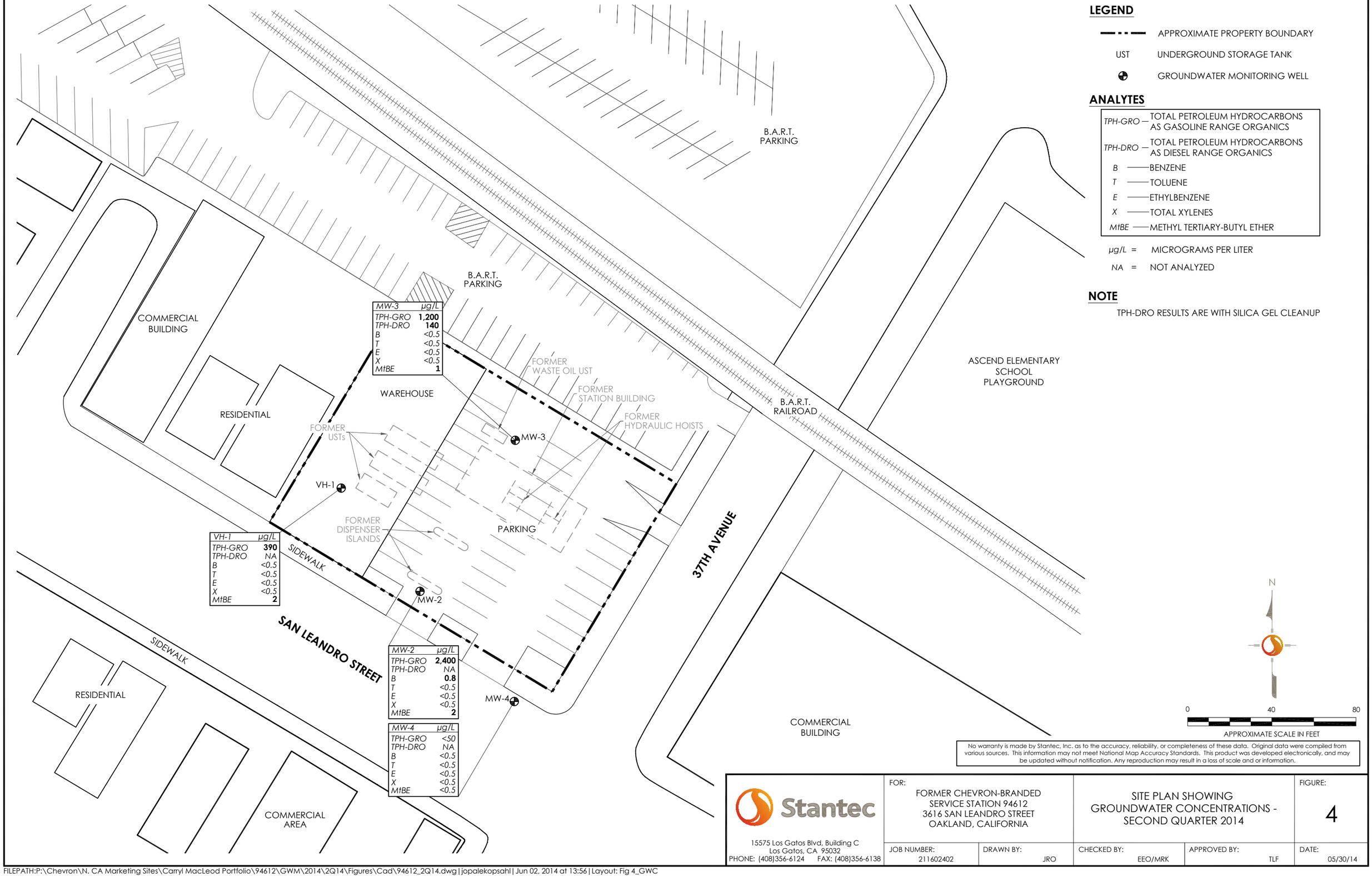
FOR:				FIGURE:
FORMER CHEVRON-BRANDED SERVICE STATION 94612 3616 SAN LEANDRO STREET OAKLAND, CALIFORNIA		GROUNDWATER FLOW DIRECTION ROSE DIAGRAM - SECOND QUARTER 2014		3
JOB NUMBER: 211602402	DRAWN BY: JRO	CHECKED BY: EEO/MRK	APPROVED BY: TLF	DATE: 05/30/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\94612\GWM\2014\2Q14\Figures\Cad\94612_2Q14.dwg | jopalekopsahl | Jun 16, 2014 at 16:02 | Layout: Fig 3_Rose



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL

ANALYTES

- *TPH-GRO* — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS
- *TPH-DRO* — TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
- *B* — BENZENE
- *T* — TOLUENE
- *E* — ETHYLBENZENE
- *X* — TOTAL XYLENES
- *MtBE* — METHYL TERTIARY-BUTYL ETHER

