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By Alameda County Environmental Health at 2:28 pm, May 21, 2014

Carryl MacLeod Project Manager Marketing Business Unit Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6506 CMacleod@chevron.com

May 20, 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 Semi-Annual Groundwater Monitoring Report* for former Chevron-branded service station 91723, located at 9757 San Leandro Street in Oakland, California. 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 <u>travis.flora@stantec.com</u>.

Sincerely,

my Jackeo

Carryl MacLeod Project Manager

First Quarter 2014 Semi-Annual Groundwater Monitoring Report

Former Chevron-branded Service Station 91723 9757 San Leandro Street Oakland, California



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

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

May 20, 2014



May 20, 2014

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

Reference: First Quarter 2014 Semi-Annual Groundwater Monitoring Report Former Chevron-branded Service Station 91723 9757 San Leandro Street, 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 Semi-Annual Groundwater Monitoring Report for former Chevron-branded service station 91723, which was located at 9757 San Leandro Street, 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 western corner at the intersection of San Leandro Street and 98th Avenue in Oakland, California. The Site is currently a large parking area staging semi-trucks for a distribution company. A former service station operated at the Site from approximately 1946 to 1978. According to available records, Chevron purchased and began operation of the service station in 1968. Prior to 1966, three fuel underground storage tanks (USTs) and one fuel dispenser island (first generation) located in the eastern portion of the Site were removed. Second-generation fuel structures (installed between 1966 and 1968) included three fuel USTs located in the north-central portion of the Site, one waste oil UST located in the western portion of the Site and one located in the southern portion of the Site). In 1978, the service station was closed and all second-generation fuel structures were removed from the Site.

Land use near the Site consists primarily of commercial and industrial properties. The Site is bounded on the northwest and southwest by a former food processing plant, on the northeast by San Leandro Street followed by railroad tracks, and on the southeast by 98th Avenue followed by commercial businesses. A former Shell-branded service station was located immediately adjacent to and northwest of the Site.

In the Third Quarter 2013 Semi-Annual Groundwater Monitoring Report, dated November 1, 2013, Stantec recommended methyl tertiary-butyl ether (MtBE) analysis be discontinued and the frequency of monitored natural attenuation (MNA) evaluations be reduced to annual and measured during Third Quarters. These recommendations were implemented commencing First Quarter 2014.

Former Chevron-branded Service Station 91723 May 20, 2014 Page 2 of 6

FIRST QUARTER 2014 GROUNDWATER MONITORING AND SAMPLING PROGRAM

Blaine Tech Services, Inc. (Blaine Tech) performed the First Quarter 2014 groundwater monitoring and sampling event on March 21, 2014. Blaine Tech's standard operating procedures (SOPs) and field data sheets are included in **Attachment A**. Blaine Tech gauged depth-to-groundwater in five Site wells (MW-2, MW-5, MW-6, MW-8, and MW-9) prior to collecting groundwater samples for laboratory analysis. All five Site wells were sampled this quarter.

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 wells are currently screened across the prevailing groundwater table with the exception of well MW-2, where the groundwater elevation is measured above the upper screen interval, and the entire screen interval is currently submerged. Groundwater elevation data from Third Quarter 2011 to present are included 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 west-southwest at an approximate hydraulic gradient ranging from 0.001 to 0.003 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 1988 to present.

Schedule of Laboratory Analysis

Groundwater samples were collected and analyzed for the presence of total petroleum hydrocarbons as gasoline range organics (TPH-GRO) and benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds) using United States Environmental Protection Agency (US EPA) Method 8260B (SW-846). Field measurements of post-purge dissolved oxygen (DO) and oxidation-reduction potential (ORP) were collected using an in-line flow-through cell.

Groundwater Analytical Results

During First Quarter 2014, groundwater samples were collected from five Site wells (MW-2, MW-5, MW-6, MW-8, and MW-9). Groundwater analytical results from Third Quarter 2011 to present are included in **Table 2**. Parameters used to evaluate MNA are presented in **Table 3**. 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 benzene isoconcentration map is shown on **Figure 6**.

Certified laboratory analysis reports and chain-of-custody documents are presented as **Attachment B**. Hydrographs based on groundwater elevations and analytical results from Third Quarter 2011 to present are included in **Attachment C**. A summary of First Quarter 2014 groundwater analytical results follows:

• **TPH-GRO** was detected in two Site wells this quarter, at concentrations of 100 micrograms per liter (µg/L; well MW-5) and 270 µg/L (well MW-8), which are historical lows for each

Former Chevron-branded Service Station 91723 May 20, 2014 Page 3 of 6

respective well. In addition, the concentration in well MW-2 (below the laboratory reporting limit [LRL] of 22 μ g/L) is a historical low.

- **Benzene** was detected in one Site well this quarter, at a concentration of 2 µg/L (well MW-8), which is a historical low for this well.
- **Toluene** was not detected above the LRL (0.5 μ g/L) in any Site well sampled this quarter. The concentration in well MW-8 is a historical low.
- **Ethylbenzene** was not detected above the LRL (0.5 μ g/L) in any Site well sampled this quarter. The concentration in well MW-8 is a historical low.
- Total Xylenes were detected in one Site well this quarter, at a concentration of 0.6 μ g/L (well MW-8), which is a historical low for this well.

CONCLUSIONS AND RECOMMENDATIONS

Concentrations of TPH-GRO and benzene were observed to be equal to or above the California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs) for groundwater that is a current or potential source of drinking water as follows:

- TPH-GRO concentrations equal or exceed the ESL of 100 µg/L in wells MW-5 and MW-8; and
- The benzene concentration exceeds the ESL of 1 μ g/L in well MW-8.

Maximum concentrations of TPH-GRO, benzene, and total xylenes are currently observed in well MW-8, which is located in the northern portion of the Site near the former second-generation USTs. TPH-GRO was also detected at 100 µg/L in well MW-5, located near the former first-generation dispenser island. Due to TPH-GRO and BTEX compounds being reported below LRLs in well MW-6 (cross-gradient of well MW-8) and the potential for two distinct source areas, dissolved TPH-GRO is currently represented as two distinct plumes on **Figure 5**, the longest of which is currently defined to below ESLs within approximately 40 feet down-gradient of the source area. Concentrations of toluene and ethylbenzene were below LRLs in all Site wells this quarter. In addition, during First Quarter 2014, historical low concentrations of BTEX compounds were observed in well MW-8, with decreases from Third Quarter 2013 to First Quarter 2014 by up to one order of magnitude. TPH-GRO concentrations fluctuate slightly with changes in groundwater elevations, but they demonstrate an overall stable to decreasing trend in Site wells. Concentrations of BTEX compounds, which are only observed in well MW-8, also demonstrate an overall decreasing trend.

During Third Quarter 2013, the longest dissolved-phase plume was defined to below ESLs within approximately 200 feet down-gradient of the source area, and during First Quarter 2014, the longest dissolved-phase plume was defined to below ESLs within approximately 40 feet down-gradient of the source area. Third Quarter 2013 data will conservatively be used for the following evaluation of Low-Threat UST Case Closure Policy (LTCP) groundwater-specific criteria.

Current and historical groundwater quality data indicate that the dissolved-phase petroleum hydrocarbon plume at the Site is generally stable or decreasing in size and concentration. Site groundwater conditions satisfy LTCP Groundwater-Specific Criteria Scenario 2 as follows:

Former Chevron-branded Service Station 91723 May 20, 2014 Page 4 of 6

- The contaminant plume that exceeds water quality objectives (WQOs) is less than 250 feet in length. Based on dissolved-phase TPH-GRO concentrations that equal or exceed the ESL for groundwater that is a current or potential source of drinking water of 100 μg/L, a conservative estimate of the contaminant plume based on Third Quarter 2013 groundwater data is 200 feet or less in length.
- <u>There is no free product</u>. Free product was reportedly observed while advancing soil boring SB-8 at 7 feet below ground surface (bgs) in 1996; however, free product has not been measured or documented in any other borings or Site wells to-date.
- The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary. As documented in the Site Conceptual Model and Data Gap Work Plan, dated March 31, 2014, during the active water supply well survey conducted in 2013, seven water supply wells were reported within a 0.25-mile radius of the Site and all were identified as for industrial use. Although wells as close as 100 feet from the Site were reported, all wells at or in the vicinity of the Site were field verified and found to be destroyed. All other wells within a 0.25-mile radius (at distances ranging from 435 to 765 feet from the Site) are located up-gradient or cross-gradient based on the predominant direction of groundwater flow (west), and are unlikely to be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site. No surface water bodies were identified within a 0.5-mile radius of the Site.
- <u>The dissolved concentration of benzene is less than 3,000 µg/L, and the dissolved concentration of MtBE is less than 1,000 µg/L.</u> As shown on Figure 4, during First Quarter 2014, benzene was detected at a maximum concentration of 2 µg/L (well MW-8). MtBE is no longer analyzed in groundwater at the Site; however, when it was last analyzed during Third Quarter 2013, and MtBE was not detected above the LRL of 0.5 µg/L in any Site well sampled.

Dissolved concentrations observed on Site during First Quarter 2014 further support this evaluation of the LTCP groundwater-specific criteria; therefore, Stantec recommends that Site groundwater monitoring and sampling cease.

A Site Conceptual Model and Data Gap Work Plan was submitted to Alameda County Environmental Health (ACEH) on March 31, 2014. Data gaps identified in the report included the status and condition of former Site wells MW-1, MW-4, MW-7, and MW-10 and the need for additional assessment to evaluate soil vapor quality at the Site and to determine if Site conditions meet the petroleum vapor intrusion to indoor air criteria set forth in the LTCP.

During the groundwater monitoring and sampling event on March 21, 2014, Blaine Tech conducted a visual survey of the Site and vicinity to evaluate the status and conditions of former Site wells MW-1, MW-4, MW-7, and MW-10. No documentation of the abandonment or destruction of these wells was found during the water well survey conducted in 2013. However, Blaine Tech was only able to locate what appears to be well MW-10. The observed well was 4-inches in diameter, with a depth-to-groundwater measurement of 9.33 feet below top of casing (TOC) and a depth-to-bottom measurement of 20.05 feet below TOC. The observed location, the diameter of the well, and the depth-to-bottom measurement are consistent with specifications for well MW-10, based on historical figures and the well construction log included in the *Site Conceptual Model and Data Gap Work Plan*. The lid to the well vault was missing bolts, but the overall integrity of the well casing and vault appeared to be in good condition.

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Wells MW-1, MW-4, and MW-7 were unable to be located and may have been paved over or potentially abandoned or destroyed.

To address the need for a soil vapor quality evaluation, Stantec proposed the resampling of permanent on-site soil vapor wells VP-1 through VP-5 and included a proposed scope of work for that sampling in the *Site Conceptual Model and Data Gap Work Plan*. On April 22, 2014, Stantec inspected the vapor wells to evaluate their conditions. The tubing and connections of all vapor wells appear to be in good condition for the collection of additional soil vapor samples.

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

Sincerely, Stantec Consulting Services Inc.

Travis Associate Project Manager

Phone: (408)356-6124 <u>Travis.Flora@stantec.com</u>

Attachments:

- Table 1 Well Details / Screen Interval Assessment First Quarter 2014
- Table 2 Groundwater Monitoring Data and Analytical Results
- Table 3 Monitored Natural Attenuation Parameters

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 – Benzene Isoconcentration Map – First Quarter 2014

Attachment A – Blaine Tech Groundwater Monitoring Report – 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

Linda Hothem Trust c/o Mr. Jan Greben, Greben & Associates, 1332 Anacapa Street, Suite 110, Santa Barbara, CA 93101

Ms. Jean Kida, Gerber Products, 12 Vreeland Road, Florham Park, NJ 07932

Former Chevron-branded Service Station 91723 May 20, 2014 Page 6 of 6

This document entitled First Quarter 2014 Semi-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.

