First Quarter 2014 Annual Groundwater Monitoring Report

Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California
Case #: RO0000138

Stantec

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

Prepared by:
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March 21, 2014

Carryl MacLeod
Project Manager
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March 21, 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 *First Quarter 2014 Annual Groundwater Monitoring Report* for former Chevron-branded service station 90517, located at 3900 Piedmont Avenue in Oakland, California (**Case #:** RO0000138). 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

March 21, 2014

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

Reference: **First Quarter 2014 Annual Groundwater Monitoring Report**
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue, Oakland, California

Dear Mr. Detterman:

On behalf of Chevron Environmental Management Company (Chevron), Stantec Consulting Services Inc. (Stantec) is pleased to submit the *First Quarter 2014 Annual Groundwater Monitoring Report* for former Chevron-branded service station 90517, which was located at 3900 Piedmont Avenue, Oakland, Alameda County, California (the Site - shown on **Figure 1**). This report is presented in three sections: Site Background, First 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 eastern corner at the intersection of Piedmont Avenue and Montell Street in Oakland, California. The Site is currently occupied by a one-story commercial building and associated parking areas. The Site background is summarized according to the *Case Closure Request*, prepared by Conestoga-Rovers & Associates (CRA) and dated October 12, 2010, and indicates a Chevron-branded service station operated at the Site from at least 1940 until 1978.

Based on a Site Plan from 1940, first-generation Site features consisted of three gasoline underground storage tanks (USTs; 928-gallon, 440-gallon, and 550-gallon) located in the southwestern portion of the Site, a lubrication building with a waste oil sump in the eastern corner of the Site, two fuel dispenser islands located in the western portion of the Site, and a small station building located adjacent to the fuel dispenser islands. Based on a Site Plan from 1955, the first-generation gasoline USTs were removed and three second-generation gasoline USTs (3,000-gallon, 5,000-gallon, and 7,500-gallon) were installed to the northwest of the first-generation USTs. A 1,000-gallon waste oil UST is shown to the northwest of the lubrication building and two hydraulic hoists are shown within the building. In addition, the first-generation fuel dispenser islands were removed and second-generation fuel dispenser islands were installed to the east of the first-generation fuel dispenser islands. Based on a Site Plan from 1971, the mid-size gasoline UST is identified as 5,700 gallons instead of 5,000 gallons. In 1978, the service station was closed and all remaining Site features, including underground fuel structures, were removed. The existing commercial building was then constructed.

Land use near the Site consists of a mixture of commercial and residential properties. The Site is bounded on the northwest by Piedmont Avenue, to the northeast by a commercial building that appears to be vacant, to the southeast by residences, and on the southwest by Montell Street.

FIRST QUARTER 2014 GROUNDWATER MONITORING AND SAMPLING PROGRAM

Gettler-Ryan, Inc. (G-R) performed the First Quarter 2014 groundwater monitoring and sampling event on February 24, 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 (MW-1 through MW-4) prior to collecting groundwater samples for laboratory analysis. Three Site wells (MW-1, MW-3, and MW-4) were sampled this quarter. Well MW-2 was gauged for depth-to-groundwater only as it is not a part of the groundwater sampling program.

Investigation-derived waste (IDW) generated during the First 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 an assessment of whether groundwater samples were collected when groundwater elevations were measured across the well screen intervals are presented in **Table 1**. All four Site wells were screened across the prevailing groundwater table. Current and historical groundwater elevation data are presented in **Table 2**. A groundwater elevation contour map (based on First Quarter 2014 data) is shown on **Figure 2**. The direction of groundwater flow at the time of sampling was generally towards the northwest at an approximate hydraulic gradient ranging from 0.012 to 0.033 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 Third Quarter 1998 to present.

Schedule of Laboratory Analysis

Groundwater samples were collected and analyzed for total petroleum hydrocarbons (TPH) as gasoline range organics (TPH-GRO) and TPH as diesel range organics (TPH-DRO) both with and without silica gel cleanup using United States Environmental Protection Agency (US EPA) Method 8015B (SW-846), and TPH as motor oil (TPH-MO) using US EPA Method 8015B modified (SW-846). Oil and grease (O&G; referred to as n-hexane extractable material [HEM] in laboratory report) both with and without silica gel cleanup was analyzed using US EPA Method 1664A. Benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds), fuel oxygenates, including methyl *tertiary*-butyl ether (MtBE), *tertiary*-butyl alcohol (TBA), *tertiary*-amyl methyl ether (TAME), ethyl *tertiary*-butyl ether (EtBE), di-isopropyl ether (DIPE), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (1,2-DBA), ethanol, and priority pollutant list (PPL) volatiles were analyzed using US EPA Method 8260B (SW-846). Metals, including cadmium, chromium, lead, nickel, and zinc were analyzed using US EPA Method 6010B (SW-846). In addition, the laboratory reported total TPH for internal quality assurance/quality control purposes.

Groundwater Analytical Results

During First Quarter 2014, groundwater samples were collected from three Site wells (MW-1, MW-3, and 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**. A TPH-DRO isoconcentration map is shown on **Figure 6**. A TPH-MO isoconcentration map is shown on **Figure 7**. A benzene isoconcentration map is shown on **Figure 8**. An isoconcentration map was not developed for MtBE as concentrations in all sampled Site wells were below laboratory reporting limits (LRLs).

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 for wells that were sampled this quarter are included in **Attachment C**.
A summary of First Quarter 2014 groundwater analytical results follows. Historical trends were not evaluated for TPH-DRO, TPH-MO, O&G, TBA, TAME, EtBE, DIPE, 1,2-DCA, 1,2-DBA, ethanol, cadmium, chromium, lead, nickel, and zinc as these constituents were recently added to the laboratory analytical program and limited data are available.

- **TPH-GRO** was detected in one Site well this quarter, at a concentration of 6,000 micrograms per liter (µg/L; well MW-4), which is within historical limits for this well.
- **TPH-DRO (with silica gel cleanup)** was detected in two Site wells this quarter, at concentrations of 570 µg/L (well MW-1) and 720 µg/L (well MW-4).
- **TPH-MO** was detected in two Site wells this quarter, at concentrations of 92 µg/L (well MW-4) and 2,400 µg/L (well MW-1).
- **O&G (without silica gel cleanup)** was detected in one Site well this quarter, at a concentration of 1,500 µg/L (well MW-3).
- **Benzene** was detected in one Site well this quarter, at a concentration of 80 µg/L (well MW-4), which is within historical limits for this well.
- **Toluene** was detected in one Site well this quarter, at a concentration of 29 µg/L (well MW-4), which is within historical limits for this well.
- **Ethylbenzene** was detected in one Site well this quarter, at a concentration of 9 µg/L (well MW-4), which is within historical limits for this well.
- **Total Xylenes** were detected in one Site well this quarter, at a concentration of 30 µg/L (well MW-4), which is within historical limits for this well.
- **MtBE** was not detected above the LRL (2 µg/L) in any Site well sampled this quarter. The concentration in well MW-4 is a historical low.
- **TBA** was not detected above the LRL (100 µg/L) in any Site well sampled this quarter.
- **TAME** was not detected above the LRL (2 µg/L) in any Site well sampled this quarter.
- **EtBE** was not detected above the LRL (2 µg/L) in any Site well sampled this quarter.
- **DIPE** was not detected above the LRL (2 µg/L) in any Site well sampled this quarter.
- **1,2-DCA** was not detected above the LRL (2 µg/L) in any Site well sampled this quarter.
- **1,2-DBA** was not detected above the LRL (2 µg/L) in any Site well sampled this quarter.
- **Ethanol** was not detected above the LRL (500 µg/L) in any Site well sampled this quarter.
- **Cadmium** was not detected above the LRL (0.76 µg/L) in any Site well sampled this quarter.

- **Chromium** was detected in three Site wells this quarter, at concentrations of 22.5 µg/L (well MW-4), 30.3 µg/L (well MW-3), and 38.7 µg/L (well MW-1).

- **Lead** detected in one Site well this quarter, at a concentration of 6.0 µg/L (well MW-3).

- **Nickel** was detected in three Site wells this quarter, at concentrations of 38.3 µg/L (well MW-3), 49.8 µg/L (well MW-1), and 57.6 µg/L (well MW-4).

- **Zinc** was detected in three Site wells this quarter, at concentrations of 39.3 µg/L (well MW-1), 41.6 µg/L (well MW-3), and 69.9 µg/L (well MW-4).

A summary of the First Quarter 2014 detections reported above LRLs from the PPL volatile analyses performed follows:

- **Acetone** was detected in one Site well this quarter, at a concentration of 20 µg/L (well MW-4).

- ***n*-Butylbenzene** was detected in one Site well this quarter, at a concentration of 5 µg/L (well MW-4).

- ***sec*-Butylbenzene** was detected in one Site well this quarter, at a concentration of 7 µg/L (well MW-4).

- **2-Chlorotoluene** was detected in one Site well this quarter, at a concentration of 2 µg/L (well MW-4).

- **Isopropylbenzene** was detected in one Site well this quarter, at a concentration of 44 µg/L (well MW-4).

- ***p*-Isopropyltoluene** was detected in one Site well this quarter, at a concentration of 7 µg/L (well MW-4).

- ***n*-Propylbenzene** was detected in one Site well this quarter, at a concentration of 35 µg/L (well MW-4).

- **1,3,5-Trimethylbenzene** was detected in one Site well this quarter, at a concentration of 2 µg/L (well MW-4).

CONCLUSIONS AND RECOMMENDATIONS

Concentrations were conservatively compared to California Regional Water Quality Control Board – San Francisco Bay Region Environmental Screening Levels (ESLs) for groundwater that is a current or potential source of drinking water, and TPH-GRO, TPH-DRO (with silica gel cleanup), TPH-MO, O&G (without silica gel cleanup), benzene, total xylenes, lead, and nickel were observed above ESLs as follows:

- The TPH-GRO concentration exceeds the ESL of 100 µg/L in well MW-4;
- TPH-DRO concentrations (with silica gel cleanup) exceed the ESL of 100 µg/L in wells MW-1 and MW-4;
- The TPH-MO concentration exceeds the ESL of 100 µg/L in well MW-1;

- The O&G concentration (without silica gel cleanup) exceeds the ESL of 100 µg/L in well MW-3;
- The benzene concentration exceeds the ESL of 1 µg/L in well MW-4;
- The total xylenes concentration exceeds the ESL of 20 µg/L in well MW-4;
- The lead concentration exceeds the ESL of 2.5 µg/L in well MW-3; and
- Nickel concentrations exceed the ESL of 8.2 µg/L in wells MW-1, MW-3, and MW-4.

Maximum concentrations of TPH-GRO, TPH-DRO (with silica gel cleanup), BTEX compounds, nickel, zinc, and select PPL volatiles were observed in well MW-4, located approximately 20 feet down-gradient of the northern-most first-generation fuel dispenser island. Maximum concentrations of TPH-MO and chromium were observed in well MW-1, located in the vicinity of the former waste oil UST and waste oil sump. Maximum concentrations of O&G (without silica gel cleanup) and lead were observed in well MW-3, located approximately 15 feet west of the former second-generation USTs.

Site conditions do not satisfy the Low-Threat UST Case Closure Policy (LTCP) Groundwater-Specific Criteria scenarios as the dissolved-phase petroleum hydrocarbon plume is currently not defined in all directions and the plume length is unknown. Additionally, potential vapor intrusion risks to the on-site commercial building need to be evaluated.

In a letter dated December 18, 2013, Alameda County Environmental Health (ACEH) stated that the Site fails to meet LTCP criteria and requested a Data Gap Work Plan Addendum and Focused Site Conceptual Model by February 28, 2014. In a letter dated February 3, 2014, Stantec requested an extension of the deadline for the Data Gap Work Plan Addendum and Site Conceptual Model to March 21, 2014. The extension was approved by ACEH in an email dated February 11, 2014.

Based on concentrations of TPH-GRO, TPH-DRO (with silica gel cleanup), TPH-MO, O&G (without silica gel cleanup), benzene, total xylenes, lead, and nickel exceeding ESLs, Stantec recommends continuing the current annual groundwater monitoring and sampling program.

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

Sincerely,
Stantec Consulting Services Inc.

Travis L. Flora
Associate Project Manager
Phone: (408) 356-6124
Travis.Flora@stantec.com

Attachments:

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

Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour Map – First Quarter 2014
Figure 3 – Rose Diagram – First Quarter 2014
Figure 4 – Site Plan Showing Groundwater Concentrations – First Quarter 2014
Figure 5 – TPH-GRO Isoconcentration Map – First Quarter 2014
Figure 6 – TPH-DRO Isoconcentration Map – First Quarter 2014
Figure 7 – TPH-MO Isoconcentration Map – First Quarter 2014
Figure 8 – Benzene Isoconcentration Map – First Quarter 2014

Attachment A – Gettler-Ryan Inc. Field Data Sheets and Standard Operating Procedures – First 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

Neil and Diane Goodhue, 300 Hillside Avenue, Piedmont, CA 94611

This document entitled First 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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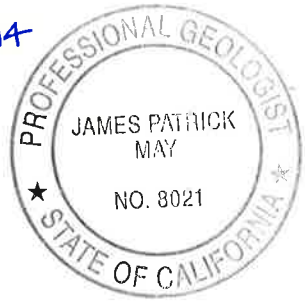


TABLES

Table 1
Well Details / Screen Interval Assessment
First Quarter 2014
Former Chevron-Branded Service Station 90517
3900 Piedmont Avenue, 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
MW-1	07/21/98	Monitoring	2	87.89	16.50	16.62	8.68	3.5-16.5	Depth-to-groundwater within screen interval.
MW-2	07/21/98	Monitoring	2	86.09	16.50	16.50	6.95	3.5-16.5	Depth-to-groundwater within screen interval.
MW-3	07/21/98	Monitoring	2	86.28	17.50	17.71	7.11	4.5-17.5	Depth-to-groundwater within screen interval.
MW-4	07/21/98	Monitoring	2	87.22	16.50	16.25	9.50	3.5-16.5	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 February 24, 2014.