µg/L = MICROGRAMS PER LITER

NA = NOT ANALYZED

NOTE

TPH-DRO RESULTS ARE WITH SILICA GEL CLEANUP

N

0 40 80

APPROXIMATE SCALE IN FEET

Stantec
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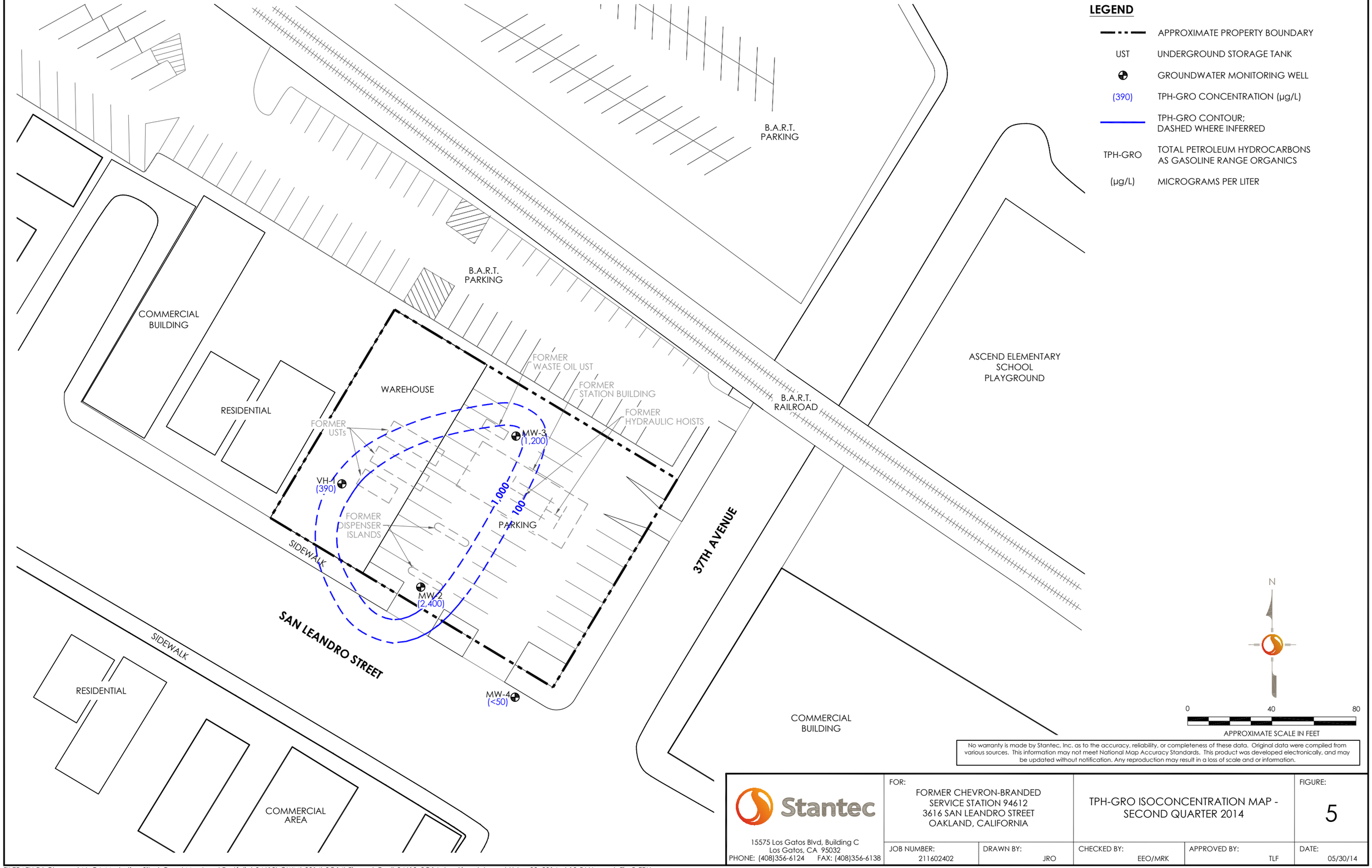
FOR:
FORMER CHEVRON-BRANDED SERVICE STATION 94612
3616 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

SITE PLAN SHOWING GROUNDWATER CONCENTRATIONS - SECOND QUARTER 2014

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602402	JRO	EEO/MRK	TLF	05/30/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\94612\GWM\2014\2Q14\Figures\Cad\94612_2Q14.dwg | jopalekopsahl | Jun 02, 2014 at 13:56 | Layout: Fig 4_GWC



Stantec
15575 Los Gatos Blvd, Building C
Los Gatos, CA 95032
PHONE: (408)356-6124 FAX: (408)356-6138

FOR:
FORMER CHEVRON-BRANDED SERVICE STATION 94612
3616 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

TPH-GRO ISOCONCENTRATION MAP - SECOND QUARTER 2014

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602402	JRO	EEO/MRK	TLF	05/30/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\94612\GWM\2014\2Q14\Figures\Cad\94612_2Q14.dwg | jopalekopsahl | Jun 02, 2014 at 13:56 | Layout: Fig 5_TPHg

ATTACHMENT A
Gettler-Ryan Inc. Field Data Sheets and Standard Operating Procedures – Second Quarter 2014

GETTLER-RYAN INC.