Prepared by Grun D'Malley (signature)

Erin O'Malley **Project Engineer**

(signature) Reviewed by

Marisa Kaffenberger Senior Engineer

Reviewed by signature

Travis L. Flora Associate Project Manager

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OF CM

Senior Geologist

TABLES

Table 1 Well Details / Screen Interval Assessment First Quarter 2014 Former Chevron-Branded Service Station 91723

9757 San Leandro Street, Oakland, California

Well ID	Date Installed	Well Type	Casing Diameter (inches)	Top of Casing (feet above msl)	Construction Well Depth (feet bgs)	Current Well Depth ¹ (feet bgs)	Current Depth to Groundwater ¹ (feet below TOC)	Screen Interval (feet bgs)	Screen Interval Assessment
MW-2	04/18/87	Monitoring	2	21.31	22.00	21.55	9.35	12-22	Depth-to-groundwater above screen interval.
MW-5	05/18/88	Monitoring	2	21.84	20.00	17.50	9.41	7-20	Depth-to-groundwater within screen interval.
MW-6	05/18/88	Monitoring	2	21.71	20.00	19.60	9.38	7-20	Depth-to-groundwater within screen interval.
MW-8	05/19/88	Monitoring	2	21.84	20.00	18.20	9.49	7-20	Depth-to-groundwater within screen interval.
MW-9	08/04/89	Monitoring	4	20.55	20.00	20.10	8.87	5.5-20	Depth-to-groundwater within screen interval.
Notes:									
bgs	= below gro	ound surface							

msl = mean sea level

TOC = top of casing

 1 = As measured prior to groundwater sampling on March 21, 2014.

Table 2 Groundwater Monitoring Data and Analytical Results

Former Chevron-Branded Service Station 91723 9757 San Leandro Street, Oakland, California

WELL ID/	TOC	DTW	GWE	TPH-GRO	В	Т	E	Х	MfBE
DATE	(ft.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
AM-2									
09/23/11	21.31	9.78	11.53	180	<0.5	<0.5	0.6	0.6	0.6
12/29/11	21.31	9.73	11.58	100	<0.5	<0.5	0.7	0.9	<0.5
03/30/12	21.31	8.02	13.29	180	<0.5	<0.5	2	4	<0.5
06/12/12	21.31	9.58	11.73	99	<0.5	<0.5	<0.5	<0.5	<0.5
09/27/12	21.31	9.81	11.50	93	<0.5	<0.5	<0.5	<0.5	<0.5
03/13/13	21.31	9.52	11.79	110	<0.5	<0.5	<0.5	<0.5	<0.5
09/17/13	21.31	9.96	11.35	94	<0.5	<0.5	<0.5	<0.5	<0.5
03/21/14	21.31	9.35	11.96	<22	<0.5	<0.5	<0.5	<0.5	
MW-5									
09/23/11	21.84	9.85	11.99	190	<0.5	<0.5	<0.5	<0.5	<0.5
12/29/11	21.84	9.91	11.93	180	<0.5	<0.5	<0.5	<0.5	<0.5
03/30/12	21.84	7.92	13.92	190	<0.5	<0.5	<0.5	<0.5	< 0.5
06/12/12	21.84	9.65	12.19	260	<0.5	<0.5	<0.5	<0.5	<0.5
09/27/12	21.84	9.83	12.01	230	<0.5	<0.5	<0.5	<0.5	<0.5
03/13/13	21.84	9.55	12.29	200	<0.5	<0.5	<0.5	<0.5	<0.5
09/17/13	21.84	9.93	11.91	140	<0.5	<0.5	<0.5	<0.5	<0.5
03/21/14	21.84	9.41	12.43	100	<0.5	<0.5	<0.5	<0.5	
MW-6									
09/23/11	21.71	9.99	11.72	<22	<0.5	<0.5	<0.5	<0.5	0.7
12/29/11	21.71	9.93	11.78	<22	<0.5	<0.5	<0.5	<0.5	0.6
03/30/12	21.71	8.00	13.71	<22	<0.5	< 0.5	<0.5	<0.5	< 0.5
06/12/12	21.71	9.76	11.95	66	<0.5	<0.5	<0.5	<0.5	< 0.5
09/27/12	21.71	9.93	11.78	27	<0.5	<0.5	<0.5	<0.5	< 0.5
03/13/13	21.71	9.70	12.01	<22	<0.5	<0.5	<0.5	<0.5	< 0.5
09/17/13	21.71	10.06	11.65	34	<0.5	<0.5	<0.5	< 0.5	< 0.5
03/21/14	21.71	9.38	12.33	<22	<0.5	<0.5	<0.5	<0.5	
MW-8	01.04	10.15	11.40	1 000	<i></i>	0	10	2	-0 5
09/23/11	21.84	10.15	11.69	1,900	55	2	10	8 5	<0.5
12/29/11	21.84	10.10	11.74	1,300	31	1	5	5	<0.5
03/30/12	21.84	8.12	13.72	2,200	65	3	20	14	<0.5
06/12/12	21.84	9.90	11.94	2,300	49	2	14	14	<0.5

Table 2 Groundwater Monitoring Data and Analytical Results

Former Chevron-Branded Service Station 91723 9757 San Leandro Street, Oakland, California

WELL ID/	TOC	DTW	GWE	TPH-GRO	В	T	E	Х	MfBE
DATE	(ft.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-8 (cont)									
09/27/12	21.84	10.12	11.72	1,900	43	2	10	8	<0.5
03/13/13	21.84	9.86	11.98	1,400	31	1	7	5	<0.5
09/17/13	21.84	10.34	11.50	2,100	60	2	11	9	<0.5
03/21/14	21.84	9.49	12.35	270	2	<0.5	<0.5	0.6	
MW-9									
09/23/11	20.55	9.30	11.25	<22	<0.5	<0.5	<0.5	<0.5	<0.5
12/29/11	20.55	9.51	11.04	<22	<0.5	<0.5	<0.5	<0.5	<0.5
03/30/12	20.55	7.52	13.03	<22	<0.5	<0.5	<0.5	<0.5	< 0.5
06/12/12	20.55	9.14	11.41	<22	<0.5	<0.5	<0.5	<0.5	< 0.5
09/27/12	20.55	9.24	11.31	<22	<0.5	<0.5	<0.5	<0.5	< 0.5
03/13/13	20.55	9.07	11.48	<22	<0.5	<0.5	<0.5	<0.5	<0.5
09/17/13	20.55	9.51	11.04	<22	<0.5	<0.5	<0.5	<0.5	< 0.5
03/21/14	20.55	8.87	11.68	<22	<0.5	<0.5	<0.5	<0.5	
TRIP BLANK									
QA									
09/23/11				<22	<0.5	<0.5	<0.5	<0.5	< 0.5
12/29/11				<22	<0.5	<0.5	<0.5	<0.5	<0.5
03/30/12				<22	<0.5	<0.5	<0.5	<0.5	<0.5
06/12/12				<22	<0.5	<0.5	<0.5	<0.5	< 0.5
09/27/12				<22	<0.5	<0.5	<0.5	<0.5	<0.5
03/13/13				<22	<0.5	<0.5	<0.5	<0.5	<0.5
09/17/13				<22	<0.5	<0.5	<0.5	<0.5	<0.5
03/21/14				<22	<0.5	<0.5	<0.5	<0.5	

9757 San Leandro Street, Oakland, California

EXPLANATIONS:

Current groundwater monitoring data provided by Blaine Tech Services, Inc. Current laboratory analytical results provided by Eurofins Lancaster Laboratories.

TOC = Top of Casing (ft.) = Feet DTW = Depth to Water GWE = Groundwater Elevation (msl) = Mean Sea Level TPH-GRO = Total Petroleum Hydrocarbons as Gasoline Range Organics

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MtBE = Methyl tertiary-butyl ether (µg/L) = Micrograms per liter -- = Not Measured/Not Analyzed QA = Quality Assurance/Trip Blank

Table 3 Monitored Natural Attenuation Parameters

Former Chevron-Branded Service Station 91723

9757 San Leandro Street, Oakland, California

WELL ID/ DATE	METHANE (µg/L)	NITRATE (µg/L)	SULFATE (µg/L)	ALKALINITY TO pH 4.5 (µg/L as CaCO 3)	ALKALINITY TO pH 8.3 (µg/L as CaCO 3)	FERROUS IRON (µg/L)	SULFIDE (µg/L)	POST-PURGE DO (mg/L)	POST-PURGE ORP (mV)
MW-2									
03/30/12	330	320	10,600	545,000	<460	2,200	<270 ¹	1.08	219
06/12/12	300	290	12,900	460,000	<700	1,400	<220 ¹	0.86	135
09/27/12	250	710	14,200	448,000	<700	450	99	0.91	138
03/13/13	680	<250	13,000	503,000		700	<54	1.39	-7
09/17/13	370	<250	12,000	506,000		690	130	0.74	8
03/21/14								1.48	-36
MW-5									
03/30/12	110	440	30,200	370,000	<460	300	<270 ¹	1.11	222
06/12/12	120	890	44,800	387,000	<700	7,300	<220 ¹	0.87	124
09/27/12	110	980	30,200	370,000	<700	7,400	<110 ¹	0.98	136
03/13/13	170	570	30,200	398,000	00</td <td>2,600</td> <td><54</td> <td>1.19</td> <td>-34</td>	2,600	<54	1.19	-34
09/17/13	110	900	31,200	373,000		2,000	<54	0.46	-4
03/21/14								1.31	-28
MW-6									
03/30/12	62	<250	5,600	455,000	<460	210	<54	1.12	223
06/12/12	190	<250	6,300	458,000	<700	4,700	<110 ¹	0.84	115
09/27/12	170	640	8,500	434,000	<700	8,800	<110 ¹	0.96	133
03/13/13	190	<250	4,400	473,000		6,200	<54	2.61	7
09/17/13	120	<250	6,300	444,000		4,600	98	0.49	-14
03/21/14								1.16	26
MW-8									
03/30/12	2,100	2,300	32,200	454,000	<460	29,300	780 ¹	1.15	230
06/12/12	1,700	<250	9,200	441,000	<700	43,200	<220 ¹	0.98	47
09/27/12	1,900	420	7,900	444,000	<700	35,600	<270 ¹	1.21	50
03/13/13	1,800	<250	9,700	450,000		32,300	<540 ¹	1.61	-85
09/17/13	1,700	<250 <250	9,700 5,700	468,000		32,300 22,300	<220'	0.38	-63 -78
03/21/14		~230	J,700	488,000				1.09	-78 -51

Table 3 Monitored Natural Attenuation Parameters

Former Chevron-Branded Service Station 91723

9757 San Leandro Street, Oakland, California

WELL ID/ DATE	METHANE (µg/L)	NITRATE (µg/L)	SULFATE (µg/L)	ALKALINITY TO pH 4.5 (µg/L as CaCO 3)	ALKALINITY TO pH 8.3 (µg/L as CaCO 3)	FERROUS IRON (µg/L)	SULFIDE (µg/L)	POST-PURGE DO (mg/L)	POST-PURGE ORP (mV)
MW-9									
03/30/12	<5.0	<250	7,400	381,000	<460	31	<54	1.34	179
06/12/12	<5.0	2,900	32,900	397,000	<700	340	<54	0.92	128
09/27/12	<5.0	1,700	32,200	398,000	<700	53	<54	1.10	141
03/13/13	<3.0	2,400	33,400	414,000		<8.0	<54	1.38	189
09/17/13	<3.0	910	29,200	414,000		<10	<54	1.41	124
03/21/14								1.04	72