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (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)
MW-1													
08/03/98	87.89	12.43	75.46	--	--		--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	87.89	9.05	78.84	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	87.89	6.50	81.39	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	87.89	7.13	80.76	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	87.89	9.15	78.74	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	87.89	9.54	78.35	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	87.89	5.90	81.99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00[3]	87.89	7.05	80.84	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/31/00	87.89	8.40	79.49	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	87.89	8.65	79.24	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.50	<2.50
02/27/01	87.89	5.83	82.06	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
05/15/01	87.89	7.71	80.18	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
08/23/01	87.89	DRY	--	--	--	--	--	--	--	--	--	--	--
02/25/02	87.89	6.71	81.18	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	87.89	8.89	79.00	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	87.89	7.36	80.53	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03[5]	87.89	9.47	78.42	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04[5]	87.89	6.30	81.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	87.89	10.12	77.77	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05[5]	87.89	6.79	81.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05[5]	87.89	8.89	79.00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06[5]	87.89	6.65	81.24	--	--	--	--	<50	1	<0.5	<0.5	<0.5	<0.5
08/02/06[5]	87.89	7.73	80.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07[5]	87.89	7.77	80.12	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07[5]	87.89	9.59	78.30	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08[5]	87.89	7.41	80.48	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08[5]	87.89	9.78	78.11	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09[5]	87.89	5.61	82.28	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09	87.89	10.22	77.67	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/29/10	87.89	6.04	81.85	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
08/11/10	87.89	8.35	79.54	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/02/11	87.89	6.54	81.35	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/31/12	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
05/10/12[5]	87.89	7.28	80.61	2,800[6]/ 1,300[6,7,8]	2,800[6]/ 1,300[6,7,8]	--	1,400/ 720[7,8]	<50	<0.5	<0.5	<0.5	<1	<0.5
02/09/13[5]	87.89	7.47	80.42	1,400[6]/ 700[6,7,8]	1,400[6]/ 700[6,7,8]	1,600/ 2,400[7]	650/ 220[7,8]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14[5]	**87.89**	**8.68**	**79.21**	**2,400[6]**	**2,400[6]**	**<1,400/ <1,400[7]**	**1,100/ 570[7,8]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (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)
MW-2													
08/03/98	86.09	11.34	74.75	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	3.4
11/23/98	86.09	6.90	79.19	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	86.09	5.23	80.86	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.09	6.12	79.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	86.09	6.41	79.68	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	86.09	7.29	78.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	86.09	4.49	81.60	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	86.09	5.90	80.19	--	--	--	--	4,000[3]	240	26	100	76	<100
07/31/00	86.09	6.58	79.51	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	86.09	6.23	79.86	--	--	--	--	<51	<0.50	2.92	<0.50	1.88	4.89
02/27/01	86.09	4.60	81.49	--	--	--	--	<52	<0.50	<0.50	<0.50	<0.50	<2.50
05/15/01	86.09	6.3	79.79	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
08/23/01	86.09	7.28	78.81	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/25/02	86.09	5.61	80.48	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	86.09	7.10	78.99	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	86.09	7.45	78.64	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03[5]	86.09	7.65	78.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04[5]	86.09	4.85	81.24	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	86.09	8.23	77.86	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05[5]	86.09	5.93	80.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05[5]	86.09	7.59	78.50	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06[5]	86.09	5.73	80.36	--	--	--	--	<50	0.6	<0.5	<0.5	<0.5	<0.5
08/02/06[5]	86.09	6.95	79.14	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07[5]	86.09	6.29	79.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07[5]	86.09	7.40	78.69	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08[5]	86.09	6.47	79.62	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08[5]	86.09	7.08	79.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09[5]	86.09	6.50	79.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09	86.09	8.51	77.58	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/29/10	86.09	6.29	79.80	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
08/11/10	86.09	7.20	78.89	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/02/11	86.09	6.87	79.22	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/31/12	86.09	6.81	79.28	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/09/13	86.09	5.80	80.29	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/24/14	**86.09**	**6.95**	**79.14**	**NOT PART OF GROUNDWATER SAMPLING PROGRAM**					**--**	**--**	**--**	**--**	**--**

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (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)
MW-3													
08/03/98	86.28	12.08	74.20	--	--	--	--	4,000	160	<5.0	<5.0	73	180
11/23/98	86.28	7.69	78.59	--	--	--	--	4,000	67.7	7.56	17.1	24.5	41.2
02/08/99	86.28	6.27	80.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.28	6.96	79.32	--	--	--	--	1,800	53.6	8.96	33	18.6	21.4
08/23/99	86.28	7.92	78.36	--	--	--	--	3,970	155	24	88.8	39.8	185
11/03/99	86.28	7.92	78.36	--	--	--	--	3,320	108	19.9	98.4	44.8	<25
02/15/00	86.28	5.74	80.54	--	--	--	--	779	26.7	3.82	15.4	4.24	<12.5
05/12/00	86.28	6.76	79.52	--	--	--	--	12,000[3]	3,100	120	980	1,400	820
07/31/00	86.28	7.30	78.98	--	--	--	--	1,200[3]	32	<5.0	11	7.3	39
10/30/00	86.28	7.02	79.26	--	--	--	--	3,300[4]	119	<5.00	40	<15.0	<25.0
02/27/01	86.28	5.89	80.39	--	--	--	--	432[3]	15.5	1.53	14.9	1.06	15.7
05/15/01	86.28	7.07	79.21	--	--	--	--	3,220[3]	96.4	12.6	11.5	11.6	128
08/23/01	86.28	8.05	78.23	--	--	--	--	2,300	48	<10	<10	<10	100
02/25/02	86.28	6.73	79.55	--	--	--	--	3,100	27	2.1	4.8	6.6	<2.5
08/05/02	86.28	7.95	78.33	--	--	--	--	4,100	87	21	90	47	21
02/11/03	86.28	7.05	79.23	--	--	--	--	3,700	21	2.3	4.4	9	<20
08/09/03[5]	86.28	8.23	78.05	--	--	--	--	1,600	12	1	2	4	0.7
02/25/04[5]	86.28	5.85	80.43	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	86.28	9.05	77.23	--	--	--	--	3,000	21	3	3	9	<0.5
02/11/05[5]	86.28	7.02	79.26	--	--	--	--	540	15	1	<0.5	0.8	<0.5
08/15/05[5]	86.28	8.41	77.87	--	--	--	--	2,600	11	1	1	2	<0.5
02/10/06[5]	86.28	6.93	79.35	--	--	--	--	970	20	2	<0.5	3	<0.5
08/02/06[5]	86.28	8.00	78.28	--	--	--	--	1,000	16	1	<0.5	3	<0.5
02/09/07[5]	86.28	7.33	78.95	--	--	--	--	590	3	<0.5	<0.5	0.5	<0.5
08/23/07[5]	86.28	8.83	77.45	--	--	--	--	2,700	18	4	2	8	<0.5
02/18/08[5]	86.28	7.27	79.01	--	--	--	--	1,300	8	1	0.6	1	<0.5
08/12/08[5]	86.28	9.58	76.70	--	--	--	--	2,000	21	3	1	4	<0.5
02/19/09[5]	86.28	6.76	79.52	--	--	--	--	810	<0.5	<0.5	<0.5	1	<0.5
08/07/09[5]	86.28	9.17	77.11	--	--	--	--	900	4	0.9	3	3	<0.5
01/29/10[5]	86.28	6.57	79.71	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/11/10[5]	86.28	8.61	77.67	--	--	--	--	1,800	9	2	6	5	<0.5
2/2/2011[5]	86.28	7.16	79.12	--	--	--	--	97	<0.5	<0.5	<0.5	<0.5	<0.5
01/31/12[5]	86.28	7.67	78.61	--	--	--	--	720	0.9	<0.5	<0.5	0.9	<0.5
02/09/13[5]	86.28	6.87	79.41	86[6]/ <41[6,7,8]	86[6]/ <41[6,7,8]	<1,400/ 2,400[7]	120/ <50[7,8]	75	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14[5]	**86.28**	**7.11**	**79.17**	**<40[6]**	**<40[6]**	**1,500/ <1,400[7]**	**<50/ <50[7,8]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (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)
MW-4													
08/03/98	87.22	12.92	74.30	--	--	--	--	1,900	110	12	<0.5	55	130
11/23/98	87.22	9.40	77.82	--	--	--	--	4,080	136	17.8	37.2	30.1	51.8
02/08/99[1]	87.22	7.82	79.40	--	--	--	--	2,900	150	16	<5.0	15	230/30.7[2]
05/07/99	87.22	7.42	79.80	--	--	--	--	6,050	161	<25	39.8	36.9	<250/30.2[2]
08/23/99	87.22	9.39	77.83	--	--	--	--	3,930	203	37.6	58.6	42.2	255
11/03/99	87.22	9.81	77.41	--	--	--	--	5,350	324	44.7	91.5	56.1	<50
02/15/00	87.22	7.72	79.50	--	--	--	--	4,080	161	27.7	31.1	39.1	73.9
05/12/00	87.22	7.91	79.31	--	--	--	--	3,600[3]	170	27	49	64	170
07/31/00	87.22	8.65	78.57	--	--	--	--	2,900[3]	160	20	15	56	170
10/30/00	87.22	9.08	78.14	--	--	--	--	5,630[4]	301	17.8	11.8	51.5	<25.0
02/27/01	87.22	7.30	79.92	--	--	--	--	2,140[3]	95.1	12.8	53.4	43.0	235
05/15/01	87.22	8.15	79.07	--	--	--	--	4,580[3]	200	44.1	46.3	51.7	172
08/23/01	87.22	9.33	77.89	--	--	--	--	2,700	250	44	21	72	130
02/25/02	87.22	7.80	79.42	--	--	--	--	4,100	100	18	27	39	<10
08/05/02	87.22	7.10	80.12	--	--	--	--	4,100	130	18	50	20	<10
02/11/03	87.22	8.12	79.10	--	--	--	--	4,100	100	23	20	51	<50
08/09/03[5]	87.22	9.55	77.67	--	--	--	--	3,700	110	24	10	45	8
02/25/04[5]	87.22	8.06	79.16	--	--	--	--	5,400	94	28	34	49	5
08/23/04[5]	87.22	10.19	77.03	--	--	--	--	5,100	100	26	7	43	5
02/11/05[5]	87.22	7.97	79.25	--	--	--	--	3,900	58	16	25	16	2
08/15/05[5]	87.22	8.82	78.40	--	--	--	--	2,400	76	16	11	26	3
02/10/06[5]	87.22	7.81	79.41	--	--	--	--	1,600	68	16	8	27	4
08/10/06[5]	87.22	8.58	78.64	--	--	--	--	2,500	100	19	5	30	3
02/09/07[5]	87.22	8.71	78.51	--	--	--	--	6,200	200	39	16	52	3
08/23/07[5]	87.22	10.38	76.84	--	--	--	--	5,800	190	48	20	61	3
02/18/08[5]	87.22	8.11	79.11	--	--	--	--	4,900	110	24	11	32	2
08/12/08[5]	87.22	10.58	76.64	--	--	--	--	6,100	180	31	9	52	3
02/19/09[5]	87.22	7.72	79.50	--	--	--	--	2,900	84	20	5	24	2
08/07/09[5]	87.22	10.42	76.80	--	--	--	--	4,900	120	34	11	36	2
01/29/10[5]	87.22	8.02	79.20	--	--	--	--	3,800	49	15	4	17	1
08/11/10[5]	87.22	10.19	77.03	--	--	--	--	5,400	110	36	11	36	1
2/2/2011[5]	87.22	8.65	78.57	--	--	--	--	3,800	76	29	16	31	1
01/31/12[5]	87.22	9.24	77.98	--	--	--	--	6,700	110	32	7	34	1
02/09/13[5]	87.22	8.14	79.08	300[6,9]/ <40[6,7]	300[6,9]/ <40[6,7]	<1,400/ 1,900[7]	2,300/ 1,500[7,8]	1,800	77	17	4	10	0.8
02/24/14[5]	**87.22**	**9.50**	**77.72**	**92[6]**	**92[6]**	**<1,400/ <1,400[7]**	**1,200/ 720[7,8]**	**6,000**	**80**	**29**	**9**	**30**	**<2**

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (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)
TRIP BLANK													
08/03/98	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	--	--	--	--	--	--	--	<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	<0.50	<0.50	<0.50	<1.50	<2.50
02/27/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
05/15/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
08/23/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA													
02/25/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/02/06[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/13[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14[5]	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 12, 2000 were compiled from reports prepared by Blaine Tech Services, Inc.
Groundwater monitoring data and laboratory analytical results from May 12, 2000 to May 12, 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
DRO = Diesel Range Organics
MO = Motor Oil
GRO = Gasoline Range Organics
O&G = Oil and Grease (n-Hexane Extractable Material)
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes (sum of m+p and o)
MtBE = Methyl tertiary-butyl ether
(µg/L) = Micrograms per liter
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank

* TOC elevations are referenced to msl.