TRANSMITTAL

May 23, 2014
G-R #386473

TO: Mr. Travis Flora
Stantec
15575 Los Gatos Boulevard
Los Gatos, CA 95032

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
Dublin, California 94568

RE: Former Chevron Service Station
#9-4612
3616 San Leandro Street
Oakland, California
RO 0000233

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Annual Event of May 13, 2014**

COMMENTS:

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

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

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

trans/9-4612

WELL CONDITION STATUS SHEET

Client/Facility #: **Chevron #9-4612**
Site Address: **3616 San Leandro Street**
City: **Oakland, CA**

Job #: **386473**
Event Date: 5-13-14
Sampler: ML

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y / N
VH-1	OK	NA	→	→	OK	→	→	NO	NO	10"x 15" BOX	NO
MW-2	OK	→	→	→	→	→	→	↓	↓	MORRISON/8"/2	↓
MW-3	OK	→	→	→	→	→	→	↓	↓	↓	↓
MW-4	OK	→	→	→	→	→	→	↓	↓	FMCO/8"/2	↓

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 Seaport Environmental located in Redwood City, California.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-4612 Job Number: 386473
Site Address: 3616 San Leandro Street Event Date: 5-13-14 (inclusive)
City: Oakland, CA Sampler: ML

Well ID VH-1 Date Monitored: 5-13-14
Well Diameter 2 (4) in.
Total Depth 28.98 ft.
Depth to Water 8.71 ft.

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

☐ Check if water column is less then 0.50 ft.

20.27 xVF .66 = 13.3 x3 case volume = Estimated Purge Volume: 39.9 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.76

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer X
Pressure Bailer
Metal Filters
Peristaltic Pump
QED Bladder Pump
Other:

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

Start Time (purge): 1205 Weather Conditions: Sunny
Sample Time/Date: 1205 / 5-13-14 Water Color: Clear Odor: (Y) N Light
Approx. Flow Rate: — gpm. Sediment Description: None
Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 8.71

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
		7.20	0.50	21.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
VH-1	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	2 x voa vial	YES	NP	CHEVRON RTC	CHEVRON STUDY SAMPLES

COMMENTS: WELL INACCESSIBLE BY TRUCK, NO PURGE SAMPLE COLLECTED.

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #9-4612** Job Number: **386473**
Site Address: **3616 San Leandro Street** Event Date: 5-13-14 (inclusive)
City: **Oakland, CA** Sampler: MC

Well ID MW-2 Date Monitored: 5-13-14
Well Diameter 2 4 in.
Total Depth 19.45 ft.
Depth to Water 9.41 ft.

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

☐ Check if water column is less then 0.50 ft.

10.04 xVF .17 = 1.7 x3 case volume = Estimated Purge Volume: 5.1 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.41

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

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

Start Time (purge): 1025 Weather Conditions: Sunny
Sample Time/Date: 1055 / 5-13-14 Water Color: Cloudy Odor: Y / N
Approx. Flow Rate: ~~4~~ gpm. Sediment Description: light
Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 9.49

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1030	2	6.92	0.54	22.1		
1035	4	6.97	0.51	21.7		
1040	5.5	6.98	0.52	21.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	x voa vial	YES	NP	CHEVRON RTC	CHEVRON STUDY SAMPLES

COMMENTS: _____

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #9-4612** Job Number: **386473**
Site Address: **3616 San Leandro Street** Event Date: 5-13-14 (inclusive)
City: **Oakland, CA** Sampler: ML

Well ID MW-3 Date Monitored: 5-13-14
Well Diameter (2)4 in.
Total Depth 18.03 ft.
Depth to Water 9.03 ft.

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

☐ Check if water column is less then 0.50 ft.

9.00 xVF 1.7 = 1.5 x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.83

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

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

Start Time (purge): 1110 Weather Conditions: SUNNY
Sample Time/Date: 1140 / 5-13-14 Water Color: CLOUDY Odor: Y (N)
Approx. Flow Rate: - gpm. Sediment Description: light
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 9.21

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1115	1.5	7.16	0.43	21.9		
1120	3	7.12	0.45	21.6		
1125	4.5	7.11	0.47	21.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	x voa vial	YES	NP	CHEVRON RTC	CHEVRON STUDY SAMPLES

COMMENTS: _____

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #9-4612** Job Number: **386473**
Site Address: **3616 San Leandro Street** Event Date: 5-13-14 (inclusive)
City: **Oakland, CA** Sampler: MC

Well ID MW-4 Date Monitored: 5-13-14
Well Diameter (2) 4 in.
Total Depth 17.84 ft.
Depth to Water 8.29 ft.

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

☐ Check if water column is less then 0.50 ft.