9757 San Leandro Street, Oakland, California

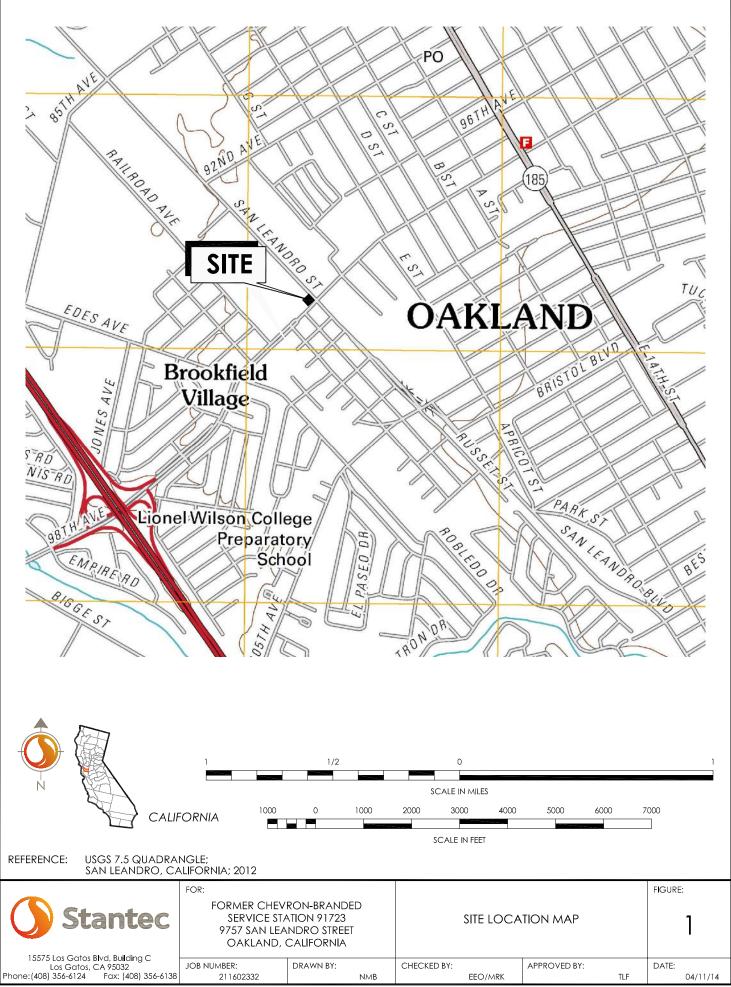
EXPLANATIONS:

Current groundwater monitoring data provided by Blaine Tech Services, Inc. Current laboratory analytical results provided by Eurofins Lancaster Laboratories.

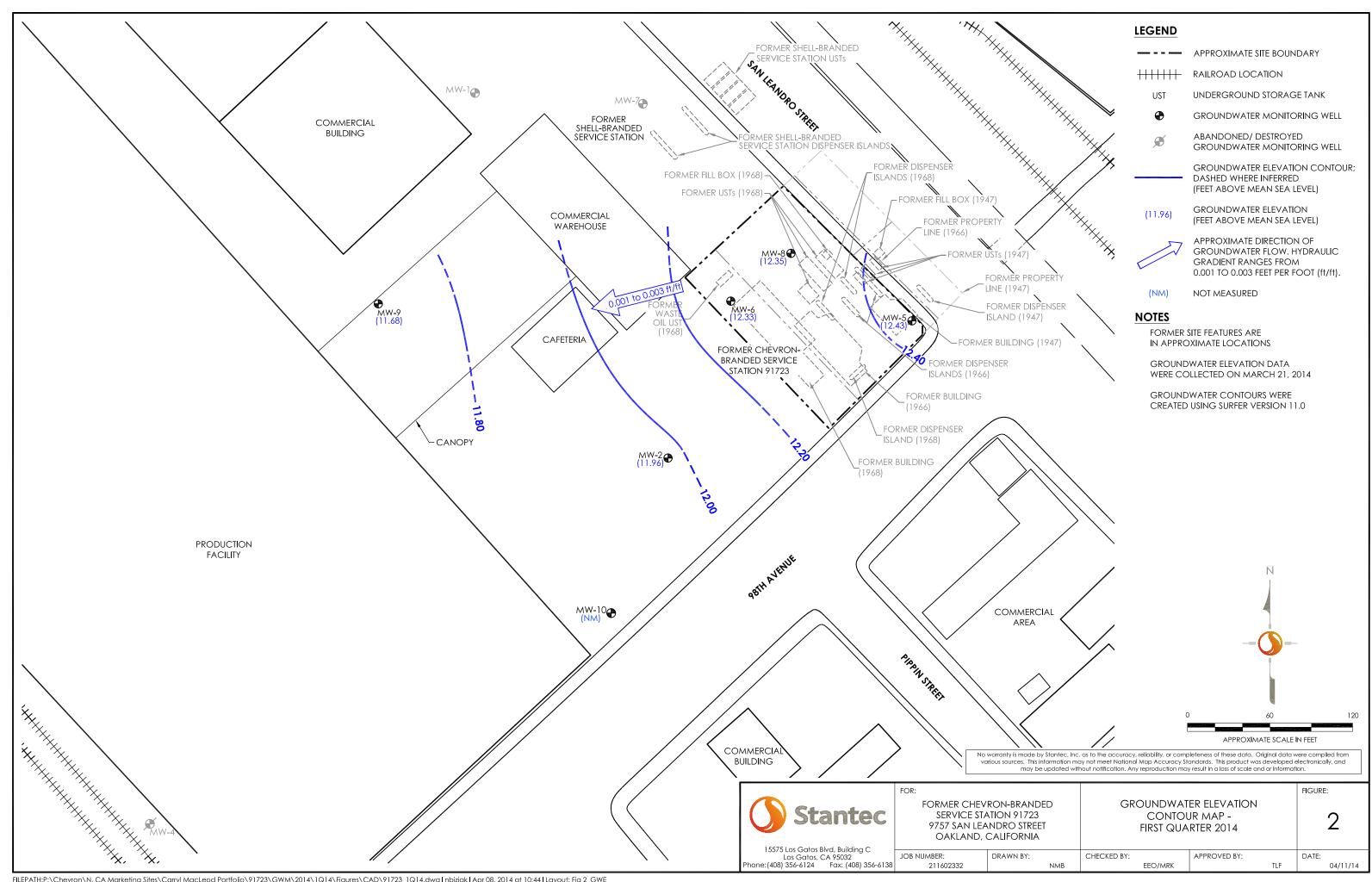
(µg/L) = Micrograms per liter (µg/L as CaCO₃) = Micrograms per liter as calcium carbonate DO = Dissolved Oxygen (mg/L) = Milligrams per liter ORP = Oxidation Reduction Potential (mV) = Millivolts -- = Not Measured/Not Analyzed

¹ Laboratory report indicates reporting limits were raised due to interference from the sample matrix.

FIGURES

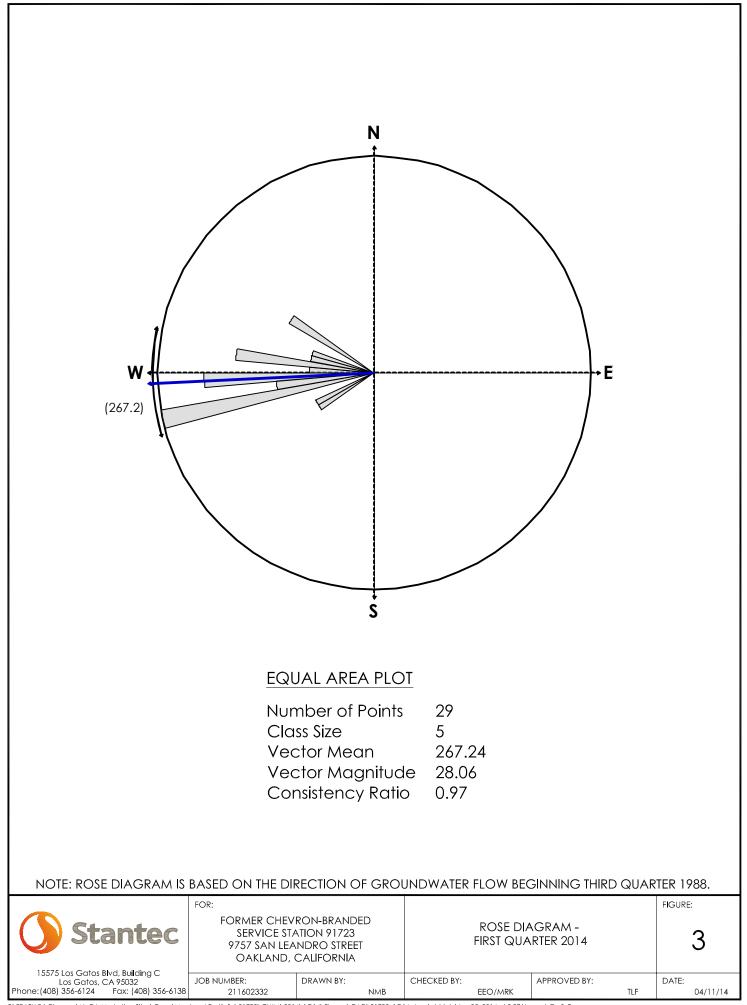


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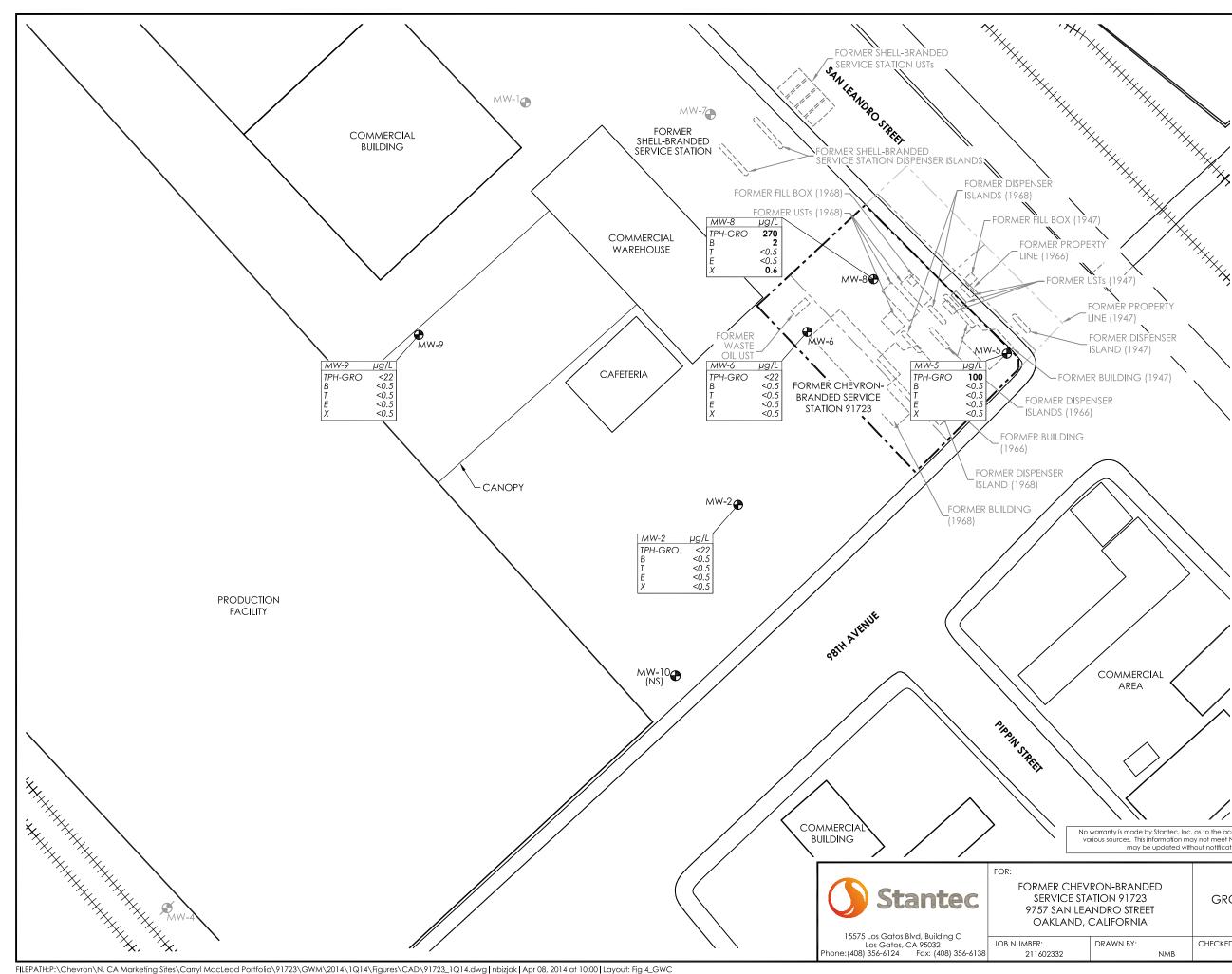