[1] Chromatogram pattern indicates gas and an unidentified hydrocarbon.

[2] Confirmation run.

[3] Laboratory report indicates gasoline C_6-C_{12}.

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

[5] BTEX and MtBE by EPA Method 8260.

[6] TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C_8 (n-octane) through C_{40} (n-tetracontane) normal hydrocarbons.

[7] Analyzed with silica gel cleanup.

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

[9] Laboratory report indicates the surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Table 3
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	ETHANOL (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	1,2-DBA (µg/L)
MW-1							
05/10/12	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/13	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14	**<500**	**<100**	**<2**	**<2**	**<2**	**<2**	**<2**
MW-3							
02/09/13	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14	**<500**	**<100**	**<2**	**<2**	**<2**	**<2**	**<2**
MW-4							
02/09/13	<50	5	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14	**<500**	**<100**	**<2**	**<2**	**<2**	**<2**	**<2**

Table 3
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results on May 12, 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.

TBA = Tertiary-Butyl Alcohol
DIPE = Di-Isopropyl Ether
EtBE = Ethyl Tertiary-Butyl Ether
TAME = Tertiary-Amyl Methyl Ether
1,2-DCA = 1,2-Dichloroethane
1,2-DBA = 1,2-Dibromoethane
(µg/L) = Micrograms per liter

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 4
Groundwater Analytical Results - PPL Volatiles
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	Acetone (µg/L)	2-Butanone (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)	2-Chlorotoluene (µg/L)	Isopropyl-benzene (µg/L)	p-Isopropyl-toluene (µg/L)	Naphth-alene (µg/L)	n-Propyl-benzene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	Diethylphthalate (µg/L)
MW-1											
05/10/12	<6	<3	<1	<1	<1	<1	<1	7	<1	<1	2
02/09/13	<6	<3	<1	<1	<1	<1	<1	<1	<1	<1	--
02/24/14	**<6**	**<3**	**<1**	**<1**	**<1**	**<2**	**<1**	**<2**	**<1**	**<1**	**--**
MW-3											
02/09/13	<6	<3	<1	<1	<1	<1	<1	<1	<1	<1	--
02/24/14	**<6**	**<3**	**<1**	**<1**	**<1**	**<2**	**<1**	**<2**	**<1**	**<1**	**--**
MW-4											
02/09/13	13	5	<1	1	<1	14	1	<1	7	<1	--
02/24/14	**20**	**<3**	**5**	**7**	**2**	**44**	**7**	**<2**	**35**	**2**	**--**

Table 4
Groundwater Analytical Results - PPL Volatiles
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results on May 12, 2012 were provided by Gettler-Ryan Inc.
Current groundwater monitoring data was provided by Gettler-Ryan Inc. and current laboratory analytical results were provided by Eurofins Lancaster Laboratories.

Only constituents with currently or historically detected concentrations are shown. Complete analytical results for the current monitoring period can be found in Attachment B.

(µg/L) **=** Micrograms per liter
PPL = priority pollutant list
-- = Not Measured/Not Analyzed

Table 5
Groundwater Analytical Results - Metals
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)
MW-1					
05/10/12	<0.27	153	92.3	195	154
02/09/13	<0.36	37.7	5.4	42.0	36.1
02/24/14	**<0.76**	**38.7**	**<4.7**	**49.8**	**39.3**
MW-3					
02/09/13	<0.36	34.6	8.4	40.6	52.1
02/24/14	**<0.76**	**30.3**	**6.0**	**38.3**	**41.6**
MW-4					
02/09/13	0.49	54.7	17.5	145	664
02/24/14	**<0.76**	**22.5**	**<4.7**	**57.6**	**69.9**

EXPLANATIONS:

(µg/L) = Micrograms per liter

ANALYTICAL METHOD:

Metals by EPA Method 6010B

Table 6
Groundwater Analytical Results - PCBs
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
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-1							
05/10/12	<0.095	<0.05	<0.19	<0.095	<0.095	<0.095	<0.14

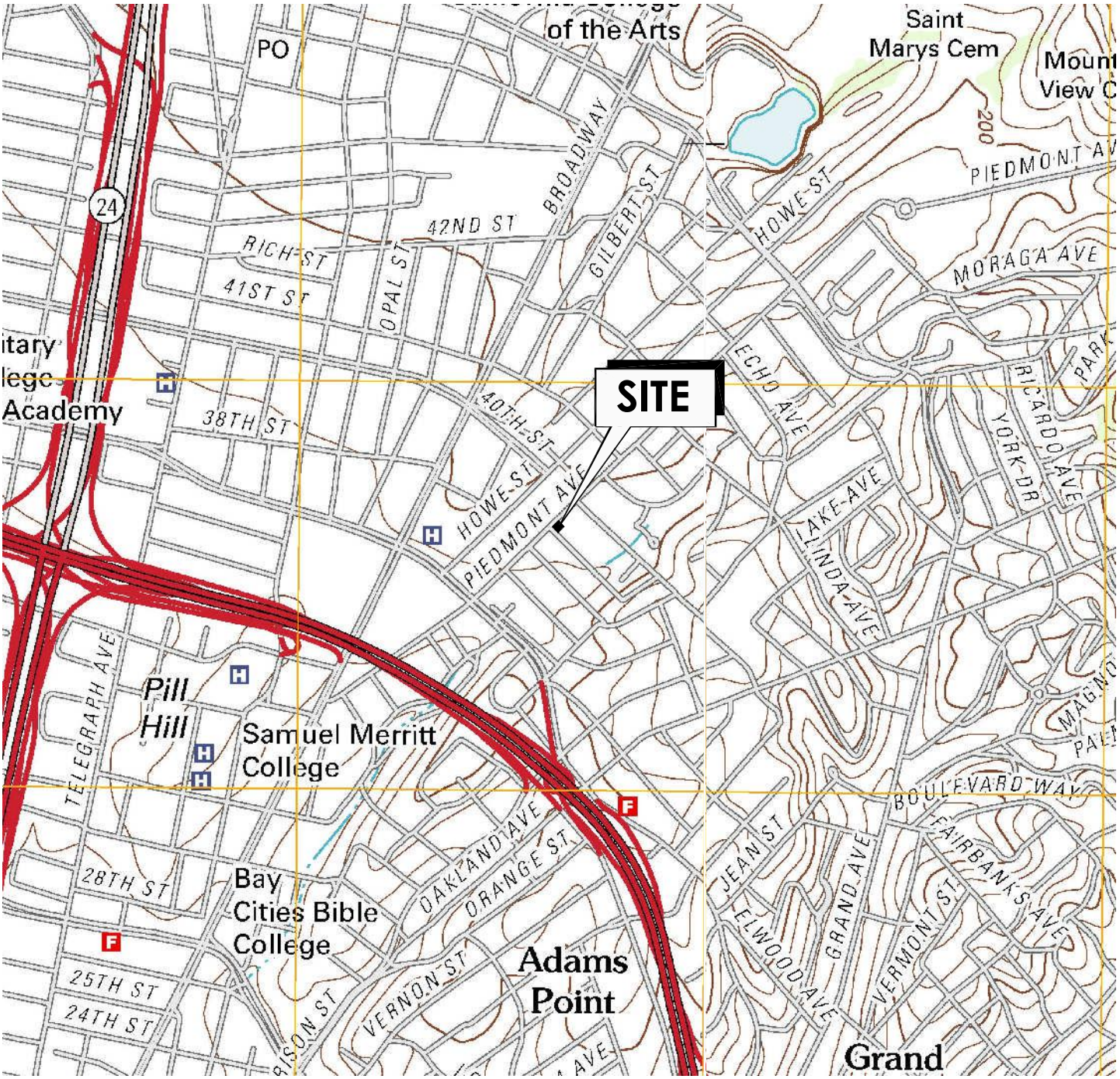
EXPLANATIONS:

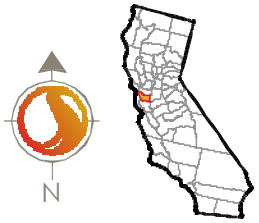
(µg/L) = Micrograms per liter
PCB = Polychlorinated Biphenyl

ANALYTICAL METHOD:

PCBs by EPA Method 8082

FIGURES





CALIFORNIA

1 1/2 0 1

SCALE IN MILES

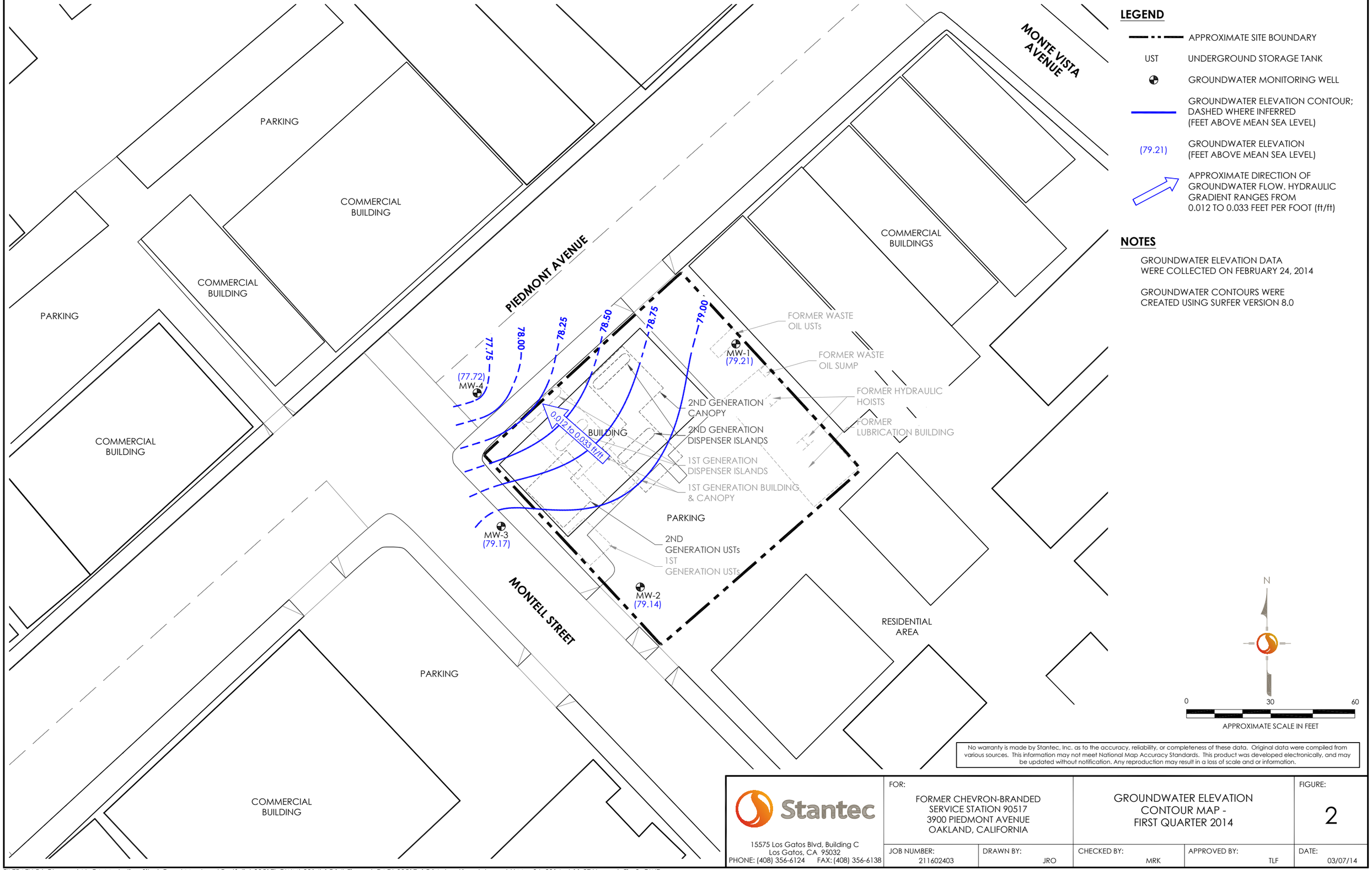
1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE IN FEET

REFERENCE: USGS 7.5 MINUTE QUADRANGLES;
OAKLAND WEST, CALIFORNIA; 2012 AND OAKLAND EAST, CALIFORNIA; 2012

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 90517 3900 PIEDMONT AVENUE OAKLAND, CALIFORNIA	SITE LOCATION MAP		FIGURE: 1
	JOB NUMBER: 211602403	DRAWN BY: JRO	CHECKED BY: MRK	APPROVED BY: TLF	DATE: 03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg|jopalekopsahl|Mar 06, 2014 at 11:35|Layout: Fig 1_SLM



LEGEND

- APPROXIMATE SITE BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR; DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- (79.21) — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW. HYDRAULIC GRADIENT RANGES FROM 0.012 TO 0.033 FEET PER FOOT (ft/ft)