9.55 xVF .17 = 1.6 x3 case volume = Estimated Purge Volume: 4.8 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.20

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

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

Start Time (purge): 1225 Weather Conditions: Sunny
Sample Time/Date: 1255 / 5-13-14 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: — gpm. Sediment Description: light
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 8.38

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
1230	1.5	6.89	0.34	21.3		
1235	3	6.94	0.36	21.0		
1241	5	6.97	0.37	20.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	x voa vial	YES	NP	CHEVRON RTC	CHEVRON STUDY SAMPLES

COMMENTS: _____

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

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories 5006 05 1314 - 06 Acct. # _____ Group # _____ Sample # _____

For Eurofins Lancaster Laboratories use only

Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # SS#9-4612-OML G-R#386473 Global ID#T0600100333 WPS

Site Address 3616 SAN LEANDRO STREET, OAKLAND, CA

Chevron PM CM Lead Consultant STANTECTF Flora

Consultant/Office Getter-Ryan, Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, deanna@grinc.com

Consultant Phone # (925) 551-7444 x180

Sampler MIKE LOMBARDO

4 Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Oil ☐ Air ☐

3 Grab / Composite

2 Sample Identification / Soil Depth / Collected (Date, Time)

5 Analyses Requested

Total Number of Containers

BTEX + MTBE 8260 ☒ 8021 ☐

TPH-GRO 8260 ☐ 8015 ☒

TPH-DRO 8015 without Silica Gel Cleanup ☒

TPH-DRO 8015 with Silica Gel Cleanup ☒ 2000

8260 Full Scan

Oxygenates (8260) _____

Total Lead Method _____

Dissolved Lead Method _____

TPH - DRO COLUMN

Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE 8260	TPH-GRO 8260	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates (8260)	Total Lead Method	Dissolved Lead Method	TPH - DRO COLUMN
QA		5-13-14		X			X		2	X	X							
VH-1			1205	X			X		6	X	X							
MW-2			1055	X			X		6	X	X							
MW-3			1140	X			X		8	X	X	X	X					
MW-4			1255	X			X		6	X	X							

6 Remarks

TPH-DRO WITH SILICA GEL REQUESTING 10 GRAM COLUMN CLEAN-UP WITH CAPRIC ACID REVERSE SURROGATE

☐ Results in Dry Weight
☐ J value reporting needed
☒ Must meet lowest detection limits possible for 8260 compounds
☐ 8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run _____ oxy's on highest hit
☐ Run _____ oxy's on all hits

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour | EDF/EDD

8 Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default)

Other: _____

Relinquished by	Date	Time	Received by	Date	Time
	5-15-14	1500			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____			Received by	Date	Time

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

9

Received by	Date	Time
	MAY14	1500

☐ Yes
☐ No

Chain-of-Custody-Record

CHEVRON RTC SAMPLES

Chevron Facility #: 9-4612 Global ID#: T0600100333
Facility Address: 3613 San Leandro Street, Oakland CA
Consultant Project #: 15-386473
Consultant Name: GETTLER-RYAN INC.
Address: 6805 SIERRA COURT, SUITE G, DUBLIN, CA 94568
Project Contact: (Name) DEANNA L. HARDING (deanna@grinc.com)
(Phone) 925-551-7555 (Fax) 925-551-7888

Chevron Contact: (Name) Rachel Molher
(Phone) 510-242-4939
Laboratory Name: Chevron RTC
Laboratory Service Order:
Laboratory Service Code:
Samples Collected by: (Name) MIKE LOMBARD
Signature:

State Method: ☑ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT ☐ ID

Sample Number	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	Sample Preservation	Date/Time	CHEVRON STUDY (NON-PRESERVED)																	Remarks / Lab Sample No.
VH-1	2	W	NP	5/13/14 1205	X																	

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	Gettler-Ryan	5-15-14 1520	Daniel Alvarez		5/15/14 1520	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced (Y/N)

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
~~10 Days~~
(As Contracted)

ATTACHMENT B
Certified Laboratory Analysis Reports and Chain-of-Custody Documents

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

May 27, 2014

Project: 94612

Submittal Date: 05/16/2014
Group Number: 1474907
PO Number: 0015141332
Release Number: CMACLEOD

State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
QA-T-140513 NA Water	7466386
VH-1-W-140513 Grab Groundwater	7466387
MW-2-W-140513 Grab Groundwater	7466388
MW-3-W-140513 Grab Groundwater	7466389
MW-4-W-140513 Grab Groundwater	7466390

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

ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan
ELECTRONIC COPY TO	Stantec	Attn: Laura Viesselman
ELECTRONIC COPY TO	Stantec International	Attn: Travis Flora
ELECTRONIC COPY TO	Stantec	Attn: Marisa Kaffenberger
ELECTRONIC COPY TO	Stantec	Attn: Erin O'Malley

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA-T-140513 NA Water
Facility# 94612 Job# 386473 GRD
3616 San Leandro-Oakland T0600100333

LL Sample # WW 7466386
LL Group # 1474907
Account # 10906

Project Name: 94612

Collected: 05/13/2014

Submitted: 05/16/2014 09:25
Reported: 05/27/2014 15:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOQA

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	Methyl Tertiary Butyl Ether	1634-04-4	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 Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