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ed T	GR	OUNDWAT CONTOL FIRST QUA				2
NMB	CHECKED BY:	FFO/MRK	APPROVED BY:	TLF	DATE:	04/11/14



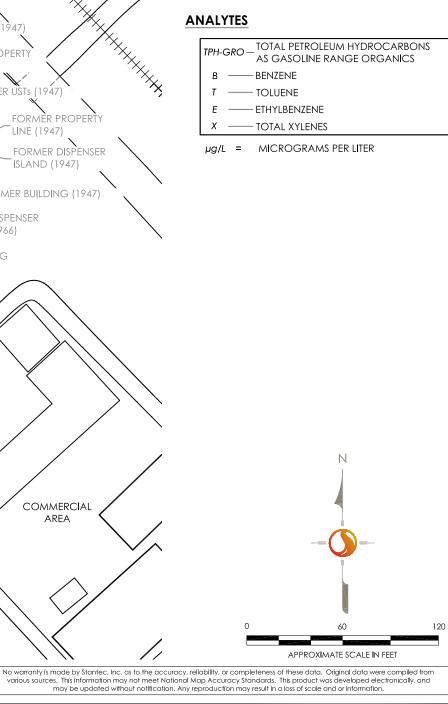
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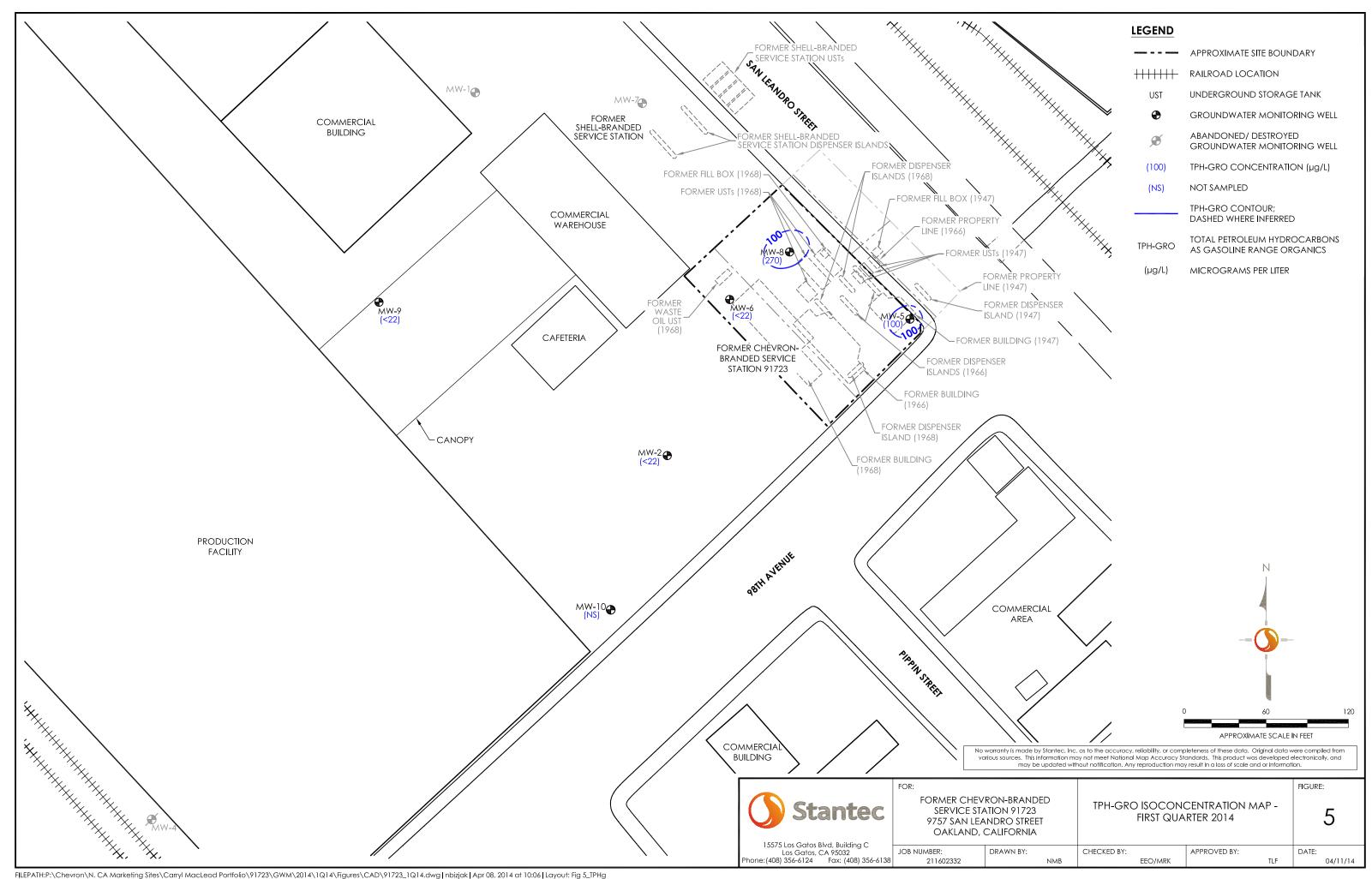
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LEGEND

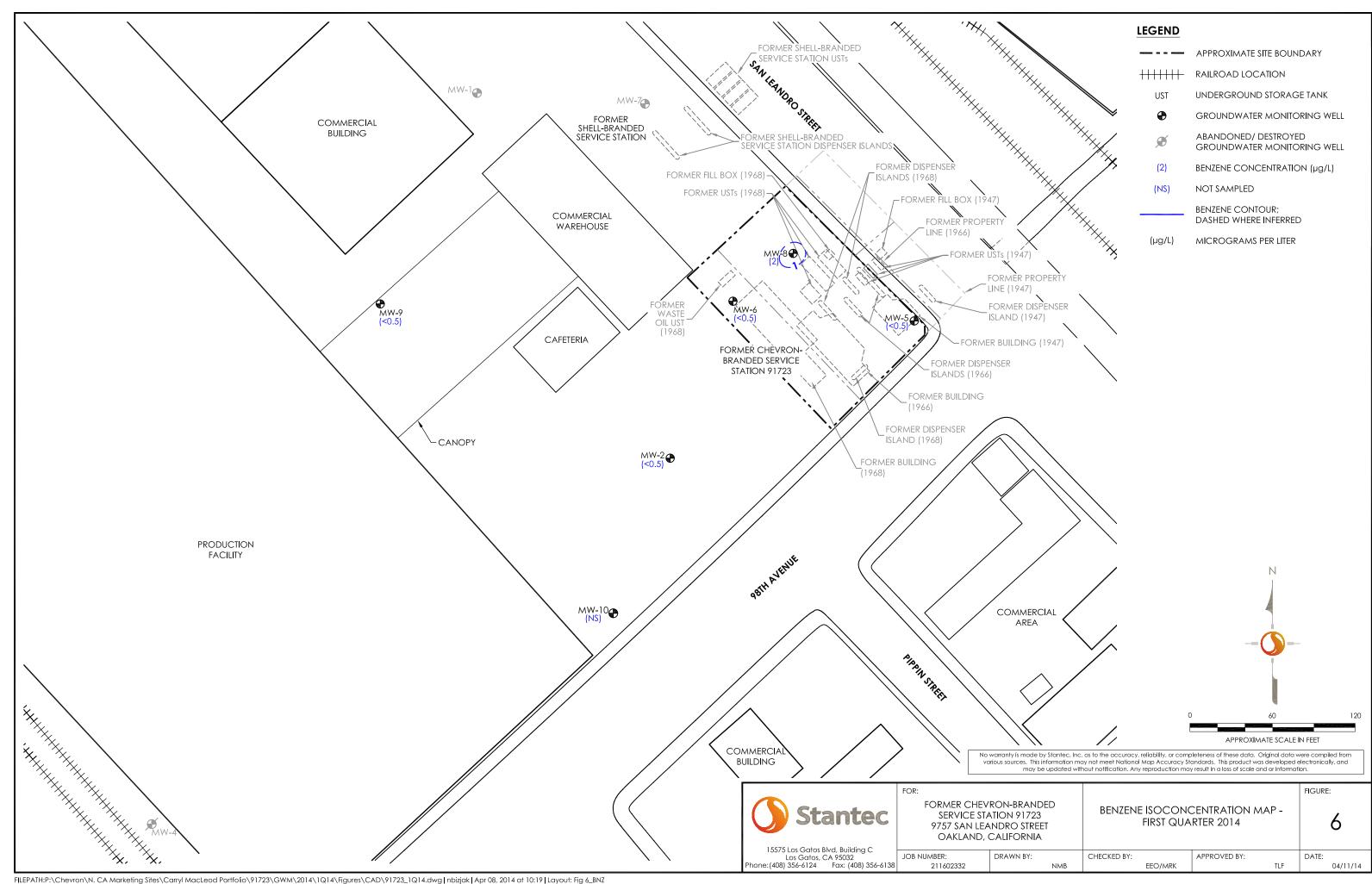
	APPROXIMATE SITE BOUNDARY
++++++	RAILROAD LOCATION
UST	UNDERGROUND STORAGE TANK
Ð	GROUNDWATER MONITORING WELL
Æ	ABANDONED/ DESTROYED GROUNDWATER MONITORING WELL
(NS)	NOT SAMPLED



ANDED 723 STREET RNIA	SITE PLAN GROUNDWATER C FIRST QUA	ONCENTRATIONS -	figure: 4
BY:	CHECKED BY:	APPROVED BY:	DATE:
NMB	EEO/MRK	TLF	04/11/14



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	0	60
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//		APPROXIMATE SCALE IN FEET
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NDED 23 REET IA	BENZENE ISOCONC FIRST QUA	-	6
	CHECKED BY:	APPROVED BY:	DATE:
NMB	EEO/MRK	TLF	04/11/14

ATTACHMENT A Blaine Tech Groundwater Monitoring Report – First Quarter 2014



March 26, 2014

Chevron Environmental Management Company Carryl McLeod 6111 Bollinger Canyon Rd. San Ramon, CA 94583

> First Quarter 2014 Monitoring at Former Chevron Service Station 9-1723 9757 San Leandro St. Oakland, CA

> Monitoring performed on March 21, 2014

Blaine Tech Services, Inc. Groundwater Monitoring Event 140321-JO1

This submission covers the routine monitoring of groundwater wells conducted on March 21, 2014 at this location. Five monitoring wells were measured for depth to groundwater (DTW). Five monitoring wells were sampled. All sampling activities were performed in accordance with local, state and federal guidelines.

Water levels measurements were collected using an electronic slope indicator. All sampled wells were purged of three case volumes, depending on well recovery, or until water temperature, pH and conductivity stabilized. Purging was accomplished using electric submersible pumps, positive air displacement pumps, or stainless steel, Teflon, or disposable bailers. Subsequent sample collection and sample handling was performed in accordance with EPA protocols. Alternately, where applicable, wells were sampled utilizing no-purge methodology. All reused equipment was decontaminated in an integrated stainless steel sink with de-ionized water supplied Hotsy pressure washer and Liquinox or equivalent.

Samples were delivered under chain-of-custody to Lancaster Laboratories of Lancaster, Pennsylvania, for analysis. Monitoring well purgewater and equipment rinsate water was collected and transported under bill-of-lading to Blaine Tech of San Jose, California.