NOTES

GROUNDWATER ELEVATION DATA WERE COLLECTED ON FEBRUARY 24, 2014

GROUNDWATER CONTOURS WERE CREATED USING SURFER VERSION 8.0

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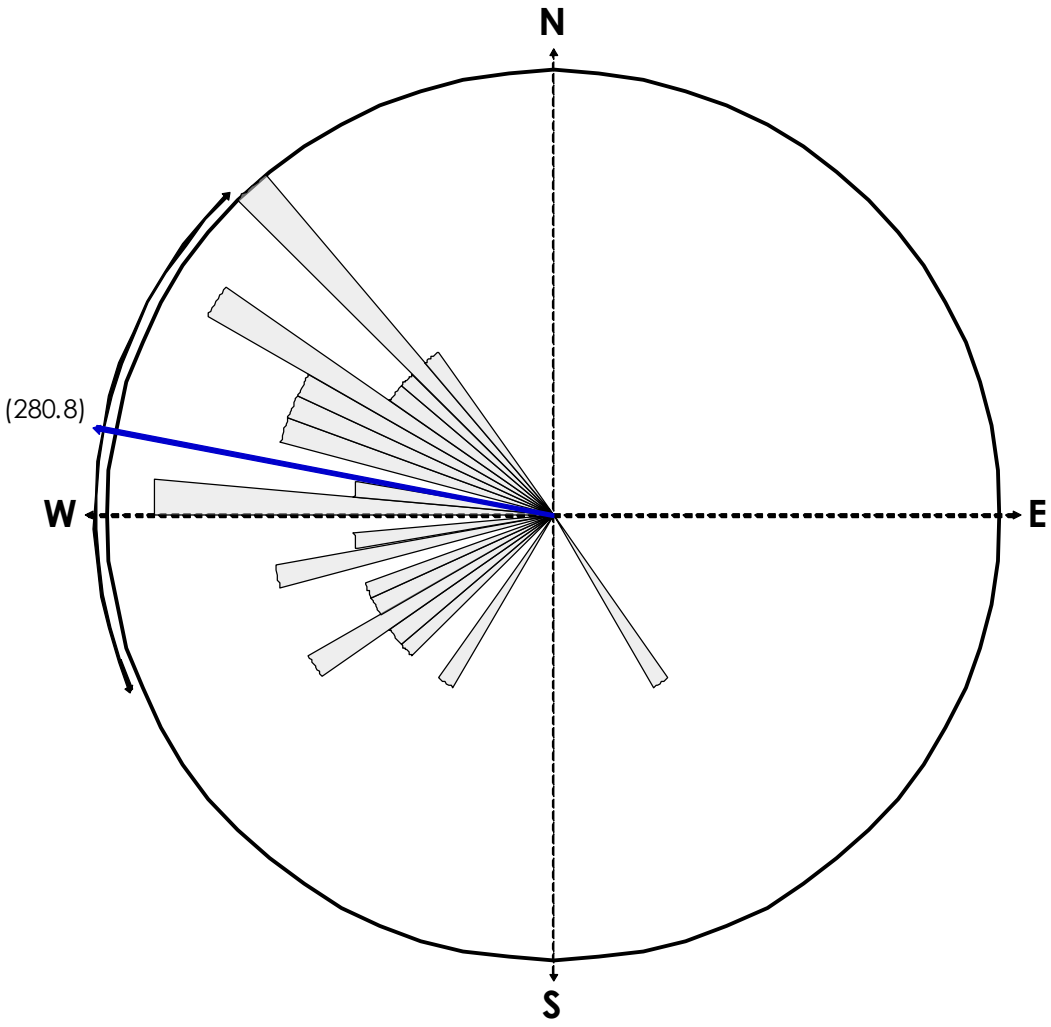
3900 PIEDMONT AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP - FIRST QUARTER 2014

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	MRK	TLF	03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg | jopalekopsahl | Mar 06, 2014 at 11:57 | Layout: Fig 2_GWE



EQUAL AREA PLOT

Number of Points	34
Class Size	5
Vector Mean	280.77
Vector Magnitude	27.98
Consistency Ratio	0.82

NOTE: ROSE DIAGRAM IS BASED ON THE DIRECTION OF GROUNDWATER FLOW BEGINNING THIRD QUARTER 1998.

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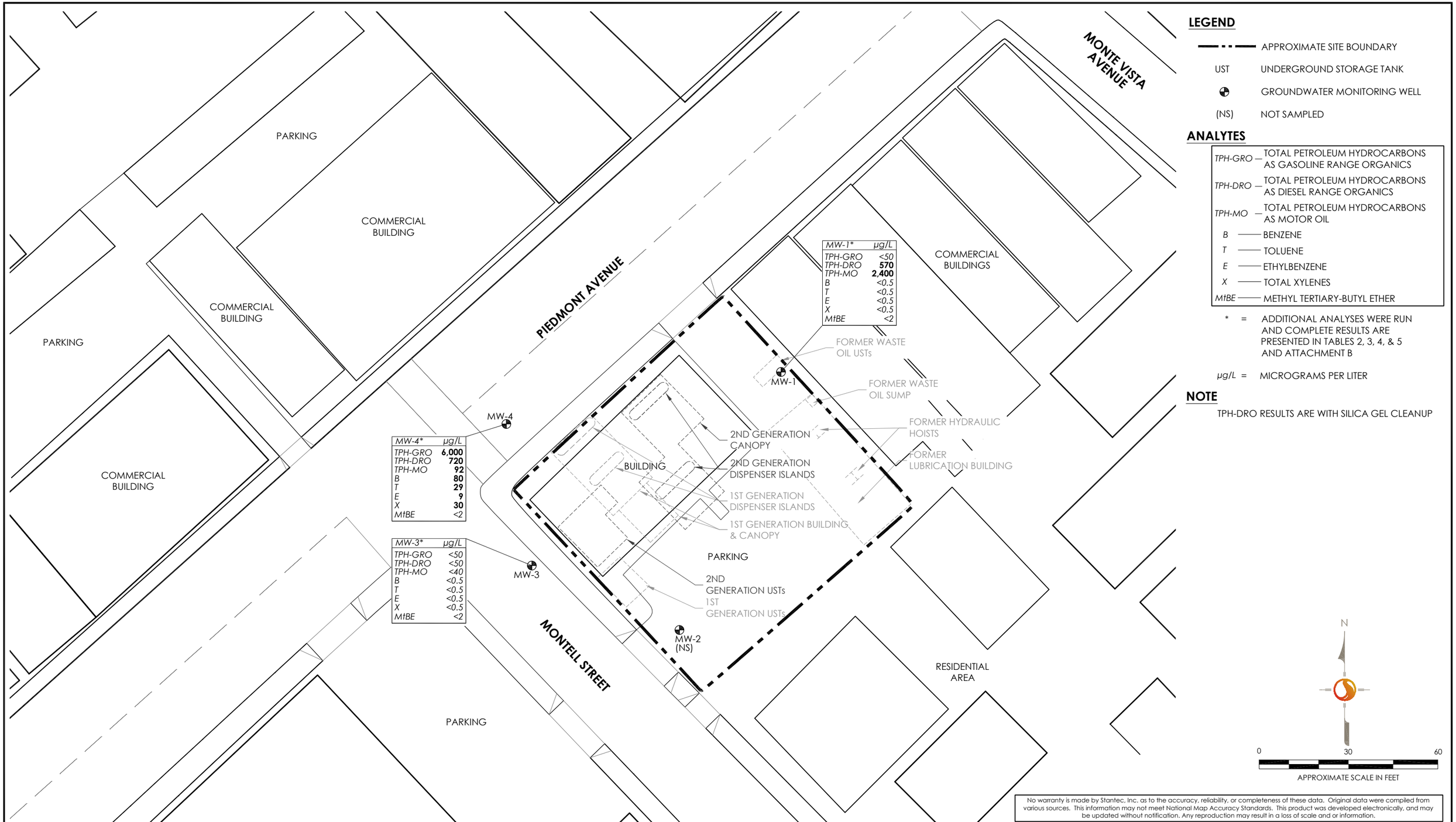
FOR:				FIGURE:
FORMER CHEVRON-BRANDED SERVICE STATION 90517 3900 PIEDMONT AVENUE OAKLAND, CALIFORNIA		ROSE DIAGRAM - FIRST QUARTER 2014		3
JOB NUMBER: 211602403	DRAWN BY: JRO	CHECKED BY: MRK	APPROVED BY: TLF	DATE: 03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg | jopalekopsahl | Mar 06, 2014 at 11:38 | Layout: Fig 3_ROSE



LEGEND

- APPROXIMATE SITE BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- (NS) — NOT SAMPLED

ANALYTES

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

* = ADDITIONAL ANALYSES WERE RUN AND COMPLETE RESULTS ARE PRESENTED IN TABLES 2, 3, 4, & 5 AND ATTACHMENT B

µg/L = MICROGRAMS PER LITER

NOTE

TPH-DRO RESULTS ARE WITH SILICA GEL CLEANUP

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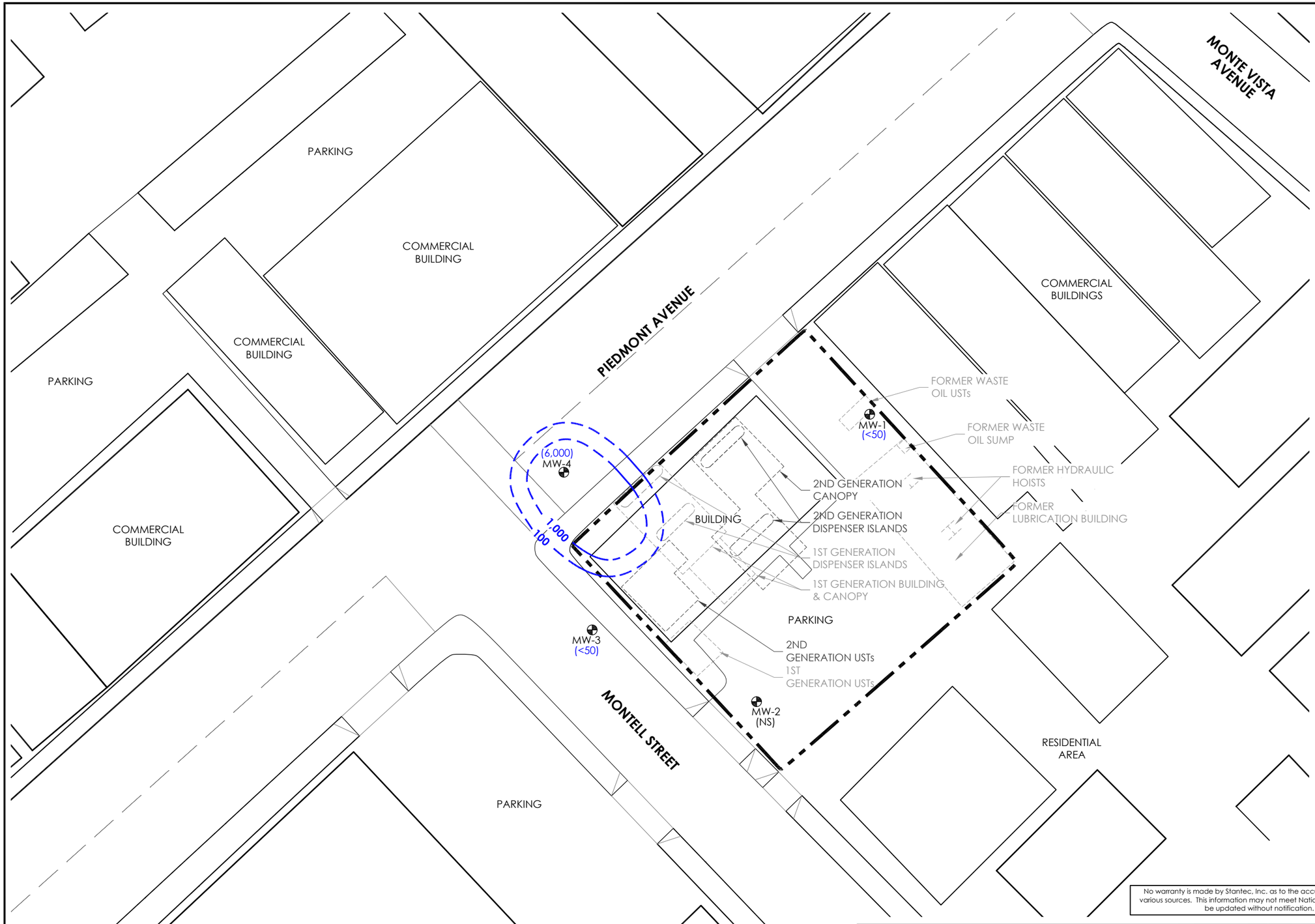
FOR: FORMER CHEVRON-BRANDED SERVICE STATION 90517
3900 PIEDMONT AVENUE
OAKLAND, CALIFORNIA

SITE PLAN SHOWING GROUNDWATER CONCENTRATIONS - FIRST QUARTER 2014

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	MRK	TLF	03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg | jopalekopsahl | Mar 06, 2014 at 11:39 | Layout: Fig 4_GWC



LEGEND

- APPROXIMATE SITE BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- (6,000) — TPH-GRO CONCENTRATION (µg/L)
- (NS) — NOT SAMPLED
- TPH-GRO CONTOUR; DASHED WHERE INFERRED
- TPH-GRO — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS
- (µg/L) — MICROGRAMS PER LITER