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/MTBE 8260 Water	SW-846 8260B	1	D141411AA	05/21/2014 11:44	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D141411AA	05/21/2014 11:44	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14139B20A	05/20/2014 11:37	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14139B20A	05/20/2014 11:37	Miranda P Tillinghast	1

Sample Description: VH-1-W-140513 Grab Groundwater
Facility# 94612 Job# 386473 GRD
3616 San Leandro-Oakland T0600100333

LL Sample # WW 7466387
LL Group # 1474907
Account # 10906

Project Name: 94612

Collected: 05/13/2014 12:05 by ML

Submitted: 05/16/2014 09:25
Reported: 05/27/2014 15:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLO01

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	Methyl Tertiary Butyl Ether	1634-04-4	2	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 Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	390	50	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

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/MTBE 8260 Water	SW-846 8260B	1	D141411AA	05/21/2014 13:40	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D141411AA	05/21/2014 13:40	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14139B20A	05/20/2014 13:05	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14139B20A	05/20/2014 13:05	Miranda P Tillinghast	1

Sample Description: MW-2-W-140513 Grab Groundwater
Facility# 94612 Job# 386473 GRD
3616 San Leandro-Oakland T0600100333

LL Sample # WW 7466388
LL Group # 1474907
Account # 10906

Project Name: 94612

Collected: 05/13/2014 10:55 by ML

Submitted: 05/16/2014 09:25
Reported: 05/27/2014 15:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLO02

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	0.8	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	2	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 Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,400	250	5

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

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/MTBE 8260 Water	SW-846 8260B	1	D141411AA	05/21/2014 14:03	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D141411AA	05/21/2014 14:03	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14139B20A	05/20/2014 18:36	Miranda P Tillinghast	5
01146	GC VOA Water Prep	SW-846 5030B	1	14139B20A	05/20/2014 18:36	Miranda P Tillinghast	5

Sample Description: MW-3-W-140513 Grab Groundwater
Facility# 94612 Job# 386473 GRD
3616 San Leandro-Oakland T0600100333

LL Sample # WW 7466389
LL Group # 1474907
Account # 10906

Project Name: 94612

Collected: 05/13/2014 11:40 by ML

Submitted: 05/16/2014 09:25
Reported: 05/27/2014 15:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLO03

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	Methyl Tertiary Butyl Ether	1634-04-4	1	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 Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	1,200	50	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**ug/l**	**ug/l**	
06609	TPH-DRO CA C10-C28	n.a.	200	50	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	140	50	1
	The reverse surrogate, capric acid, is present at <1%.				

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

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/MTBE 8260 Water	SW-846 8260B	1	D141411AA	05/21/2014 14:26	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D141411AA	05/21/2014 14:26	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14139B20A	05/20/2014 18:14	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14139B20A	05/20/2014 18:14	Miranda P Tillinghast	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	141360023A	05/19/2014 21:56	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	141360024A	05/22/2014 11:04	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	141360023A	05/19/2014 03:00	Sherry L Morrow	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	141360024A	05/19/2014 03:00	Sherry L Morrow	1

Sample Description: MW-4-W-140513 Grab Groundwater
Facility# 94612 Job# 386473 GRD
3616 San Leandro-Oakland T0600100333

LL Sample # WW 7466390
LL Group # 1474907
Account # 10906

Project Name: 94612

Collected: 05/13/2014 12:55 by ML

Submitted: 05/16/2014 09:25
Reported: 05/27/2014 15:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLO04

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	Methyl Tertiary Butyl Ether	1634-04-4	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 Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

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/MTBE 8260 Water	SW-846 8260B	1	D141411AA	05/21/2014 12:31	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D141411AA	05/21/2014 12:31	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14139B20A	05/20/2014 13:27	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14139B20A	05/20/2014 13:27	Miranda P Tillinghast	1

Quality Control Summary

Client Name: Chevron Group Number: 1474907
Reported: 05/27/14 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 Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D141411AA	Sample number(s): 7466386-7466390							
Benzene	N.D.	0.5	ug/l	110		78-120		
Ethylbenzene	N.D.	0.5	ug/l	95		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	104		75-120		
Toluene	N.D.	0.5	ug/l	97		80-120		
Xylene (Total)	N.D.	0.5	ug/l	96		80-120		
Batch number: 14139B20A	Sample number(s): 7466386-7466390							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	112	110	80-139	3	30
Batch number: 141360023A	Sample number(s): 7466389							
TPH-DRO CA C10-C28	N.D.	50.	ug/l	87	96	73-120	10	20
Batch number: 141360024A	Sample number(s): 7466389							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	50.	ug/l	70	64	43-120	10	20

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D141411AA	Sample number(s): 7466386-7466390 UNSPK: 7466390								
Benzene	114	106	72-134	7	30				
Ethylbenzene	103	98	71-134	5	30				
Methyl Tertiary Butyl Ether	106	99	72-126	7	30				
Toluene	105	99	80-125	6	30				
Xylene (Total)	104	99	79-125	5	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: D141411AA

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.