Enclosed documentation from this event includes copies of the Well Gauging Sheet, Well Monitoring Data Sheets, and Chain-of-Custody.

Blaine Tech Services, Inc.'s activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrogeologic conditions or formulation of recommendations was performed.

Please call if you have any questions.

Sincerely,

AZA

Dustin Becker Blaine Tech Services, Inc. Senior Project Manager

- attachments: SOP Well Gauging Sheet Individual Well Monitoring Data Sheets Wellhead Inspection Form Bill of Lading Calibration Log
- cc: Stantec Attn: Travis Flora 15575 Los Gatos Blvd Building C Los Gatos, CA 95032

BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS AT CHEVRON SITES

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

SAMPLING PROCEDURES OVERVIEW

SAFETY

All groundwater monitoring assignments performed for Chevron comply with Chevron's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40-hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Chevron site.

INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic water level indicators that are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of immiscibles. When free product is suspected, its presence is confirmed using an electronic interface probe (e.g. GeoTech). No samples are collected from a well containing product.

TRADITIONAL PURGING & SAMPLING

Evacuation

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well.

Standard Methods & Procedures Chevron EMC Page 1

Parameter Stabilization

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

Sample Collection

All samples are collected using disposable bailers.

Sample Containers

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory that will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

Dewatered Wells

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not immediately recharge.

Measuring Recharge

Upon completion of well purging, a depth to water measurement is collected and notated to ensure that the well has recharged to within 80% of its static, pre-purge level prior to sampling.

Wells that do not immediately show 80% recharge or dewatered wells will be allowed approximately 2 hours to recharge prior to sampling or will be sampled at site departure. All wells requiring off-site traffic control in the public right-of-way, the 80% recharge rule may be disregarded in the interests of Health and Safety. The sample may be collected as soon as there is sufficient water. The water level at time of sampling will be noted.

Dissolved Oxygen Measurements

Dissolved Oxygen readings are taken pre- and/or post-purge using YSI meters (e.g. YSI Model 550) or HACH field test kits.

The YSI meters are able to collect accurate in-situ readings. The probe allows downhole measurements to be taken from wells with diameters as small as two inches. The probe and reel is decontaminated between wells as described above. The meter is calibrated

Standard Methods & Procedures

as per the instructions in the operating manual. The probe is lowered into the water column and the reading is allowed to stabilize prior to collection.

Oxidation Reduction Potential Measurements (ORP)

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual.

LOW FLOW SAMPLING USING SAMPLE-PRO BLADDER PUMP

Calibration

Calibrate YSI Flow Cell as per manufacturer's specifications. Thoroughly rinse probe and cup between parameters. Calibration order as follows:

- 1. pH (use 3-point calibration of 7, 4, 10)
- 2. Oxygen Reduction Potential (ORP)
- 3. Specific Conductance
- 4. Dissolved Oxygen (DO) (calibrate simulating 100% oxygen saturation)

Purging & Sampling Collection

- 1. Insert new bladder into Sample-Pro pump housing.
- 2. Remove dedicated PE tubing from the well or start with new PE tubing cut to the required length.
- 3. Attach the PE tubing to the Sample-Pro Bladder Pump.
- 4. Gently lower the Sample-Pro Bladder Pump, and PE tubing into the well, placing the Sample-Pro Bladder Pump intake at the center of the screened interval. Take care to minimize disturbance to the water column.
- 5. Direct effluent line into YSI 556 Flow Cell.
- 6. Set Sample-Pro Bladder Pump speed at 100 500 ml/min.
- 7. Collect water quality parameter measurements for temperature, pH, conductivity, turbidity, DO and ORP every 3-5 minutes.
- 8. Monitor drawdown during purging with electronic water level meter. Record water level with each parameter measurement. MAXIMUM DRAWDOWN IS 0.33 FEET.
- 9. Collect parameter measurements until stability is achieved. Stability is defined as three consecutive measurements where:

Temp	± 1° Celsius
рН	± 0.1
Conductivity	± 3%
Turbidity	± 10% NTU
DO	± 0.3 mg/l
ORP	± 10 Mv

- 10. Sample may be collected once stability is achieved and at least one system volume of water removed from the well.
- 11. Disconnect effluent line from YSI 556 Flow Cell.
- 12. Sample through effluent line while maintaining constant flow rate.
- 13. Remove Sample-Pro Bladder Pump, and PE tubing from well.
- 14. Detach and reinstall dedicated PE tubing in well.

PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non-hazardous purgewater is transported under standard Bill of Lading or Non-Hazardous Waste Manifest to a Blaine Tech Services, Inc. facility before being transported to a Chevron approved disposal facility

TRIP BLANKS

Trip Blanks, if requested, are taken to the site and kept inside the sample cooler for the duration of the event. They are turned over to the laboratory for analysis with the samples from that site.

DUPLICATES

Duplicates, if requested, may be collected at a site.

SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the designated analytical laboratory. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

DOCUMENTATION CONVENTIONS

A label must be affixed to all sample containers. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time and date of sample collection along with the initials of the person who collects the sample are handwritten onto the label. Field documentation is contemporaneous.

DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment such as hose reels, pumps and bailers is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is detuned to function as a hot pressure washer that is then operated with high quality deionized water that is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, water level indicator, etc.) that cannot be washed using the high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

FERROUS IRON MEASUREMENTS

All field measurements are collected at time of sampling with a HACH test kit.

WELL GAUGING DATA

Date <u>3-21-14</u>

Client _ Chernon

Site 9757 San Leandro St. Oakland CH.

Well ID	Time	Well Size (in.)	Sheen / Odor	Thickness of Immiscible Liquid (ft.)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-Z	6756	2			9.35	21.55		
MW-5	0759	2			27:9.41	17.50		
MW-6	0752	2			9.38	19.60		
MW-8	0802	2			9.49	18.20		
MW-9	6749	Ч			8.97	20.10	V	
			:					

BLAINE TECH SERVICES, INC.

SAN JOSE SACRAMENTO LOS ANGELES SAN DIEGO SEATTLE

www.blainetech.com

Project #: 140321- by				Station #: 140321-361 9-1723			
Sampler: \int_0				Date: 3-21-14			
				Ambient Air Temperature: 65° F			
Well I.D.				Well Diameter: 2 3 4 6 8			
Total We		21.59	5	Depth to Water: 9.35			
Depth to 1	Free Produ			Thickness of Free Product (feet):			
Reference	ed to:	PVG	Grade	D.O. Meter (if req'd): YSI HACH			
DTW wit	h 80% Rec	harge [(H	leight of Water	Column x 0.20)) + DTW]:	1.79	
Purge Method: Bailer Waterra Disposable Bailer Peristaltic Positive Air Displacement Extraction Pump Electric Submersible Other				Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: Well Diameter Multiplier Well Diameter Multiplier			
۱.۹ I Case Volum	_(Gals.) X ie Spo	3 ecified Volun	$\frac{5.2}{\text{Calculated Vo}}$	_ Gals. 2" lume 3"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 radius ² * 0.163	
Time	Temp (°F)	pН	Cond. (mS or uS)	Turbidity (NTUs)	Gals. Removed	Observations	
0957	63.0	6.98	930	71006	1.9		
0951	63.1	6.98	932	71000	3.8		
0901	63.1	6.97	937	>\000	5,7	2000 - 100 -	
						·	
Did well dewater? Yes No			Gallons actuall	y evacuated:	5.7		
Sampling Date: 3-21-14 Sampling Time			e: ()905	Depth to Water	: 9.36		
Sample I.D.: Mw-2			Laboratory:	(Lancaster) Oth			
			Other:	Seeca	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Duplicate I.D.: Analyzed for:				ATBE OXYS	Other:		
D.O. (if req'd): Pre-purge			Pre-purge:	^{mg} /L	Post-purge:	2 (49 mg	/L
O.R.P. (if req'd): Pre-purge:			mV	Post-purge:	-36 m ^v	vi Vi	

Blaine Tech Services, Inc., 1680 Rogers Avenue, San Jose, CA 95112 (408) 573-0555

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Project #: 140321-501				Station #: 9 - 17-23			
Sampler: Jo				Date: 3-21-14			
Weather: Cleur				Ambient Air Temperature: 65° F			
Well I.D.	: MW-5			Well Diameter: (2) 3 4 6 8			
Total We	ll Depth:	17.50)	Depth to Water: Q.4			
Depth to	Free Produ	ict:	and the second	Thickness of Free Product (feet):			
Referenc	ed to:	PVO	Grade	D.O. Meter (if req'd): YSI HACH			
DTW wit	h 80% Rec	harge [(H	leight of Water	Column x 0.20) + DTW]: ((.02	
Purge Method: Bailer Waterra Disposable Bailer Peristaltic Positive Air Displacement Extraction Pump Electric Submersible Other				Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: Well Diameter Multiplier Well Diameter Multiplier			
1.3	_(Gals.) X	3	= <u>3.9</u>	Gals. 1" 2" 3"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 r radius ² * 0.163	
1 Case Volur Time	Temp (°F)	ecified Volum pH	nes Calculated Vo Cond. (mS or/µS)	Turbidity (NTUs)	Gals. Removed	Observations	
6917	63.1	6.99	874	>1006	i. 3	an bar an	
6919	63.1	6.98	891.	71000	2.6		
0 921	63.1	6.98	884	>1000	3.9		
`							
			,				
Did well dewater? Yes No			Gallons actually evacuated: 34				
Sampling Date: 3-21-14 Sampling Time							
Sample I.D.: MW-5			Laboratory: (Lancaster) Other				
Analyzed for: TPH-G BTEX MTBE OXYS Other: See Coc							
Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:					Other:		
D.O. (if req'd): Pre-purge:			^{mg} /L	Post-purge:)31 mg/L		
O.R.P. (if req'd): Pre-purge:				mV	Post-purge:	-28 mV	

Blaine Tech Services, Inc., 1680 Rogers Avenue, San Jose, CA 95112 (408) 573-0555

Project #: 140321-J01				Station #: 9-1723			
Sampler: 50				Date: 3-21-14			
Weather: Cleux				Ambient Air Temperature:			
Well I.D.: NW -6				Well Diameter: (2) 3 4 6 8			
Total We	ll Depth:	19.60		Depth to Water: 9.38			
Depth to	Free Produ	ict:	with the second state	Thickness of Free Product (feet):			
Reference	ed to:	(PVC)	Grade	D.O. Meter (if req'd): YSI HACH			
DTW wit	h 80% Rec	harge [(H	leight of Water	Column x 0.20) + DTW]: 1	42	
Purge Method: Bailer Waterra Disposable Bailer ' Peristaltic Positive Air Displacement Extraction Pump Electric Submersible Other				Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: Well Diameter Multiplier Well Diameter Multiplier			
1 Case Volum	_(Gals.) X ne Sp	<u>3</u> ecified Volun	$= \frac{4.8}{\text{Calculated Vo}}$	Gals. 2" Jume 3"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 radius ² * 0.163	
Time	Temp (°F)	pН	Cond. (mS or (µS)	Turbidity (NTUs)	Gals. Removed	Observations	
0937	62.1	6.69	981	71000	1.6		
0831	62.1	6.70	976.	71000	3.2		
0841	62.1	6.70	974	71000	4.8		
Did well dewater? Yes (No) Gallons actually evacuated: 4.0					4.8		
Sampling Date: 3-2(-14 Sampling Time			e: 0845	Depth to Water	: 9.42		
			Laboratory:	(Lancaster) Oth	ier		
				Other:	See Coc	······································	
Duplicate I.D.: Analyzed for:				MTBE OXYS	Other:		
D.O. (if req'd): Pre-purge:			^{mg} /L	Post-purge:	> \\\& ^{mg} /L		
O.R.P. (if req'd): Pre-purge:				mV	Post-purge:	26 mV	