N

0 30 60

APPROXIMATE SCALE IN FEET

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FOR:
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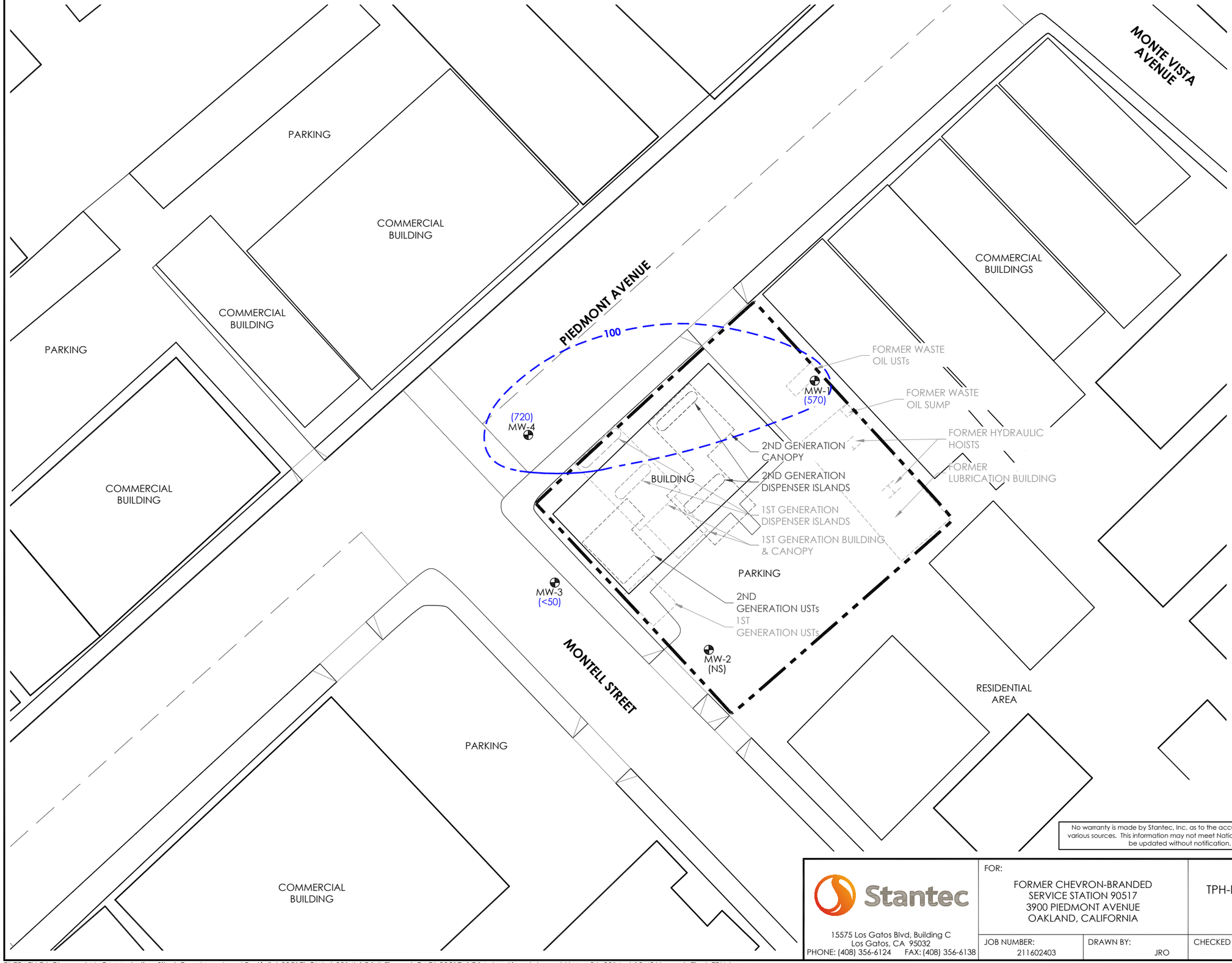
3900 PIEDMONT AVENUE
OAKLAND, CALIFORNIA

TPH-GRO ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	MRK	TLF	03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg | jopalekopsahl | Mar 06, 2014 at 12:34 | Layout: Fig 5_TPHg



LEGEND

	APPROXIMATE SITE BOUNDARY
UST	UNDERGROUND STORAGE TANK
	GROUNDWATER MONITORING WELL
(570)	TPH-DRO CONCENTRATION (µg/L)
(NS)	NOT SAMPLED
	TPH-DRO CONTOUR; DASHED WHERE INFERRED
TPH-DRO	TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
(µg/L)	MICROGRAMS PER LITER

NOTE

RESULTS ARE WITH SILICA GEL CLEANUP

N

0 30 60

APPROXIMATE SCALE IN FEET

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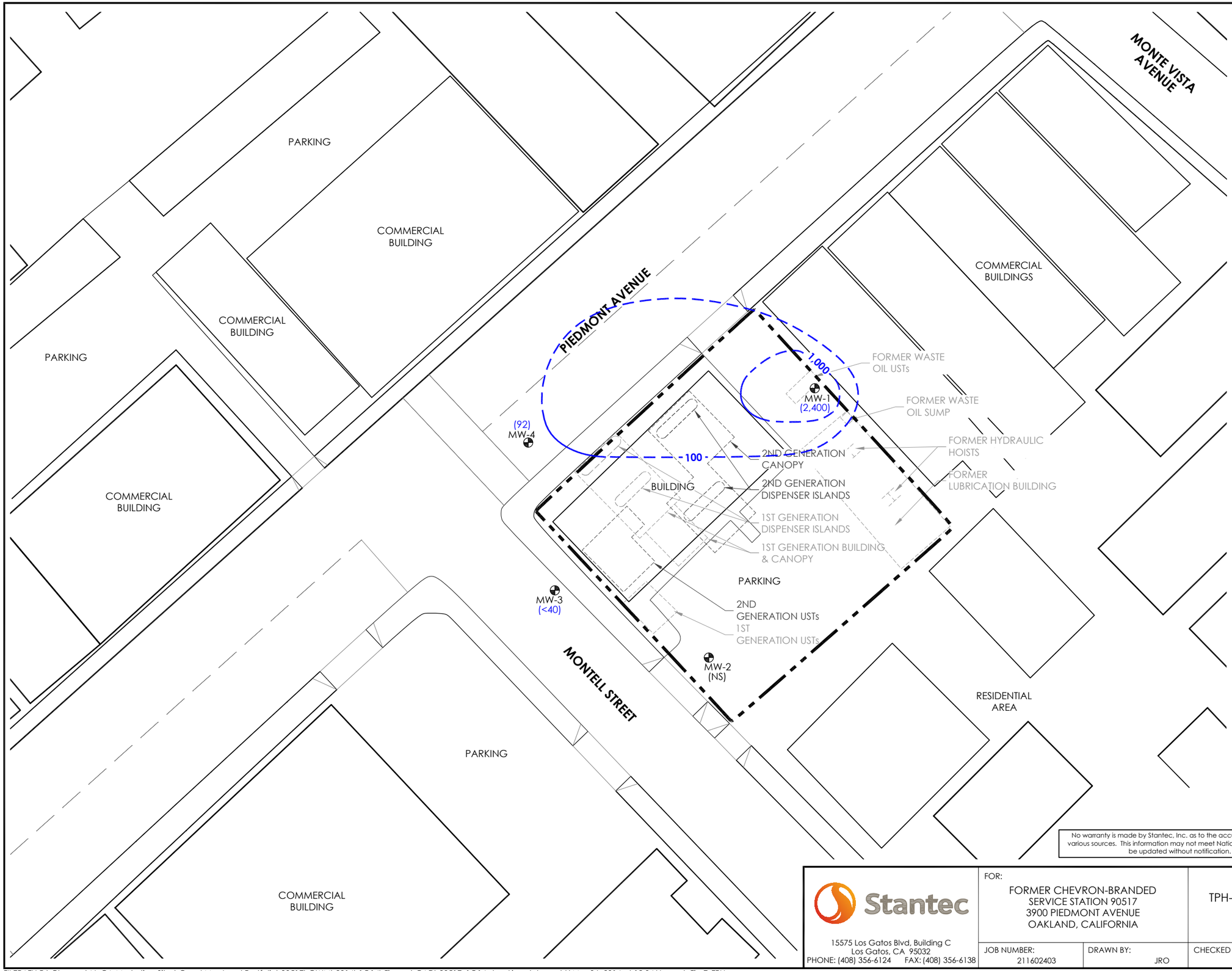
TPH-DRO ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	MRK	TLF	03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg | jopalekopsahl | Mar 06, 2014 at 12:49 | Layout: Fig 6_TPHd



LEGEND

- APPROXIMATE SITE BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- (2,400) — TPH-MO CONCENTRATION (µg/L)
- (NS) — NOT SAMPLED
- TPH-MO CONTOUR; DASHED WHERE INFERRED
- TPH-MO — TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
- (µg/L) — MICROGRAMS PER LITER

N

0 30 60

APPROXIMATE SCALE IN FEET

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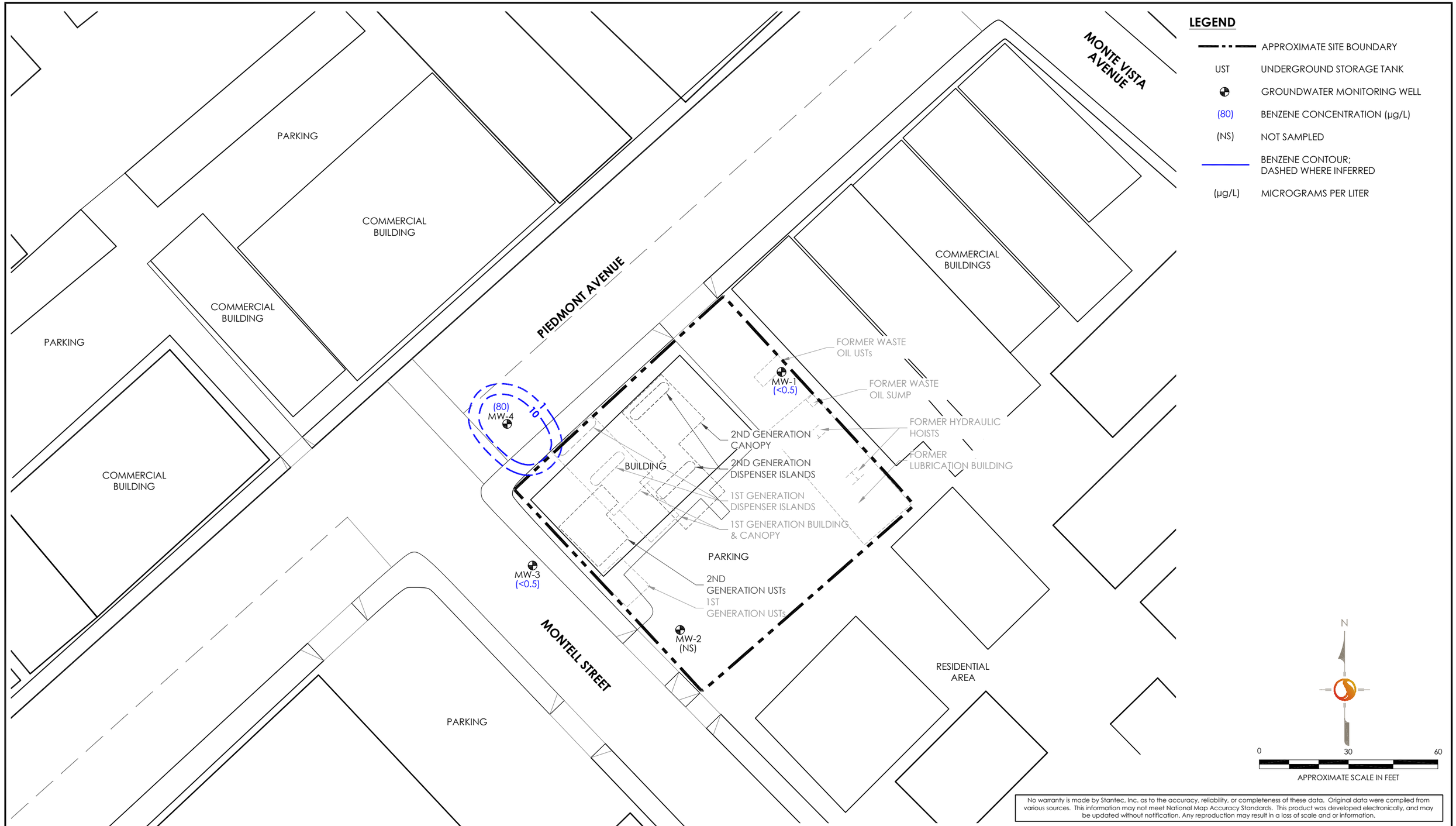
TPH-MO ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	MRK	TLF	03/07/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2014\1Q14\Figures\CAD\90517_1Q14.dwg | jopalekopsahl | Mar 06, 2014 at 12:04 | Layout: Fig 7_TPHm



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OAKLAND, CALIFORNIA

BENZENE ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	MRK	TLF	03/07/14

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

GETTLER-RYAN INC.