Quality Control Summary

Client Name: Chevron Group Number: 1474907
Reported: 05/27/14 at 03:53 PM

Surrogate Quality Control

7466386	99	99	92	98
7466387	101	96	96	103
7466388	100	97	96	109
7466389	98	95	93	108
7466390	102	100	94	100
Blank	101	100	93	101
LCS	100	103	92	103
MS	100	102	93	103
MSD	100	107	93	105
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 14139B20A

	Trifluorotoluene-F
7466386	88
7466387	83
7466388	85
7466389	85
7466390	77
Blank	79
LCS	81
LCSD	86
Limits:	63-135

Analysis Name: TPH-DRO CA C10-C28
Batch number: 141360023A

	Orthoterphenyl
7466389	105
Blank	102
LCS	104
LCSD	110
Limits:	46-131

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 141360024A

	Orthoterphenyl
7466389	90
Blank	79
LCS	90
LCSD	87
Limits:	46-131

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

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories 508 85 1514-86 Acct. # 10906

For Eurofins Lancaster Laboratories use only
Group # 1474907 Sample # 7466386-90
Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # SS#9-4612-OML G-R#386473 Global ID#T0600100333 WBS
Site Address 3616 SAN LEANDRO STREET, OAKLAND, CA
Chevron PM CM Lead Consultant STANTECTF Flora
Consultant/Office Getter-Ryan, Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568
Consultant Project Mgr. Deanna L. Harding, deanna@grinc.com
Consultant Phone # (925) 551-7444 x180
Sampler MIKE LOMBARD

4 Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Oil ☐ Air ☐

5 Analyses Requested

2 Sample Identification	Soil Depth	Collected Date	Collected Time	3 Grab	Composite	Total Number of Containers	BTEX + MTBE 8021	BTEX + MTBE 8260	TPH-GRO 8015	TPH-GRO 8260	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead Method	Dissolved Lead Method	TPH-DRO COLUMN
QA		5-13-14		X		2	X		X								
VH-1			1205	X		6	X		X								
MW-2			1055	X		6	X		X								
MW-3			1140	X		8	X		X		X	X					
MW-4			1255	X		6	X		X								

Results in Dry Weight ☐
J value reporting needed ☐
Must meet lowest detection limits possible for 8260 compounds ☒
8021 MTBE Confirmation ☐
Confirm highest hit by 8260 ☐
Confirm all hits by 8260 ☐
Run _____ oxy's on highest hit ☐
Run _____ oxy's on all hits ☐

6 Remarks

TPH-DRO WITH SILICA GEL REQUESTING 10 GRAM COLUMN CLEAN-UP WITH CAPRIC ACID REVERSE SURROGATE

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour | EDF/EDD

Relinquished by	Date	Time	Received by	Date	Time
	5-15-14	1500			
Relinquished by	Date	Time	Received by	Date	Time
	15MAY14	1636	UPS		

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default)
Other: _____

Relinquished by Commercial Carrier:
UPS X FedEx ____ Other ____

Temperature Upon Receipt 0.3 / 1.9 °C

Received by	Date	Time
	5/16/14	925

Custody Seals Intact? Yes No

9

eurofins | Lancaster Laboratories Environmental

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	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 limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