Blaine Tech Services, Inc., 1680 Rogers Avenue, San Jose, CA-95112 (408) 573-0555

Project #: 1/1-201 \$				Station #: alt a			
Project #: 140321-j01				Station #: 94 9-1723			
Sampler: 36				Date: 3-21-14			
Weather: devi				Ambient Air Temperature: 65°F			
Well I.D.: MW-B				Well Diameter: 2 3 4 6 8			
Total We	ll Depth:	18.20		Depth to Water: 9.49			
Depth to	Free Produ	ict:	artholithe contra	Thickness of Free Product (feet):			
Reference	ed to:	(PVC)	Grade	D.O. Meter (if req'd): YSI HACH			
DTW wit	h 80% Rec	harge [(H	leight of Water	Column x 0.20)) + DTW]:	11.23	
Purge Method: Bailer Waterra Disposable Bailer ' Peristaltic Positive Air Displacement Extraction Pump Electric Submersible Other				Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other:			
3 1 Case Volum	_(Gals.) X ne Spe	3 ecified Volum	$\frac{1}{1000} = \frac{39}{Calculated Vo}$	Gals. 1" 2" 3"	0.04 4" 0.16 6" 0.37 Other	0.65	
Time	Temp (°F)	pH	Cond. (mS or uS)	Turbidity (NTUs)	Gals. Removed	Observations	
0937	63.1	6.96	892	7000	1.3	odos	
0439	67.2	6.67	891 .	7000	26	Ola	
onu	63.2	6.88	895	>1000	9.8	0,9,95	
Did well dewater? Yes (No) Gallons actually evacuated: 4.9					9.9		
Sampling Date: 3-2(-(4) Sampling Time			e: 0945	Depth to Water	r: 9.54		
Sample I.D.: Mw-9			Laboratory:	Lancaster Ott			
Analyzed for: TPH-G BTEX MTBE OXYS Other: Sole Cou							
Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE OXYS Other:							
D.O. (if req'd): Pre-purge			mg/L	Post-purge:	l.M. mg/L		
O.R.P. (if req'd): Pre-purge:				mV	Post-purge?	- <u>-</u> S mV	

Blaine Tech Services, Inc., 1680 Rogers Avenue, San Jose, CA 95112 (408) 573-0555

CHEVRON WELL MONITORING DATA SHEET

•

Project #	: 140321 -	-101		Station #: 4	1-1723					
Sampler:		·····		Date: 3-21-14						
Weather:	clear			Ambient Air Temperature: 65°F						
Well I.D.				Well Diameter: 2 3 (4) 6 8						
Total We	ll Depth:	20.10	0	Depth to Water: 8.87						
Depth to	Free Produ		***************************************	Thickness of I	Free Product (fee	et): ••••••				
Reference	ed to:	(PVC)	Grade	D.O. Meter (i	f req'd):	YSI HACH				
DTW wit	h 80% Rec	<mark>charge [(</mark> F	leight of Water	Column x 0.20	0) + DTW]:	- Land				
Purge Method: Sampling Method: Bailer Bailer Waterra Disposable Bailer Disposable Bailer Peristaltic Extraction Port Positive Air Displacement Extraction Pump Dedicated Tubing Electric Submersible Other Other: Well Diameter Multiplier Multiplier 1" 0.04 4"										
$\frac{1}{1 \text{ Case Volume}} (Gals.) \times \frac{3}{\text{Specified Volumes}} = \frac{21.6}{\text{Calculated Volume}} (Gals.) = \frac{1^{\circ}}{2^{\circ}} (Gals.) = \frac{1^{\circ}}{0.16} $										
Time	Temp (°F)	pН	Cond. (mS or (µS)	Turbidity (NTUs)	Gals. Removed	Observations				
0816	620	6.94	956	429	7.2					
0918	62.1	6.93	857.	500	14,4					
0820	62.1	6.96	859	502	21.6					
-ita Ali						•				
Did well	dewater?	Yes	No,	Gallons actua	lly evacuated:	21.6				
Sampling	Date: 3-7	21-14	Sampling Time	e: 0825	Depth to Water	r: 9,27				
Sample I.	D.: M	J-9.		Laboratory:	Lancaster) Oth	her				
Analyzed	nalyzed for: TPH-G BTEX MTBE OXYS Other: 500, 606									
Duplicate	; I.D.:		Analyzed for:		MTBE OXYS	Other:				
D.O. (if r	eq'd):		Pre-purge:	mg/	L Post-purge;	1.04 ^{mg} /1				
O.R.P. (if	req'd):		Pre-purge:	m\	V Post-purge:	JZ mV				

Blaine Tech Services, Inc., 1680 Rogers Avenue, San Jose, CA 95112 (408) 573-0555

		 .				CUSTODY FOR												1
Chevron Site Numbe	hevror	Environ	mental Man	agement Compar	ny ■ 6111 Bo	llinger Canyon	Rd.	I Sa	n R	amo	on,		94	<u>583</u>	EOU			of
Chevron Site Global		01700		Chevron Consulta			H			T	T	ANA	LIS	<u>=5 R</u>	T	IRED	,	Preservation Codes
				Address: 15575 Lo	os Gatos Blvd., Bldg	<u>ı. C. Los Gatos,</u>									1.			H=HCL T=
Chevron Site Address	s: <u>9757 Sa</u>	n Leandro St.	عيد ،	CAConsultant Con	itact: <u>Travis Flora</u>							0						Thiosulfate
Oakland, CA				Consultant Phone	NO. <u>408-356-612</u>	24		SCREEN				EN		GREASE				N =HNO ₃ B = NaOH
Chevron PM: CARRY	L MACLEO	D		Consultant Project	t No. 1403	21-101		1 X				ALKALINITY D		oŏ				$S = H_2SO_4 O =$
Chevron PM Phone N	lo.: <u>(925)7</u>	<u>90-6506</u>		Sampling Compa			UXVQEMATESU] 오			STLC []			jg				Other
Retail and Termin	H Busines	s Unit (RTBU). Job	4	6		LAN				STL	EPA 310.1		413.1				
Construction/Reta		5 O.M. (111 DO	, 505	Sampled By (Print): 0 (hz)			ORO	ļ ,			PA 3		EPA 4					
Charge Cardes							Ś				шс	<u> </u>	T		-			
Charge Code: NWRTB	00SITE NU	JMBER-0-W	BS	Lancaster Laboratories	Other Lab	Temp. Blank Check Time Temp.	l c	-		50	l n		≥					Special Instructions
(WBS ELEMENTS SITE ASSESSMENT: A1L			TONE DEL	Laboratories		0000 100	MTRED	DRO		Z v	ETAL		TINE					Must meet lowest detection limits possible
SITE MONITORING: OML	OPERATION	MAINTENANCE (MONITORING: M1L	El Lancaster, PA Lab Contact: Jill Parker		1000 100	VV		MTBE	9. M	2 ME							for 8260 Compounds
This is a LEGAL Doc	UMENT. <u>Al</u>	L FIELDS MU	ST BE FILLED OUT	2425 New Holland Pike.		····		9		N V	LE 2		Õ		NOL			
CORRE	CTLY AND	COMPLETE	LY.	Lancaster, PA 17601 Phone No:			SC/MS BTFX EI	Ø	BTEX	Fe.	E		CIFIC		ETHANOL	D-H-T		
				(717)656-2300			1 Do H	- m	8	Ca,	1000	HG	SPEC	TRF		F		
·····	SAMPL	E ID					1 2 2 0 1 2 2 0	015E	8021B	010	010/7	50.4	10B	418.1 TRPH	60	8015		
Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	# of Containers	Container Type	EPA 8260B/GC/MS TPH-G-C	EPA 8015B	EPA 8	EPA 6010 Ca, Fe, K, Mg, Mn, Na	EPA6010/7000 TITLE 22 METALS	EPA150.1 PH []	SM2510B SPECIFIC CONDUCTIVITY	EPA 4	EPA 8260	EPA 8		Notes/Comment s
QA	+		140321	0800	2	VORS	X						†	1	[}			
MW-Z	W		1	0905	6		x						<u> </u>		\vdash			
Mw- 5				0925	<u>ve</u>								<u> </u>					
MW-6				0845			X								+			
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Relinquished By (SC)	BTS Comp		1-14/1545 Date/Time	Railwayidhad Ta	375	3-21-19 1545			Hou	rs🛛		Othe	er 🗖					
				Reimquished To	Company <i>とし</i> た	Date/Time 3/24/14 11	50		San	npie li	ntegr	ity: (	Unec	ж бу і	iab o	n arri	vai)	
Relinguished By	Comp	<u>ン 3, 29</u> Dany D	7.14@ 1150 ate/Time	Relinquished To	Company	Date/Time			Inta	ct:		On l	ce:	~	Ter	np:	<del></del>	
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WELLHEAD INSPECTION CHECKLIST

Page_____ of _____

Site Address     ATS1     Sun     Lean(hi)     St     Calland     Ut       Job Number     I4032L-Jot     Technician     Jo       Well     Well Is     Well IS     Water     Wellow     Cap     Other     Action     Well Inspected       No Corrective     Action     Required     Well Well     Well Wolf (12° riss)     Water     Wellow     Cap     Lock     Other     Action     Repair       Mu-7     X     Impocted     Well     Well     Well     Well     Impocted     Submitted       Mw-5     X     Impocted     X     Impocted     X     Impocted     Impocted       Mw-6     X     Impocted     X     Impocted     Impocted     Impocted     Impocted       Mw-6     X     Impocted     X     Impocted     Imp	Client <u>dra</u>	NM						Date	3-21-	14	
Job Number     Id 0324 - 101     Technician     Jo       Well Inspected - No Corrective Action Required     Well IS SECURABLE BY DESIGN (12'or less)     Well IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL": (12'or less)     Water Bailed From Wellbox     Wellbox Components Cleaned     Cap Replaced     Lock Replaced     Other Action Taken (explain below)     Well Not Inspected (explain below)     Repair Order Submitted       MW-7     X	Site Address	9757	Sun L	eanthip	<u>st.</u>	Galdan	LUM	<u> </u>			
Well Inspected No Corrective Action RequiredWELL IS SECURABLE BY DESIGN (12'or less)Well Not MARKED WITH THE WORDS "MONITORING WELL" (12'or less)Water Bailed From WellboxWellbox CeanedCap ReplacedCock ReplacedOther Action Taken (explain below)Well Not Inspected (explain below)Repair Order SubmittedMu-7XImage: Securation of the components (12'or less)Image: Securation of the components (12'or less)Image: Securation of the components WellboxImage: Securation of the components (Image: Securation of the components)Image: Securation of the componen									٥٤		
MW-5         X         Image: Constraint of the second seco	Well ID	Inspected - No Corrective Action	SECURABLE BY DESIGN	CLEARLY MARKED WITH THE WORDS "MONITORING WELL"	Bailed From	Components			Action Taken (explain	Inspected (explain	Order
Mw-6 × 1	MU-Z										
$Mw-g \times \times \times$	Mw-5	$\mathbf{X}$									
	MW-6								X		
Mw-G     X     I       Image: Second	MW-9	$\times$	$\geq$	<u> </u>							
	MW-G								$\times$		
NOTES: <u>Mw-9</u> Steel Plate 11d, Mw-6 Steel Plate 11d.	NOTES:	Mw-9	Del	Plate 11d	, M	w-6 (	Heel	plate	rid.		L

www.blainetech.com

BILL OF LADING No.