TRANSMITTAL

March 3, 2014
G-R #386420

TO: Mr. Travis Flora
Stantec
15575 Los Gatos Blvd., Building C
Los Gatos, California 95032

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

RE: Former Chevron Service Station
#9-0517
3900 Piedmont Avenue
Oakland, California
RO 0000138

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Annual Event of February 24, 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/9-0517

WELL CONDITION STATUS SHEET

Client/Facility #: **Chevron #9-0517** Job #: **386420**

Site Address: **3900 Piedmont Avenue** Event Date: 2/24/14

City: **Oakland, CA** Sampler: JH

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
MW-1	OK							N	N	8" BL	N
MW-2	OK							Y	Y 2"		
MW-3	OK							↓	↓		
MW-4	OK							↓	↓	8" MORRISON	↓

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 #9-0517 | Job Number: 386420
Site Address: 3900 Piedmont Avenue | Event Date: 2/24/14 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: MW-1 | Date Monitored: 2/24/14
Well Diameter: 2 in.
Total Depth: 16.62 ft.
Depth to Water: 8.68 ft. ☐ Check if water column is less then 0.50 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

7.94 xVF .17 = 1.34 x3 case volume = Estimated Purge Volume: 4.04 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.26

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
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: gal
Amt Removed from Well: gal
Water Removed:

Start Time (purge): 0815 | Weather Conditions: Clear
Sample Time/Date: 0840 / 2/24/14 | Water Color: Clear | Odor: Y (N) Light
Approx. Flow Rate: - gpm. | Sediment Description: Light
Did well de-water? NO | If yes, Time: | Volume: gal. | DTW @ Sampling: 9.80

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0818	1.5	7.61	705	18.7		
0821	3.0	7.34	682	18.3		
0824	4.0	7.27	640	18.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)/ FULL SCAN VOC's (8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-MO(8015)
	1 x 250ml poly	YES	HNO3	LANCASTER	CAM 5 METALS (6010B)
	3 x 1 liter WM glass	YES	HCL	LANCASTER	TOTAL OIL & GREASE (1664A)

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 #9-0517 | Job Number: 386420
Site Address: 3900 Piedmont Avenue | Event Date: 2/24/14 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: MW- 2 | Date Monitored: 2/24/14
Well Diameter: 2 in.
Total Depth: 16.50 ft.
Depth to Water: 6.55 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 ____ = ____ x3 case volume = Estimated Purge Volume: ____ gal.

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

Purge Equipment:
- Disposable Bailer
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other: ____

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

Time 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: ____ gal
Amt Removed from Well: ____ gal
Water Removed: ____

Start Time (purge): ____ Weather Conditions: ____
Sample Time/Date: ____ / ____ Water Color: ____ Odor: Y / N ____
Approx. Flow Rate: ____ gpm. Sediment Description: ____
Did well de-water? ____ If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: ____

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)/ FULL SCAN VOC's (8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	x 1 liter ambers	YES	NP	LANCASTER	TPH-MO(8015)
	x 250ml poly	YES	HNO3	LANCASTER	CAM 5 METALS (6010B)
	x 1 liter WM glass	YES	HCL	LANCASTER	TOTAL OIL & GREASE (1664A)

COMMENTS: MW

Add/Replaced Gasket: ____ Add/Replaced Bolt: ____ Add/Replaced Lock: X Add/Replaced Plug: X 2

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #9-0517 | Job Number: 386420
Site Address: 3900 Piedmont Avenue | Event Date: 2/24/14 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: MW-3 | Date Monitored: 2/24/14
Well Diameter: 2 in.
Total Depth: 17.71 ft.
Depth to Water: 7.11 ft. ☐ Check if water column is less then 0.50 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

10.60 xVF .17 = 1.80 x3 case volume = Estimated Purge Volume: 5.40 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.23

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
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: gal
Amt Removed from Well: gal
Water Removed:

Start Time (purge): 0855 | Weather Conditions: clear
Sample Time/Date: 0935 / 2/24/14 | Water Color: Clear Odor: Y / (N)
Approx. Flow Rate: — gpm. | Sediment Description: Light
Did well de-water? No If yes, Time: Volume: gal. DTW @ Sampling: 8.80

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (S))	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
0859	1.5	7.80	637	18.9		
0903	3.5	7.61	620	18.6		
0908	5.5	7.23	609	18.5		

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)/ FULL SCAN VOC's (8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-MO(8015)
	1 x 250ml poly	YES	HNO3	LANCASTER	CAM 5 METALS (6010B)
	3 x 1 liter WM glass	YES	HCL	LANCASTER	TOTAL OIL & GREASE (1664A)

COMMENTS:

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Lock: X Add/Replaced Plug: X 2"

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-0517 | Job Number: 386420
Site Address: 3900 Piedmont Avenue | Event Date: 2/24/14 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: MW-4 | Date Monitored: 2/24/14
Well Diameter: 2 in.
Total Depth: 16.25 ft.
Depth to Water: 9.50 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.

6.75 xVF .17 = 1.14 x3 case volume = Estimated Purge Volume: 3.44 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.85

Purge Equipment:
Disposable Bailer: X
Stainless Steel Bailer:
Stack Pump:
Suction Pump:
Grundfos:
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: gal
Amt Removed from Well: gal
Water Removed:

Start Time (purge): 0955 | Weather Conditions: Clear
Sample Time/Date: 1035 / 2/24/14 | 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: 10.37

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (µS))	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
0958	1	6.93	695	18.9		
1002	2	6.81	737	18.3		
1007	3.5	6.65	705	18.1		

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)/ FULL SCAN VOC's (8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/TPH-DRO(8015)
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-MO(8015)
	1 x 250ml poly	YES	HNO3	LANCASTER	CAM 5 METALS (6010B)
	3 x 1 liter WM glass	YES	HCL	LANCASTER	TOTAL OIL & GREASE (1664A)

COMMENTS:

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Lock: X Add/Replaced Plug: X 3"

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # _____ Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility SS#9-0517-OML G-R#386420 Global ID#T0600102248 WBS
Site Address 3080 PIEDMONT AVENUE, OAKLAND, CA
Chevron PM CM STANTECTF Lead Consultant Plora
Consultant/Office Getler-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 Sim Herian

2 Sample Identification

3 Grab / Composite

4 Matrix

Soil / Sediment ☐ | Water: Potable ☐ Ground ☒ NPDES ☐ Surface ☐ | Oil ☐ Air ☐

5 Analyses Requested

Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Soil/Sediment	Water: Potable	Water: Ground	Water: NPDES	Water: Surface	Oil	Air	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 ☒	8260 Full Scan VOCs	Oxygenates _____	Total Lead Method _____	Dissolved Lead Method _____	TPH-mo (8015)	CAM 5 metals (6010B)	Total oil & grease (1664A)
QA		2/21/14		X				X					2	X	X									
MW-1		↓	0840	X				X					14	↓	↓	X	X	X				X	X	X
MW-3			0935	X				X					↓											
MW-4			1035	X				X					↓											

6 Remarks

COC AMENDED ON 02-25-14, TAT CHANGED TO 24 HOURS

- ☐ 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: _____

9

Relinquished by	Date	Time	Received by	Date	Time
	2/21/14	1130		2/24/14	1130
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

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

March 03, 2014

Project: 90517

Submittal Date: 02/25/2014
Group Number: 1454886
PO Number: 0015141332
Release Number: HOPKINS/CMACLEO
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
QA-T-140224 NA Water	7373048
MW-1-W-140224 Grab Groundwater	7373049
MW-3-W-140224 Grab Groundwater	7373050
MW-4-W-140224 Grab Groundwater	7373051

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	Attn: Erin O'Malley
ELECTRONIC COPY TO	Stantec	Attn: Marisa Kaffenberger
ELECTRONIC COPY TO	Stantec International	Attn: Travis Flora

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA-T-140224 NA Water
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373048
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POQA-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	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.	2	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	F140562AA	02/25/2014 18:14	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140562AA	02/25/2014 18:14	Brett W Kenyon	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14055B20A	02/26/2014 11:49	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14055B20A	02/26/2014 11:49	Marie D Beamenderfer	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-1-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373049
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 08:40 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	2	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	2	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	100	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	1	1
10335	Chloroethane	75-00-3	N.D.	2	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	1	1
10335	Chloromethane	74-87-3	N.D.	2	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	2	1
10335	Dibromomethane	74-95-3	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	2	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethanol	64-17-5	N.D.	500	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	2	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	2	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-1-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373049
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 08:40 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Isopropylbenzene	98-82-8	N.D.	2	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	2	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	2	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	1	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	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
GC Petroleum Hydrocarbons	**SW-846 8015B**		**ug/l**	**ug/l**	
06609	TPH-DRO CA C10-C28	n.a.	1,100	50	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**ug/l**	**ug/l**	
02500	Total TPH	n.a.	2,400	39	1
02500	TPH Motor Oil C16-C36	n.a.	2,400	39	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.				
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	570	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	38.7	1.6	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-1-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373049
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 08:40 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	49.8	1.5	1
07072	Zinc	7440-66-6	39.3	2.0	1
Wet Chemistry	**EPA 1664A**		**ug/l**	**ug/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1,400	1
08078	SGT-HEM (TPH)	n.a.	N.D.	1,400	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
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W140571AA	02/26/2014 08:53	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140571AA	02/26/2014 08:53	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14055B20A	02/26/2014 12:11	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14055B20A	02/26/2014 12:11	Marie D Beamenderfer	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	140560010A	02/26/2014 10:29	Christine E Dolman	1
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	140560012A	02/26/2014 17:26	Heather E Williams	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	140560011A	02/26/2014 09:43	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	140560010A	02/25/2014 15:15	Kelli M Barto	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	140560011A	02/25/2014 15:15	Kelli M Barto	1
11191	TPH Fuels Waters Extraction	SW-846 3510C	1	140560012A	02/25/2014 15:15	Kelli M Barto	1
07049	Cadmium	SW-846 6010B	1	140561848001	02/26/2014 13:21	Eric L Eby	1
07051	Chromium	SW-846 6010B	2	140561848001	02/28/2014 12:46	Eric L Eby	1
07055	Lead	SW-846 6010B	1	140561848001	02/26/2014 13:21	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	140561848001	02/26/2014 13:21	Eric L Eby	1
07072	Zinc	SW-846 6010B	1	140561848001	02/26/2014 13:21	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140561848001	02/25/2014 23:27	Annamaria Kuhns	1
08079	HEM (oil & grease)	EPA 1664A	1	14057807901A	02/26/2014 09:06	Yolunder Y Bunch	1
08078	SGT-HEM (TPH)	EPA 1664A	1	14057807801A	02/26/2014 09:10	Yolunder Y Bunch	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-3-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373050
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 09:35 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	2	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	2	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	100	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	1	1
10335	Chloroethane	75-00-3	N.D.	2	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	1	1
10335	Chloromethane	74-87-3	N.D.	2	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	2	1
10335	Dibromomethane	74-95-3	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	2	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethanol	64-17-5	N.D.	500	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	2	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	2	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-3-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373050
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 09:35 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Isopropylbenzene	98-82-8	N.D.	2	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	2	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	2	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	1	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	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
GC Petroleum Hydrocarbons	**SW-846 8015B**		**ug/l**	**ug/l**	
06609	TPH-DRO CA C10-C28	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**ug/l**	**ug/l**	
02500	Total TPH	n.a.	N.D.	40	1
02500	TPH Motor Oil C16-C36	n.a.	N.D.	40	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.				
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	30.3	1.6	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-3-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373050
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 09:35 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
Metals	**SW-846 6010B**		ug/l	ug/l	
07055	Lead	7439-92-1	6.0	4.7	1
07061	Nickel	7440-02-0	38.3	1.5	1
07072	Zinc	7440-66-6	41.6	2.0	1
Wet Chemistry	**EPA 1664A**		ug/l	ug/l	
08079	HEM (oil & grease)	n.a.	1,500	1,400	1
08078	SGT-HEM (TPH)	n.a.	N.D.	1,400	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
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W140571AA	02/26/2014 10:05	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140571AA	02/26/2014 10:05	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14055B20A	02/26/2014 12:33	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14055B20A	02/26/2014 12:33	Marie D Beamenderfer	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	140560010A	02/26/2014 09:43	Christine E Dolman	1
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	140560012A	02/26/2014 17:47	Heather E Williams	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	140560011A	02/26/2014 10:06	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	140560010A	02/25/2014 15:15	Kelli M Barto	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	140560011A	02/25/2014 15:15	Kelli M Barto	1
11191	TPH Fuels Waters Extraction	SW-846 3510C	1	140560012A	02/25/2014 15:15	Kelli M Barto	1
07049	Cadmium	SW-846 6010B	1	140561848001	02/26/2014 06:59	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	140561848001	02/26/2014 06:59	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	140561848001	02/26/2014 06:59	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	140561848001	02/26/2014 06:59	Joanne M Gates	1
07072	Zinc	SW-846 6010B	1	140561848001	02/26/2014 06:59	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140561848001	02/25/2014 23:27	Annamaria Kuhns	1
08079	HEM (oil & grease)	EPA 1664A	1	14057807901A	02/26/2014 09:06	Yolunder Y Bunch	1
08078	SGT-HEM (TPH)	EPA 1664A	1	14057807801A	02/26/2014 09:10	Yolunder Y Bunch	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-4-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373051
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 10:35 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	2	1
10335	Benzene	71-43-2	80	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	2	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	100	1
10335	n-Butylbenzene	104-51-8	5	1	1
10335	sec-Butylbenzene	135-98-8	7	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	1	1
10335	Chloroethane	75-00-3	N.D.	2	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	1	1
10335	Chloromethane	74-87-3	N.D.	2	1
10335	2-Chlorotoluene	95-49-8	2	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	2	1
10335	Dibromomethane	74-95-3	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	2	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethanol	64-17-5	N.D.	500	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	2	1
10335	Ethylbenzene	100-41-4	9	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	2	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-4-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373051
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 10:35 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Isopropylbenzene	98-82-8	44	2	1
10335	p-Isopropyltoluene	99-87-6	7	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	2	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	2	1
10335	n-Propylbenzene	103-65-1	35	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	1	1
10335	Toluene	108-88-3	29	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	2	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	27	0.5	1
10335	o-Xylene	95-47-6	3	0.5	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	6,000	250	5
GC Petroleum Hydrocarbons	**SW-846 8015B**		**ug/l**	**ug/l**	
06609	TPH-DRO CA C10-C28	n.a.	1,200	50	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**ug/l**	**ug/l**	
02500	Total TPH	n.a.	92	38	1
02500	TPH Motor Oil C16-C36	n.a.	92	38	1
	TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.				
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	720	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	22.5	1.6	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Sample Description: MW-4-W-140224 Grab Groundwater
Facility# 90517 Job# 386420 GRD
3900 Piedmont-Oakland T0600102248