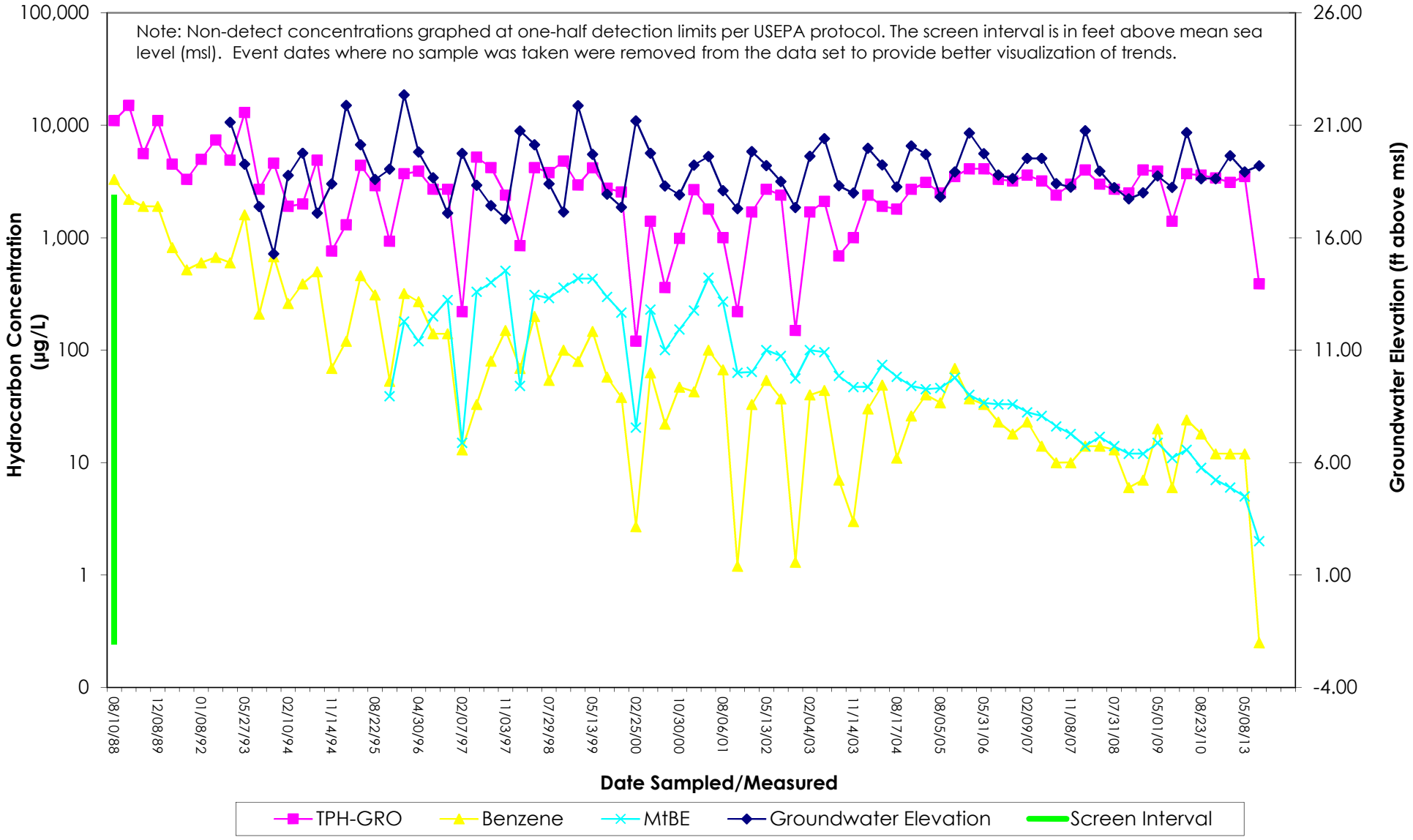
ATTACHMENT C
Hydrographs

VH-1 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 94612

3616 San Leandro Street

Oakland, California

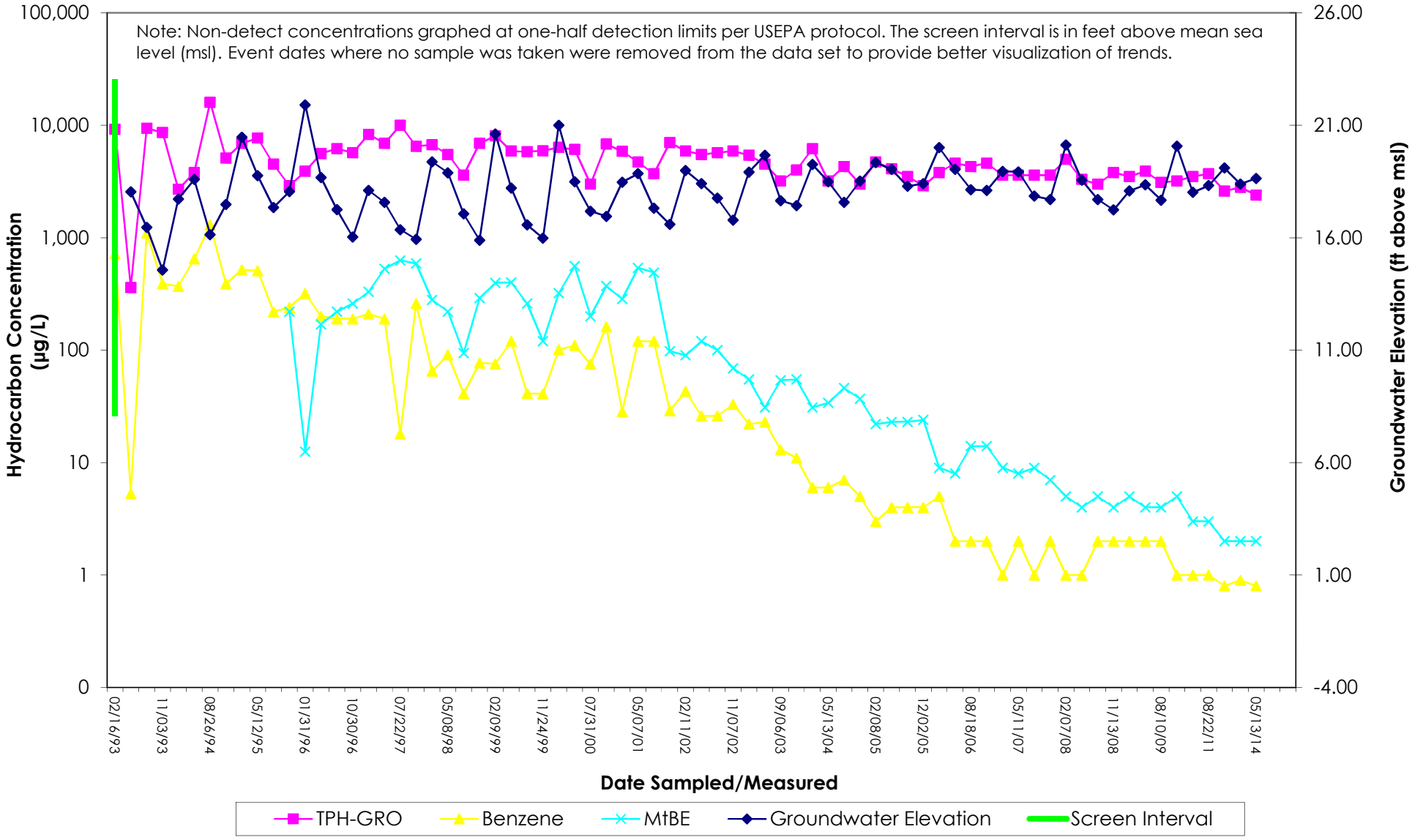


MW-2 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 94612