SOURCE RECORD **BILL OF LADING** FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF CALIFORNIA. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND-WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN SAN JOSE, CALIFORNIA FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 1680 Rogers Ave. San Jose CA (408) 573-0555). BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

9-17-22	2		(	Carril madeal					
CHEVR	ON #		Čhevron Engineer						
<u>a757</u>	Swn	hourfm	Q	Oakland	CA				
street n	umber	stree	et name	e city	state				

WELL I.D. GALS.	WELL I.D. GALS.
MW-2 15.7	/
MW-5 1 3.9	1
MW-6 , 4.8	/
Mw-9 1216	
<u>Mu-9 1 9.9</u>	
/	/
······	
added equip.	/any other
rinse water / +	adjustments /
TOTAL GALS. 47 RECOVERED 469-	loaded onto BTS vehicle #
BTS event # time 140321-501	date 1030 <u>3 / 2( 1 44</u>
Transporter signature	
****	
REC'D AT RIS	time date <u>3 / 2/14</u>
Unloaded/received by signature	
Y	

# TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	NE dramm	9-17-23		PROJECT NUMBER 140321-Joj					
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS		
Ingran L Utten Meter II	6272914	3-21-14 0600	7,10,4 39000	7-01, 1000; 4.00	yes	17%	JO		
					0, ,				
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	· · · · · · · · · · · · · · · · · · ·								
			~		~				

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





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

## ANALYTICAL RESULTS

Prepared by:

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

ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

April 02, 2014

Project: 91723

Submittal Date: 03/25/2014 Group Number: 1461798 PO Number: 0015141332 Release Number: HOPKINS/CMACLEO State of Sample Origin: CA

Client Sample Description QA-T-140321 NA Water MW-2-W-140321 NA Water MW-5-W-140321 NA Water MW-6-W-140321 NA Water MW-8-W-140321 NA Water MW-9-W-140321 NA Water Lancaster Labs (LL) # 7405697 7405698 7405699 7405700 7405701 7405702

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

ELECTRONIC	Stantec	Attn: Laura Viesselman
COPY TO		
ELECTRONIC	Stantec	Attn: Travis Flora
COPY TO		
ELECTRONIC	Stantec	Attn: Marisa Kaffenberger
COPY TO		
ELECTRONIC	Stantec	Attn: Erin O'Malley
COPY TO		-
ELECTRONIC	Blaine Tech Services, Inc.	Attn: Dustin Becker
COPY TO		





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## Respectfully Submitted,

Matalie K - 2

Natalie R. Luciano Senior Specialist

(717) 556-7258



Analysis Report

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

## Sample Description: QA-T-140321 NA Water Facility# 91723 BTST 9757 San Leandro-Oakland T0600101789

LL Sample # WW 7405697 LL Group # 1461798 Account # 10869

#### Project Name: 91723

Collected: 03/21/2014 08:00

Submitted: 03/25/2014 09:50 Reported: 04/02/2014 19:14 ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

## 1723Q

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO	n.a.	N.D.	22	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F140871AA	03/28/2014 09:00	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140871AA	03/28/2014 09:00	Anita M Dale	1



Analysis Report

Account

LL Sample # WW 7405698 LL Group # 1461798

# 10869

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

## Sample Description: MW-2-W-140321 NA Water Facility# 91723 BTST 9757 San Leandro-Oakland T0600101789

#### Project Name: 91723

Collected: 03/21/2014 09:05 by JO

Submitted: 03/25/2014 09:50 Reported: 04/02/2014 19:14 ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

## 17232

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8	8260B	ug/l	ug/l	
10945	Benzene		71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO		n.a.	N.D.	22	1
10945	Ethylbenzene		100-41-4	N.D.	0.5	1
10945	Toluene		108-88-3	N.D.	0.5	1
10945	Xylene (Total)		1330-20-7	N.D.	0.5	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F140871AA	03/28/2014 09:22	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140871AA	03/28/2014 09:22	Anita M Dale	1



Analysis Report

Account

LL Sample # WW 7405699 LL Group # 1461798

# 10869

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

## Sample Description: MW-5-W-140321 NA Water Facility# 91723 BTST 9757 San Leandro-Oakland T0600101789

#### Project Name: 91723

Collected: 03/21/2014 09:25 by JO

Submitted: 03/25/2014 09:50 Reported: 04/02/2014 19:14 ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

## 17235

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 826	0в	ug/l	ug/l	
10945	Benzene		71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO		n.a.	100	22	1
10945	Ethylbenzene		100-41-4	N.D.	0.5	1
10945	Toluene		108-88-3	N.D.	0.5	1
10945	Xylene (Total)		1330-20-7	N.D.	0.5	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F140872AA	03/28/2014 09:09	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140872AA	03/28/2014 09:09	Anita M Dale	1



**Analysis Report** 

Account

LL Sample # WW 7405700 LL Group # 1461798

# 10869

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

## Sample Description: MW-6-W-140321 NA Water Facility# 91723 BTST 9757 San Leandro-Oakland T0600101789

#### Project Name: 91723

Collected: 03/21/2014 08:45 by JO

Submitted: 03/25/2014 09:50 Reported: 04/02/2014 19:14 ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

## 17236

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor	
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l		
10945	Benzene		71-43-2	N.D.	0.5	1	
10945	C6-C12-TPH-GRO		n.a.	N.D.	22	1	
10945	Ethylbenzene		100-41-4	N.D.	0.5	1	
10945	Toluene		108-88-3	N.D.	0.5	1	
10945	Xylene (Total)		1330-20-7	N.D.	0.5	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F140872AA	03/28/2014 09:31	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140872AA	03/28/2014 09:31	Anita M Dale	1



Analysis Report

Account

LL Sample # WW 7405701 LL Group # 1461798

# 10869

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

## Sample Description: MW-8-W-140321 NA Water Facility# 91723 BTST 9757 San Leandro-Oakland T0600101789

#### Project Name: 91723

Collected: 03/21/2014 09:45 by JO

Submitted: 03/25/2014 09:50 Reported: 04/02/2014 19:14 ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

## 17238

CAT No.	Analysis Name	CAS N	As Received umber Result	As Received Method Detection Limi	Dilution t Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10945	Benzene	71-43	-2 2	0.5	1
10945	C6-C12-TPH-GRO	n.a.	270	22	1
10945	Ethylbenzene	100-4	1-4 N.D.	0.5	1
10945	Toluene	108-8	8-3 N.D.	0.5	1
10945	Xylene (Total)	1330-	20-7 0.6	0.5	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F140872AA	03/28/2014 10:37	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140872AA	03/28/2014 10:37	Anita M Dale	1



Analysis Report

Account

LL Sample # WW 7405702 LL Group # 1461798

# 10869

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## Sample Description: MW-9-W-140321 NA Water Facility# 91723 BTST 9757 San Leandro-Oakland T0600101789

#### Project Name: 91723

Collected: 03/21/2014 08:25 by JO

Submitted: 03/25/2014 09:50 Reported: 04/02/2014 19:14 ChevronTexaco L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

## 17239

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10945	Benzene		71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO		n.a.	N.D.	22	1
10945	Ethylbenzene		100-41-4	N.D.	0.5	1
10945	Toluene		108-88-3	N.D.	0.5	1
10945	Xylene (Total)		1330-20-7	N.D.	0.5	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F140872AA	03/28/2014 10:58	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F140872AA	03/28/2014 10:58	Anita M Dale	1



**Analysis Report** 

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

Page 1 of 2

## Quality Control Summary

Client Name: ChevronTexaco Reported: 04/02/14 at 07:14 PM Group Number: 1461798

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

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

## Laboratory Compliance Quality Control

<u>Analysis Name</u>	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	<u>RPD Max</u>
Batch number: F140871AA	Sample nur	nber(s): 74	05697-7405	5698				
Benzene	N.D.	0.5	ug/l	104		78-120		
C6-C12-TPH-GRO	N.D.	22.	ug/l	131	137	80-152	4	30
Ethylbenzene	N.D.	0.5	uq/l	108		79-120		
Toluene	N.D.	0.5	ug/l	109		80-120		
Xylene (Total)	N.D.	0.5	ug/l	101		80-120		
Batch number: F140872AA	Sample nur	nber(s): 74	05699-7405	5702				
Benzene	N.D.	0.5	ug/l	101		78-120		
C6-C12-TPH-GRO	N.D.	22.	ug/l	126	127	80-152	0	30
Ethylbenzene	N.D.	0.5	ug/l	105		79-120		
Toluene	N.D.	0.5	ug/l	111		80-120		
Xylene (Total)	N.D.	0.5	ug/l	100		80-120		

#### Sample Matrix Quality Control

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

Analysis Name	MS <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	<u>RPD</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: F140871AA	Sample	number(s)	: 7405697	-740569	8 UNSP	K: 7405698			
Benzene	111	110	72-134	1	30				
Ethylbenzene	113	111	71-134	2	30				
Toluene	113	114	80-125	1	30				
Xylene (Total)	106	104	79-125	2	30				
Batch number: F140872AA	Sample	number(s)	: 7405699	-740570	2 UNSP	K: 7405700			
Benzene	107	104	72-134	3	30				
Ethylbenzene	109	108	71-134	0	30				
Toluene	111	109	80-125	2	30				
Xylene (Total)	101	101	79-125	0	30				

## Surrogate Quality Control

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

*- Outside of specification

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

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





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Page 2 of 2

# Quality Control Summary

Group Number: 1461798

Client Name: ChevronTexaco Reported: 04/02/14 at 07:14 PM

## Surrogate Quality Control

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
7405697	91	94	108	103	
7405698	91	96	109	105	
Blank	90	94	109	103	
LCS	90	96	111	107	
LCSD	90	96	109	103	
MS	93	96	110	106	
MSD	89	97	109	108	
Limits:	80-116	77-113	80-113	78-113	
	mber: F140872AA	GRO by 8260B-Wate			
		GRO by 8260B-Wate	er Toluene-d8	4-Bromofluorobenzene	
Batcĥ nu 7405699	mber: F140872AA Dibromofluoromethane	- 1,2-Dichloroethane-d4 94	Toluene-d8	105	
Batcĥ nu 7405699 7405700	mber: F140872AA Dibromofluoromethane 89 90	1,2-Dichloroethane-d4 94 97	Toluene-d8	105 104	
Batcĥ nu 7405699 7405700 7405701	mber: F140872AA Dibromofluoromethane 89 90 91	1,2-Dichloroethane-d4 94 97 99	Toluene-d8	105 104 105	
Batcĥ nu 7405699 7405700 7405701 7405702	mber: F140872AA Dibromofluoromethane 89 90 91 91	1,2-Dichloroethane-d4 94 97 99 97	Toluene-d8 109 108 108 108	105 104 105 105	
Batcĥ nu 7405699 7405700 7405701 7405702 Blank	mber: F140872AA Dibromofluoromethane 89 90 91 91 89	- 1,2-Dichloroethane-d4 94 97 99 97 95	Toluene-d8 109 108 108 108 108 109	105 104 105 105 104	
Batch nu 7405699 7405700 7405701 7405702 Blank LCS	mber: F140872AA Dibromofluoromethane 89 90 91 91 89 90	- 1,2-Dichloroethane-d4 97 99 97 95 98	Toluene-d8 109 108 108 108 109 109	105 104 105 105 104 107	
Batch nu 7405699 7405700 7405701 7405702 Blank LCS LCSD	mber: F140872AA Dibromofluoromethane 89 90 91 91 89 90 90	1,2-Dichloroethane-d4 94 97 99 97 95 98 97	Toluene-d8 109 108 108 108 109 109 109	105 104 105 105 104 107 106	
Batch nu 7405699 7405700 7405701 7405702 Blank LCS LCS LCSD MS	mber: F140872AA Dibromofluoromethane 89 90 91 91 89 90 90 89	1,2-Dichloroethane-d4 94 97 99 97 95 98 97 95 98 97 99	Toluene-d8 109 108 108 108 109 109 109 110	105 104 105 105 104 107 106 106	
Batch nu 7405699 7405700 7405701 7405702 Blank LCS LCSD	mber: F140872AA Dibromofluoromethane 89 90 91 91 89 90 90	1,2-Dichloroethane-d4 94 97 99 97 95 98 97	Toluene-d8 109 108 108 108 109 109 109	105 104 105 105 104 107 106	

*- 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.