LL Sample # WW 7373051
LL Group # 1454886
Account # 10906

Project Name: 90517

Collected: 02/24/2014 10:35 by JH

Submitted: 02/25/2014 09:50
Reported: 03/03/2014 11:52

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

POMW4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Program RL	Dilution Factor
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	57.6	1.5	1
07072	Zinc	7440-66-6	69.9	2.0	1
Wet Chemistry	**EPA 1664A**		**ug/l**	**ug/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1,400	1
08078	SGT-HEM (TPH)	n.a.	N.D.	1,400	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
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W140571AA	02/26/2014 10:29	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140571AA	02/26/2014 10:29	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	14055B20A	02/26/2014 12:55	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	14055B20A	02/26/2014 12:55	Marie D Beamenderfer	5
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	140560010A	02/26/2014 10:06	Christine E Dolman	1
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	140560012A	02/26/2014 18:09	Heather E Williams	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	140560011A	02/26/2014 10:29	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	140560010A	02/25/2014 15:15	Kelli M Barto	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	140560011A	02/25/2014 15:15	Kelli M Barto	1
11191	TPH Fuels Waters Extraction	SW-846 3510C	1	140560012A	02/25/2014 15:15	Kelli M Barto	1
07049	Cadmium	SW-846 6010B	1	140561848001	02/26/2014 13:25	Eric L Eby	1
07051	Chromium	SW-846 6010B	2	140561848001	02/28/2014 12:50	Eric L Eby	1
07055	Lead	SW-846 6010B	1	140561848001	02/26/2014 13:25	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	140561848001	02/26/2014 13:25	Eric L Eby	1
07072	Zinc	SW-846 6010B	1	140561848001	02/26/2014 13:25	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140561848001	02/25/2014 23:27	Annamaria Kuhns	1
08079	HEM (oil & grease)	EPA 1664A	1	14057807901A	02/26/2014 09:06	Yolunder Y Bunch	1
08078	SGT-HEM (TPH)	EPA 1664A	1	14057807801A	02/26/2014 09:10	Yolunder Y Bunch	1

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Quality Control Summary

Client Name: Chevron Group Number: 1454886
Reported: 03/03/14 at 11:52 AM

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 Program RL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F140562AA	Sample number(s): 7373048							
Benzene	N.D.	0.5	ug/l	96	98	78-120	3	30
Ethylbenzene	N.D.	0.5	ug/l	96	98	79-120	2	30
Methyl Tertiary Butyl Ether	N.D.	2.	ug/l	93	97	75-120	4	30
Toluene	N.D.	0.5	ug/l	93	97	80-120	4	30
Xylene (Total)	N.D.	0.5	ug/l	93	96	80-120	3	30
Batch number: W140571AA	Sample number(s): 7373049-7373051							
Acetone	N.D.	6.	ug/l	84		38-157		
t-Amyl methyl ether	N.D.	2.	ug/l	100		75-120		
Benzene	N.D.	0.5	ug/l	98		78-120		
Bromobenzene	N.D.	1.	ug/l	99		80-120		
Bromochloromethane	N.D.	1.	ug/l	105		80-121		
Bromodichloromethane	N.D.	1.	ug/l	110		73-120		
Bromoform	N.D.	1.	ug/l	102		61-120		
Bromomethane	N.D.	2.	ug/l	109		51-120		
2-Butanone	N.D.	3.	ug/l	88		58-126		
t-Butyl alcohol	N.D.	100.	ug/l	113		75-120		
n-Butylbenzene	N.D.	1.	ug/l	94		80-120		
sec-Butylbenzene	N.D.	1.	ug/l	96		80-120		
tert-Butylbenzene	N.D.	1.	ug/l	96		80-120		
Carbon Disulfide	N.D.	1.	ug/l	100		58-126		
Carbon Tetrachloride	N.D.	1.	ug/l	115		74-130		
Chlorobenzene	N.D.	1.	ug/l	102		80-120		
Chloroethane	N.D.	2.	ug/l	98		45-120		
2-Chloroethyl Vinyl Ether	N.D.	2.	ug/l	90		59-126		
Chloroform	N.D.	1.	ug/l	112		77-122		
Chloromethane	N.D.	2.	ug/l	95		55-120		
2-Chlorotoluene	N.D.	1.	ug/l	98		80-120		
4-Chlorotoluene	N.D.	1.	ug/l	100		80-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	96		56-120		
Dibromochloromethane	N.D.	1.	ug/l	107		72-120		
1,2-Dibromoethane	N.D.	2.	ug/l	101		76-120		
Dibromomethane	N.D.	1.	ug/l	103		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	102		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	100		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	101		80-120		
Dichlorodifluoromethane	N.D.	2.	ug/l	97		35-122		
1,1-Dichloroethane	N.D.	1.	ug/l	102		80-120		
1,2-Dichloroethane	N.D.	2.	ug/l	119		71-130		
1,1-Dichloroethene	N.D.	1.	ug/l	107		76-124		
cis-1,2-Dichloroethene	N.D.	1.	ug/l	101		80-120		
trans-1,2-Dichloroethene	N.D.	1.	ug/l	108		80-120		

*- 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: 1454886
Reported: 03/03/14 at 11:52 AM

Analysis Name	Blank Result	Blank Program RL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloropropane	N.D.	1.	ug/l	97		80-120		
1,3-Dichloropropane	N.D.	1.	ug/l	95		80-120		
2,2-Dichloropropane	N.D.	1.	ug/l	106		67-124		
1,1-Dichloropropene	N.D.	1.	ug/l	105		80-120		
cis-1,3-Dichloropropene	N.D.	1.	ug/l	105		80-120		
trans-1,3-Dichloropropene	N.D.	1.	ug/l	101		69-120		
Ethanol	N.D.	500.	ug/l	92		54-149		
Ethyl t-butyl ether	N.D.	2.	ug/l	100		74-120		
Ethylbenzene	N.D.	0.5	ug/l	99		79-120		
Freon 113	N.D.	2.	ug/l	101		63-133		
Hexachlorobutadiene	N.D.	2.	ug/l	94		50-133		
2-Hexanone	N.D.	3.	ug/l	87		59-125		
di-Isopropyl ether	N.D.	2.	ug/l	98		65-120		
Isopropylbenzene	N.D.	2.	ug/l	102		77-120		
p-Isopropyltoluene	N.D.	1.	ug/l	96		80-120		
Methyl Tertiary Butyl Ether	N.D.	2.	ug/l	106		75-120		
4-Methyl-2-pentanone	N.D.	3.	ug/l	91		59-120		
Methylene Chloride	N.D.	2.	ug/l	101		80-120		
Naphthalene	N.D.	2.	ug/l	91		47-126		
n-Propylbenzene	N.D.	1.	ug/l	97		80-120		
Styrene	N.D.	1.	ug/l	103		80-120		
1,1,1,2-Tetrachloroethane	N.D.	1.	ug/l	103		80-120		
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	95		70-120		
Tetrachloroethene	N.D.	1.	ug/l	102		80-120		
Toluene	N.D.	0.5	ug/l	95		80-120		
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	93		58-126		
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	96		65-120		
1,1,1-Trichloroethane	N.D.	1.	ug/l	100		66-126		
1,1,2-Trichloroethane	N.D.	1.	ug/l	100		80-120		
Trichloroethene	N.D.	1.	ug/l	108		80-120		
Trichlorofluoromethane	N.D.	2.	ug/l	115		65-130		
1,2,3-Trichloropropane	N.D.	1.	ug/l	99		76-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	100		74-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	99		74-120		
Vinyl Chloride	N.D.	1.	ug/l	98		63-120		
m+p-Xylene	N.D.	0.5	ug/l	102		80-120		
o-Xylene	N.D.	0.5	ug/l	100		80-120		
Batch number: 14055B20A	Sample number(s): 7373048-7373051							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30
Batch number: 140560010A	Sample number(s): 7373049-7373051							
TPH-DRO CA C10-C28	N.D.	50.	ug/l	80	82	73-120	2	20
Batch number: 140560012A	Sample number(s): 7373049-7373051							
Total TPH	N.D.	40.	ug/l	81	76	52-120	7	20
TPH Motor Oil C16-C36	N.D.	40.	ug/l					
Batch number: 140560011A	Sample number(s): 7373049-7373051							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	71	81	43-120	14	20
Batch number: 140561848001	Sample number(s): 7373049-7373051							
Cadmium	N.D.	0.76	ug/l	106		90-112		
Chromium	N.D.	1.6	ug/l	107		90-110		
Lead	N.D.	4.7	ug/l	106		88-110		

*- 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: 1454886
Reported: 03/03/14 at 11:52 AM

Analysis Name	Blank Result	Blank Program RL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Nickel	N.D.	1.5	ug/l	107		90-111		
Zinc	N.D.	2.0	ug/l	105		90-110		
Batch number: 14057807801A	Sample number(s): 7373049-7373051							
SGT-HEM (TPH)	N.D.	1,400.	ug/l	66	72	64-114	9	26
Batch number: 14057807901A	Sample number(s): 7373049-7373051							
HEM (oil & grease)	N.D.	1,400.	ug/l	85	83	78-114	2	16

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: W140571AA	Sample number(s): 7373049-7373051 UNSPK: 7373049								
Acetone	85	85	35-144	0	30				
t-Amyl methyl ether	102	105	65-117	2	30				
Benzene	105	107	72-134	2	30				
Bromobenzene	102	107	82-115	6	30				
Bromochloromethane	111	109	76-134	1	30				
Bromodichloromethane	115	113	38-137	1	30				
Bromoform	101	100	48-118	1	30				
Bromomethane	117	116	47-129	1	30				
2-Butanone	90	90	53-124	0	30				
t-Butyl alcohol	117	121*	67-119	4	30				
n-Butylbenzene	99	100	74-134	1	30				
sec-Butylbenzene	101	105	79-125	4	30				
tert-Butylbenzene	101	105	81-121	5	30				
Carbon Disulfide	116	115	53-149	1	30				
Carbon Tetrachloride	131	131	72-135	0	30				
Chlorobenzene	109	109	87-124	0	30				
Chloroethane	111	115	51-145	3	30				
2-Chloroethyl Vinyl Ether	0*	0*	10-151	0	30				
Chloroform	120	120	81-134	1	30				
Chloromethane	102	109	50-131	6	30				
2-Chlorotoluene	102	107	82-118	5	30				
4-Chlorotoluene	103	107	84-122	4	30				
1,2-Dibromo-3-chloropropane	91	97	54-134	7	30				
Dibromochloromethane	111	108	74-116	2	30				
1,2-Dibromoethane	106	104	77-116	2	30				
Dibromomethane	106	107	83-119	1	30				
1,2-Dichlorobenzene	103	107	84-119	4	30				
1,3-Dichlorobenzene	103	107	86-121	4	30				
1,4-Dichlorobenzene	103	106	85-121	3	30				
Dichlorodifluoromethane	126	126	52-129	0	30				
1,1-Dichloroethane	107	111	84-129	4	30				
1,2-Dichloroethane	122	121	68-131	1	30				
1,1-Dichloroethene	123	124	75-155	1	30				
cis-1,2-Dichloroethene	108	110	80-141	2	30				
trans-1,2-Dichloroethene	116	117	81-142	1	30				