3616 San Leandro Street

Oakland, California

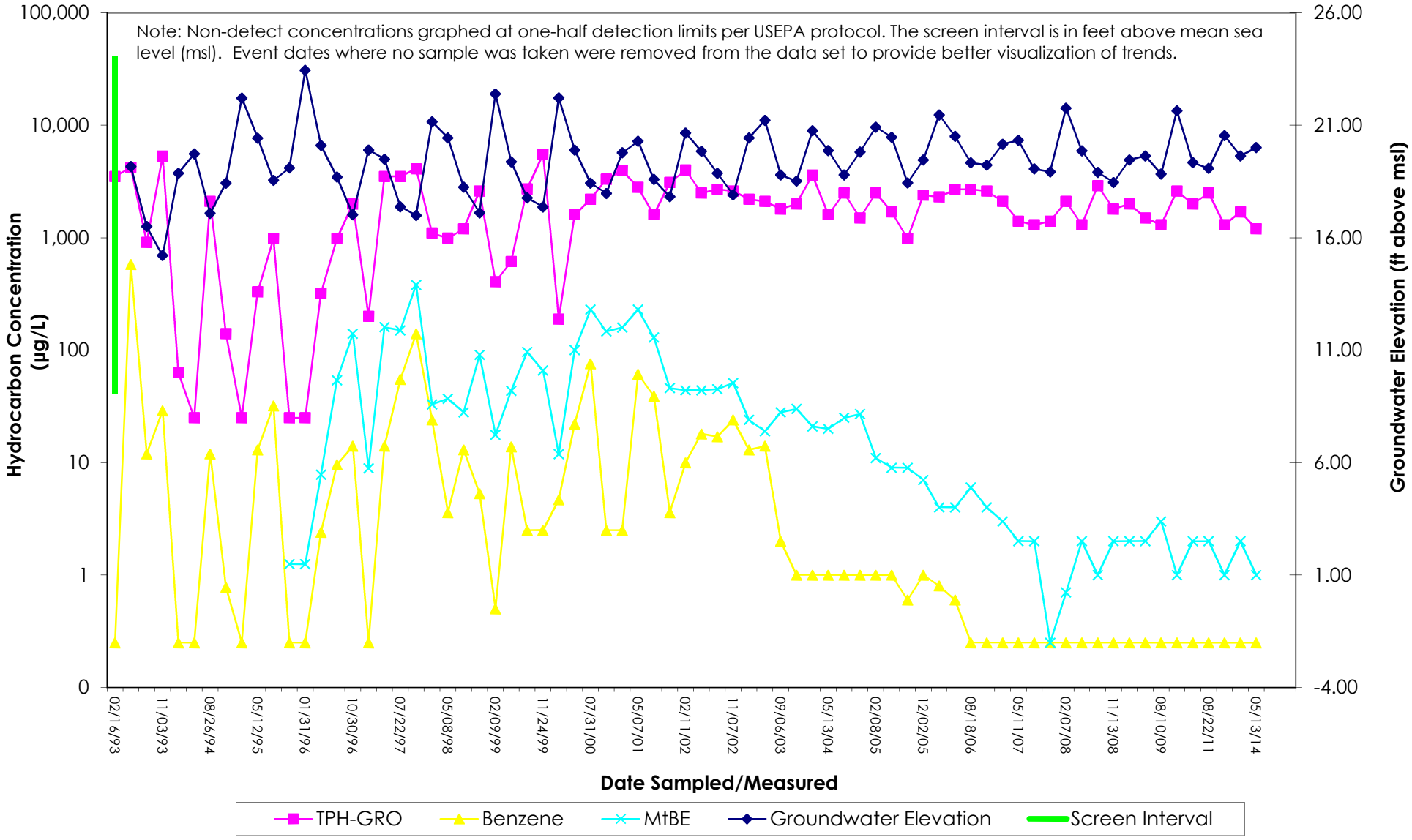


MW-3 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 94612

3616 San Leandro Street

Oakland, California



MW-4 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 94612

3616 San Leandro Street

Oakland, California