10869/140 C	a1798 hevron	Environr	5 6 9 7 - ⁻ 32414 - D nental Mana	7 O 2_ ∮ agement Compar	CHAIN OF ( וy ■ 6111 Bol	CUSTODY FOR llinger Canyon	M Rd.∎	Sa	n Ra	amo	on, (	CA	945	583			0C _1_ of _1
Chevron Site Number				Chevron Consulta	nt: <u>STANTEC</u>							ANA	LYSE	S RE		IRED	Preservation Codes
Chevron Site Global II	D: <u>T060010</u>	01789		Address: <u>15575 Lo</u>	s Gatos Blvd., Bldg	. C Los Gatos,	H										
Chevron Site Address	: <u>9757 Sar</u>	n Leandro St.,	-	<u>CA</u> Consultant Con	tact: <u>Travis Flora</u>									SE 🗆			H =HCL T= Thiosulfate
Oakland, CA				Consultant Phone	No. <u>408-356-612</u>	<u>4</u>	HVOCI	SCREEN				ALKALINITY		GREASE			N =HNO ₃ B = NaOH
Chevron PM: CARRYL	_ MACLEOI	D		Consultant Project	t No. <u>1403</u>	21-101					-	KAL		~ ১			$S = H_2SO_4 O = Other$
Chevron PM Phone N	lo.: <u>(925)79</u>	0-6506		Sampling Compar	· •		VTES				sт∟с 🛛			3.1 OIL			
⊠ Retail and Termina ⊠ Construction/Retai		Unit (RTBU)	Job	Sampled By (Print Sampler Signature	\ <u>\</u>		OXYGENATES	ORO [			TTLC D S	EPA 310.1		EPA 413.1			
(WBS ELEMENTS: SITE ASSESSMENT: A1L SITE MONITORING: OML THIS IS A LEGAL DOC	REMEDIATIO OPERATION	MAINTENANCE &	ON: <b>R5L</b> MONITORING: <b>M1L</b> T BE FILLED OUT	Lancaster Laboratories ⊠ Lancaster, PA Lab Contact: Jill Parker 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300	Other Lab	Temp. Blank Check         Time       Temp.         0000       1° C         1000       1° C	EPA 8260B/GC/MS TPH-G-& BTEX Ø MTBED OX		1B BTEX 🗆 MTBE 🗆	EPA 6010 Ca, Fe, K, Mg, Mn, Na	EPA6010/7000 TITLE 22 METALS	EPA150.1 PH 🗆 🛛 E	SM2510B SPECIFIC CONDUCTIVITY	418.1 TRPH	) ETHANOL	-	Special Instructions Must meet lowest detection limits possible for 8260 Compounds
	SAMPL	E ID					8260 G-K	8015	8021	6010	3010	150.1	510E	418.	3260	8015	
Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	# of Containers	Container Type	EPA TPH-	EPA 8015B	EPA 8021B	EPA	EPA(	EPA	SM2	EPA	EPA 8260	EPA 8015	Notes/Comment s
QA	t		140321	0800	2	VORS	X										
MW-2	W			0905	6		$\times$										
MW-5				6925	and the second se		X										
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Relinquished By Relinquished By 6C Relinquished By Relinquished By Cu, Malford	Com Bt Com <b>57</b> Com	3-21 pany D <u>3.29</u> pany D	Pate/Time:  -14/1545 Pate/Time #44 Pate/Time #444/1632	Relinquished To Relinquished To Relinquished To	Company RTS Company LLL Company	Date/Time 3-2(-4) 1545 Date/Time 3/24/14 11 Date/Time	50		Sta Hoເ	•	19	2 Othe	(Cheo	ck by	lab o	48 hc on arri mp: <u>(</u> #	ival)
V				Bucam	Bluy Page 11	ELLE 3.	25 95	140									COC Revision 12, 10/02/12

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#### Lancaster Laboratories Environmental

# **Explanation of Symbols and Abbreviations**

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

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

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

Data Qualifiers:

C - result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

# **Organic Qualifiers**

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

## Inorganic Qualifiers

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

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

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

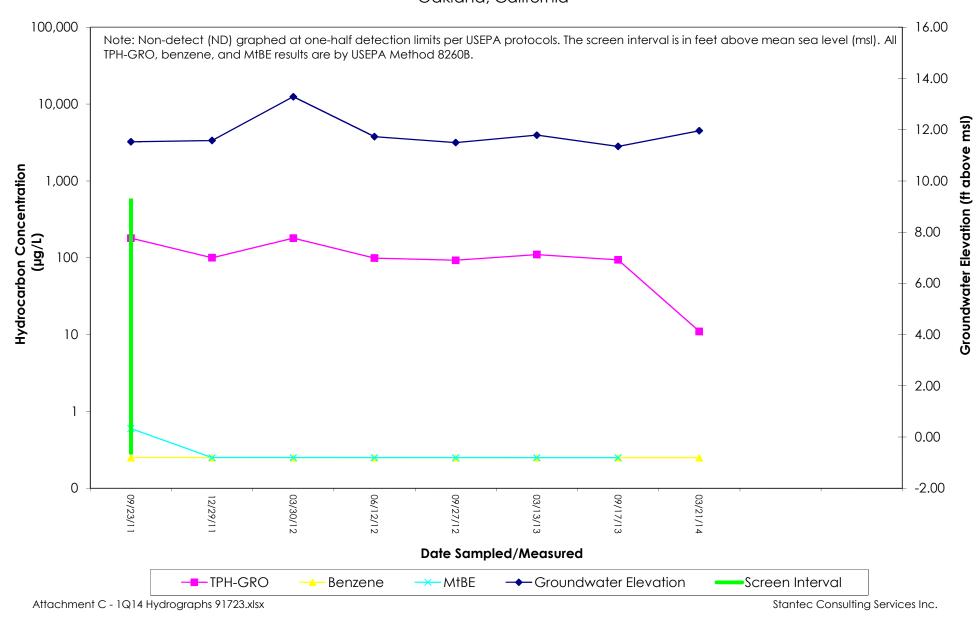
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have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

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

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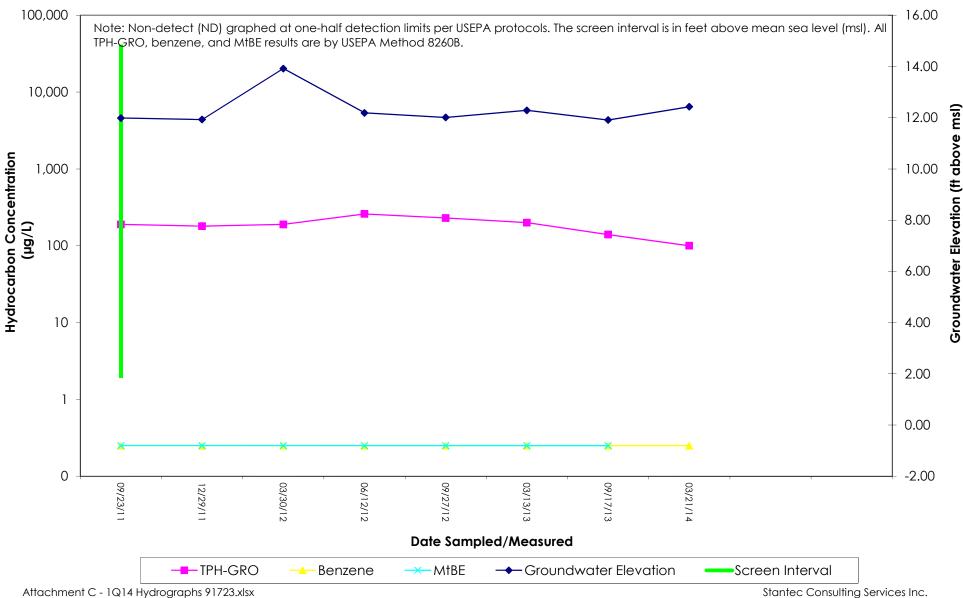
## MW-2 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 91723 9757 San Leandro Street Oakland, California



# MW-5 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

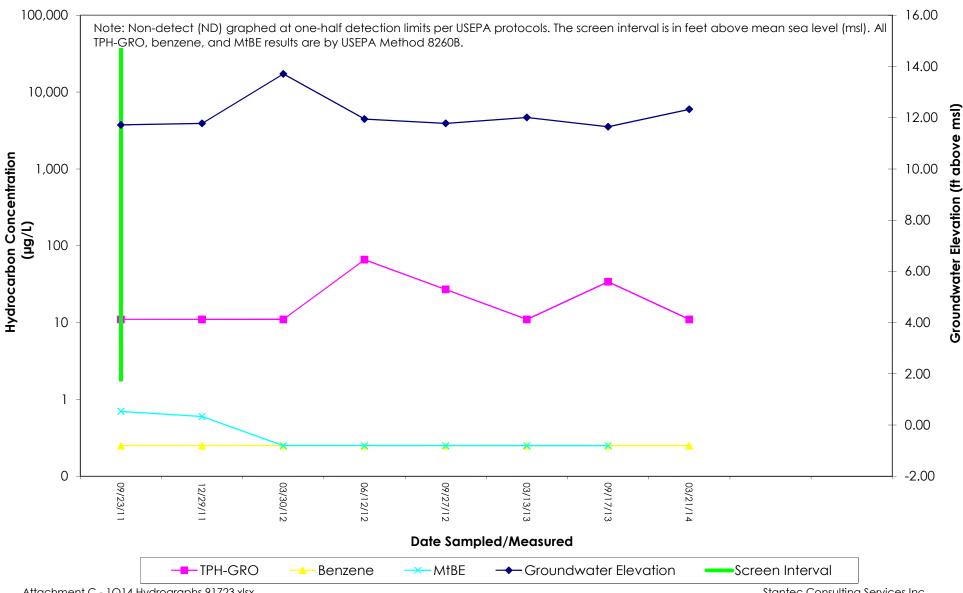
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Stantec Consulting Services Inc.

# MW-6 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

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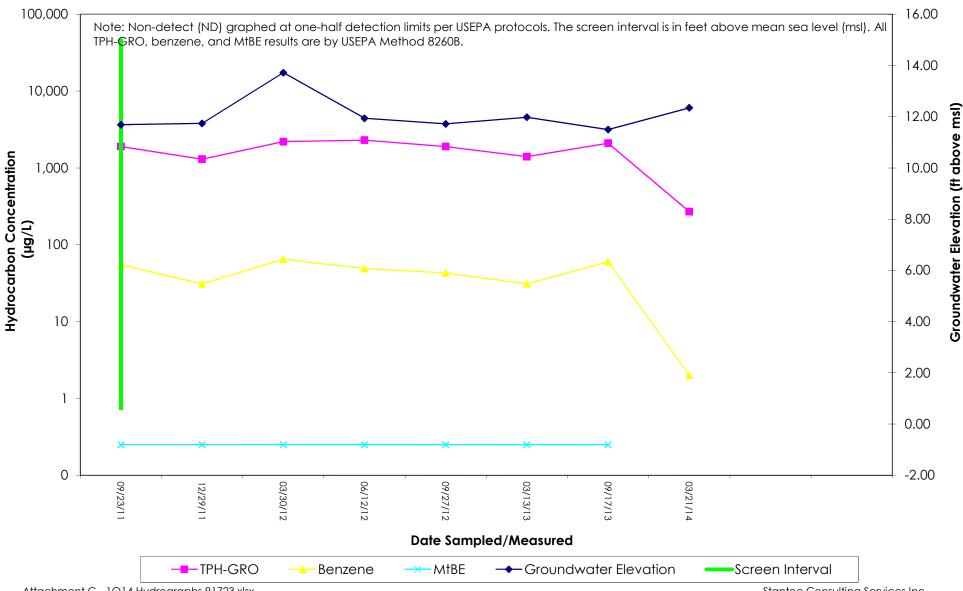


Attachment C - 1Q14 Hydrographs 91723.xlsx

Stantec Consulting Services Inc.

# MW-8 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

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Attachment C - 1Q14 Hydrographs 91723.xlsx

Stantec Consulting Services Inc.

# MW-9 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

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