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

Quality Control Summary

Client Name: Chevron Group Number: 1454886
Reported: 03/03/14 at 11:52 AM

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
1,2-Dichloropropane	102	106	83-124	3	30				
1,3-Dichloropropane	97	97	81-120	0	30				
2,2-Dichloropropane	119	120	69-135	1	30				
1,1-Dichloropropene	122	120	86-137	1	30				
cis-1,3-Dichloropropene	107	108	70-116	1	30				
trans-1,3-Dichloropropene	103	103	74-119	1	30				
Ethanol	104	93	53-146	11	30				
Ethyl t-butyl ether	103	104	74-122	0	30				
Ethylbenzene	107	107	71-134	0	30				
Freon 113	132	129	89-148	2	30				
Hexachlorobutadiene	88	90	56-134	1	30				
2-Hexanone	87	87	55-127	0	30				
di-Isopropyl ether	100	102	70-129	2	30				
Isopropylbenzene	109	109	75-128	0	30				
p-Isopropyltoluene	101	104	76-123	4	30				
Methyl Tertiary Butyl Ether	108	110	72-126	2	30				
4-Methyl-2-pentanone	92	92	63-123	1	30				
Methylene Chloride	109	109	78-133	0	30				
Naphthalene	86	94	52-125	8	30				
n-Propylbenzene	102	107	74-134	4	30				
Styrene	106	107	78-125	1	30				
1,1,1,2-Tetrachloroethane	107	108	74-136	1	30				
1,1,2,2-Tetrachloroethane	94	100	72-128	6	30				
Tetrachloroethene	113	112	80-128	1	30				
Toluene	101	102	80-125	1	30				
1,2,3-Trichlorobenzene	87	92	50-138	6	30				
1,2,4-Trichlorobenzene	93	97	56-137	4	30				
1,1,1-Trichloroethane	114	114	69-140	0	30				
1,1,2-Trichloroethane	100	102	71-141	2	30				
Trichloroethene	116	117	88-133	1	30				
Trichlorofluoromethane	142	147*	64-146	3	30				
1,2,3-Trichloropropane	99	102	76-118	3	30				
1,2,4-Trimethylbenzene	103	107	72-130	4	30				
1,3,5-Trimethylbenzene	102	107	65-132	4	30				
Vinyl Chloride	115	122	66-133	6	30				
m+p-Xylene	109	108	79-125	1	30				
o-Xylene	105	107	79-125	2	30				
Batch number: 140561848001	Sample number(s): 7373049-7373051 UNSPK: 7373050 BKG: 7373050								
Cadmium	107	108	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	101	103	76-120	2	20	30.3	29.8	2 (1)	20
Lead	104	106	75-125	2	20	6.0	6.1	2 (1)	20
Nickel	106	107	86-115	1	20	38.3	37.3	3 (1)	20
Zinc	105	106	85-117	1	20	41.6	41.4	0 (1)	20
Batch number: 14057807801A	Sample number(s): 7373049-7373051 UNSPK: 7373049								
SGT-HEM (TPH)	53*		64-132						
Batch number: 14057807901A	Sample number(s): 7373049-7373051 UNSPK: 7373049								
HEM (oil & grease)	96		78-114						

*- 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: 1454886
Reported: 03/03/14 at 11:52 AM

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: F140562AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7373048	93	96	107	103
Blank	97	97	106	104
LCS	95	97	104	106
LCSD	94	98	105	106
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W140571AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7373049	106	99	93	96
7373050	106	99	94	99
7373051	106	102	100	101
Blank	106	100	96	96
LCS	106	99	97	103
MS	107	100	96	102
MSD	108	99	96	101
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 14055B20A

	Trifluorotoluene-F
7373048	83
7373049	82
7373050	83
7373051	97
Blank	86
LCS	88
LCSD	87
Limits:	63-135

Analysis Name: TPH-DRO CA C10-C28
Batch number: 140560010A

	Orthoterphenyl
7373049	94
7373050	100
7373051	87
Blank	87
LCS	92
LCSD	94

*- 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: 1454886
Reported: 03/03/14 at 11:52 AM

Surrogate Quality Control

Limits: 46-131

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 140560011A

	Orthoterphenyl
7373049	87
7373050	80
7373051	82
Blank	90
LCS	87
LCSD	93
Limits:	46-131

Analysis Name: TPH Fuels by GC (Waters)
Batch number: 140560012A

	Chlorobenzene	Orthoterphenyl
7373049	90	64
7373050	87	76
7373051	104	84
Blank	93	77
LCS	97	84
LCSD	88	79
Limits:	28-152	52-131

*- 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

For Eurofins Lancaster Laboratories use only
Acct. # 10906 Group # 1454886 Sample # 7373048-51
Instructions on reverse side correspond with circled numbers.
022414-01 1L 500ml

SCR #: ______

① Client Information

Facility # SS#9-0517-OML G-R#386420 WBS Global ID#T0600102248

Site Address 3900 PIEDMONT AVENUE, OAKLAND, CA

Chevron PM CM STANTECTF Lead Consultant 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 Jim Herrn

④ Matrix: Sediment ☐ Ground ☒ Surface ☐; Soil ☐ Potable ☐ NPDES ☐ Air ☐; Water; Oil

⑤ Analyses Requested: BTEX + MTBE 8260 ☐ 8021 ☐; TPH-GRO 8260 ☐ 8015 ☐; TPH-DRO 8015 without Silica Gel Cleanup ☒; TPH-DRO 8015 with Silica Gel Cleanup ☒; 8260 Full Scan VOC's; Oxygenates; Total Lead Method; Dissolved Lead Method; TPH-MO (8015); CAM 5 metals (6010B); Total oil & Grease (1664A)

② Sample Identification	Soil Depth	Collected Date	Collected Time	③ Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE	TPH-GRO	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan VOC's	Oxygenates	Total Lead	Dissolved Lead	TPH-MO (8015)	CAM 5 metals (6010B)	Total oil & Grease (1664A)
QA		2/24/14		X			X		2	X	X									
MW-1		↓	0840	X			X		14	↓	↓	X	X	X				X	X	X
MW-3		↓	0935	X			X		↓	↓	↓	↓	↓	↓				↓	↓	↓
MW-4		↓	1035	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

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 ⑨
[signature]	2/24/14	1130	[signature]	2/24/14	1130
A. Aulger [signature]	24FEB14	1634	UPS		
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			[signature]	2.25.14	950

Temperature Upon Receipt ________ °C

Custody Seals Intact? (Yes) No

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management
7050.03

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.

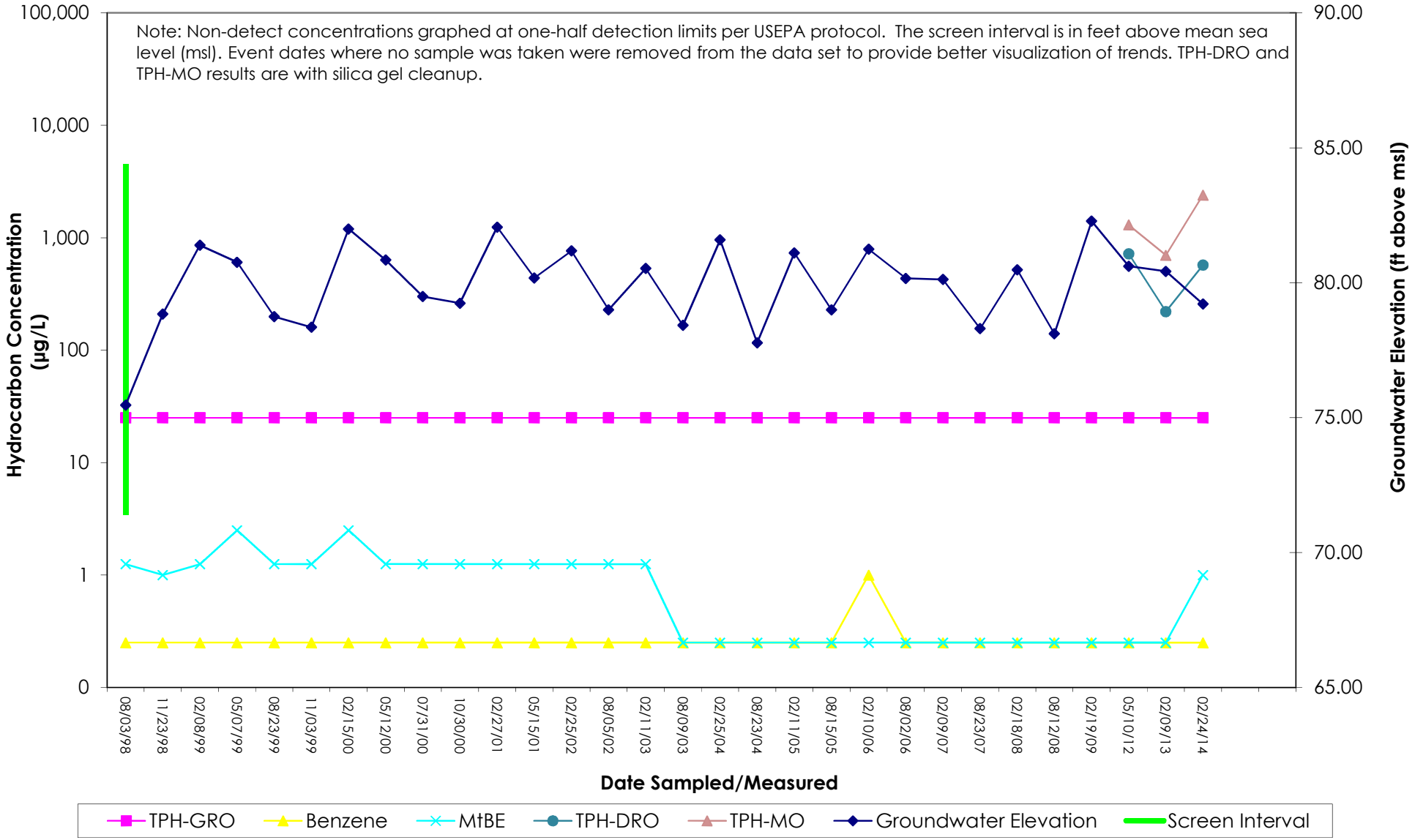
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have 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

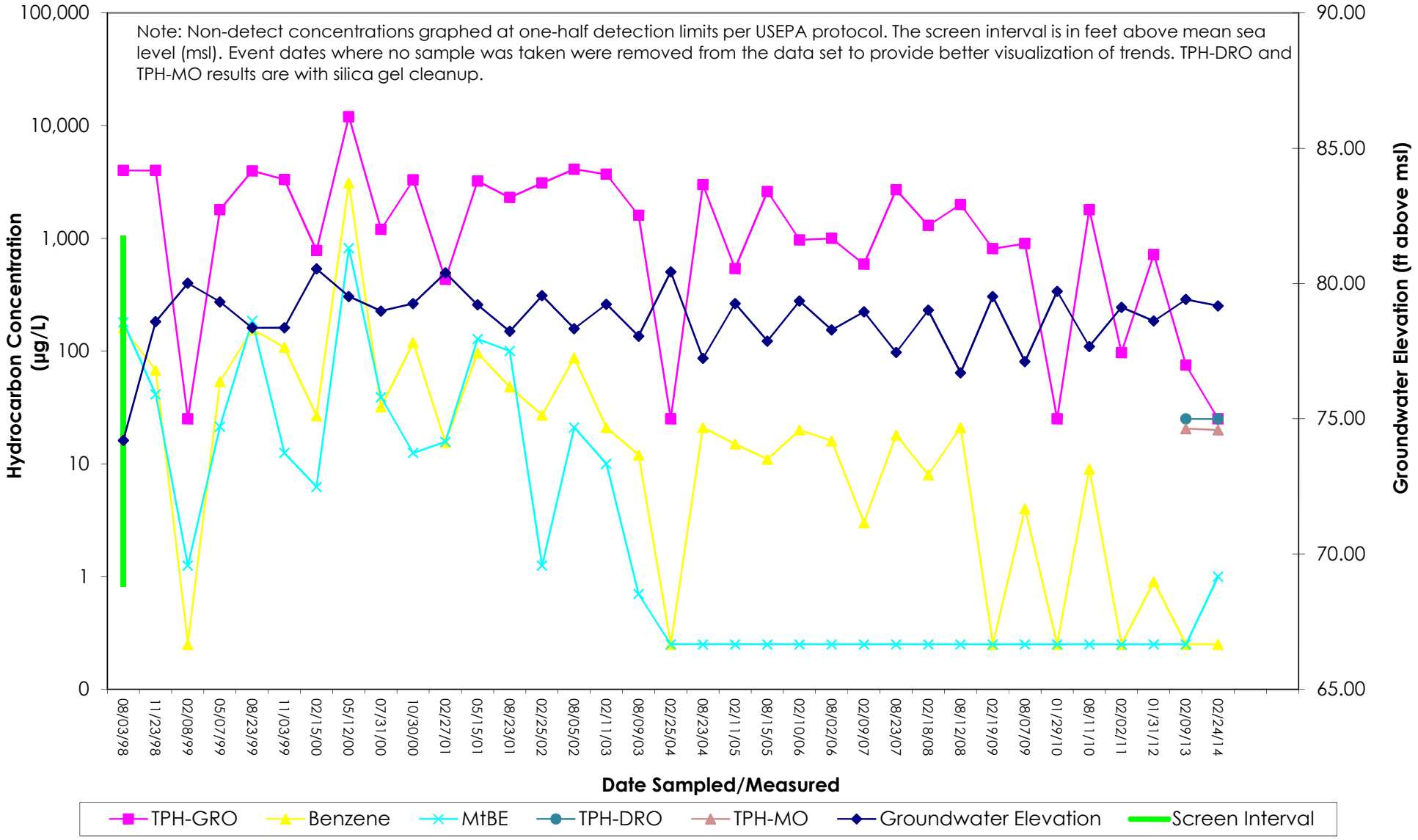
MW-1 TPH-GRO, TPH-DRO, TPH-MO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California



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

Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California



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

Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California