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**Third Quarter 2015  
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

October 26, 2015



**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

October 26, 2015

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 *Third Quarter 2015 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 [travis.flora@stantec.com](mailto:travis.flora@stantec.com).

Sincerely,

A handwritten signature in cursive script that reads "Carryl MacLeod".

**Carryl MacLeod**  
Project Manager



October 26, 2015

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

**Reference:**    **Third Quarter 2015 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 *Third Quarter 2015 Semi-Annual Groundwater Monitoring Report* for former Chevron-branded service station 91723, which was located at 9757 San Leandro Street, Oakland, Alameda County, California (Site - shown on **Figure 1**). This report is presented in three sections: Site Background, Third Quarter 2015 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 five fuel dispenser islands (four located in the central 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.

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.

Halogenated volatile organic compound (HVOC) analysis was added to the groundwater monitoring and sampling program in First Quarter 2015 to address Alameda County Environmental Health's (ACEH's) concern. HVOCs were not detected above method detection limits (MDLs) in any Site well except well MW-9, where concentrations were below their respective California Regional Water Quality Control Board – San Francisco Bay Region Environmental Screening Levels (ESLs). Based on these data, HVOC analysis was discontinued.

# THIRD QUARTER 2015 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

Former Chevron-branded Service Station 91723

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## THIRD QUARTER 2015 GROUNDWATER MONITORING AND SAMPLING PROGRAM

Gettler-Ryan Inc. (G-R) performed the Third Quarter 2015 groundwater monitoring and sampling event on August 24, 2015. G-R's standard operating procedures (SOPs) and field data sheets are included in **Attachment A**. G-R gauged depth-to-groundwater (DTW) 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 Third Quarter 2015 groundwater monitoring and sampling event was transported by Clean Harbors Environmental Services to Seaport Environmental in Redwood City, California.

### Groundwater Elevation and Gradient

Well construction details and a screen interval assessment for each Site well are presented in **Table 1**. Wells MW-5, MW-6, MW-8, and MW-9 are currently screened across the prevailing groundwater table, while the DTW measurement in well MW-2 was above the screen interval, and the screen interval is currently entirely submerged. Groundwater elevation data from Third Quarter 2011 to present are included in **Table 2**. A groundwater elevation contour map (based on Third Quarter 2015 data) is shown on **Figure 2**. The direction of groundwater flow beneath the Site at the time of sampling was toward the west at an average hydraulic gradient of approximately 0.002 feet per foot (ft/ft). This is generally consistent with the historical direction of groundwater flow, as shown by the groundwater flow direction rose diagram on **Figure 3** illustrating the direction of groundwater flow from Third Quarter 1988 to present.

### Schedule of Laboratory Analysis

Groundwater samples were analyzed for 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).

### Groundwater Analytical Results

During Third Quarter 2015, 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** and **Table 3**. Only historically detected HVOCs are shown in **Table 3**. Historical monitored natural attenuation (MNA) data are presented in **Table 4**. 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 Third Quarter 2015 groundwater analytical results follows:

- **TPH-GRO** was detected in two Site wells, at concentrations of 260 micrograms per liter ( $\mu\text{g/L}$ ; well MW-5) and 2,700  $\mu\text{g/L}$  (well MW-8). The concentration in well MW-8 is within historical limits, while the concentration in well MW-5 is equal to the historical high.

## THIRD QUARTER 2015 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

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- **Benzene** was detected in one Site well, at a concentration of 39 µg/L (well MW-8), which is within historical limits for this well.
- **Toluene** was detected in one Site well, at a concentration of 2 µg/L (well MW-8), which is within historical limits for this well.
- **Ethylbenzene** was detected in one Site well, at a concentration of 5 µg/L (well MW-8), which is within historical limits for this well.
- **Total Xylenes** were detected in one Site well, at a concentration of 7 µg/L (well MW-8), which is within historical limits for this well.

### CONCLUSIONS AND RECOMMENDATIONS

The maximum concentration of TPH-GRO and only detections of BTEX compounds 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 above the ESL in well MW-5, located near the former first-generation dispenser islands.

In a letter dated April 14, 2015, ACEH conditionally approved Stantec's *Revised Data Gap Work Plan Addendum*, dated February 20, 2015. Stantec oversaw the advancement of 11 on-Site soil borings from July 27 through 30, 2015, and resampling of permanent on-Site soil vapor wells VP-1 through VP-5 on July 31, 2015. ACEH requested a Site Investigation Report by July 17, 2015. Stantec requested extensions on the due date for the Site Investigation Report in letters dated July 6 and October 13, 2015. The latest extension was requested to allow additional technical peer review of the report, with a proposed due date of October 26, 2015. Results and conclusions of the Site investigation will be presented under separate cover.

If you have any questions, please contact the Stantec Project Manager, Travis Flora, at (408) 356-6124 or [travis.flora@stantec.com](mailto:travis.flora@stantec.com).

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Former Chevron-branded Service Station 91723

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## LIMITATIONS

This document entitled Third Quarter 2015 Semi-Annual Groundwater Monitoring Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Chevron Environmental Management Company (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Erin O'Malley  
(signature)

**Erin O'Malley**  
Project Engineer

Reviewed by Marisa Kaffenberger  
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Associate Project Manager

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Senior Geologist



## **THIRD QUARTER 2015 SEMI-ANNUAL GROUNDWATER MONITORING REPORT**

Former Chevron-branded Service Station 91723

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### **Attachments:**

Table 1 – Well Details / Screen Interval Assessment – Third Quarter 2015

Table 2 – Groundwater Monitoring Data and Analytical Results

Table 3 – Groundwater Analytical Results – Halogenated Volatile Organic Compounds

Table 4 – Monitored Natural Attenuation Parameters

Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Contour Map – Third Quarter 2015

Figure 3 – Groundwater Flow Direction Rose Diagram – Third Quarter 2015

Figure 4 – Site Plan Showing Groundwater Concentrations – Third Quarter 2015

Figure 5 – TPH-GRO Isoconcentration Map – Third Quarter 2015

Figure 6 – Benzene Isoconcentration Map – Third Quarter 2015

Attachment A – Gettler-Ryan Inc. Field Data Sheets and Standard Operating Procedures –  
Third Quarter 2015

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

Hothem Trust c/o Mr. Jan Greben, Greben & Associates, 125 East De La Guerra Street, Suite 203, Santa Barbara, CA 93101 – Electronic Copy

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

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Shyamal Roy and Byron Low, Matson Global Distribution Services, 9401 San Leandro Street, Oakland, CA 94603 – Electronic Copy

## **TABLES**



**Table 1**  
**Well Details / Screen Interval Assessment**  
**Third Quarter 2015**  
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 <sup>1</sup> (feet below TOC)	Current Depth to Groundwater <sup>1</sup> (feet below TOC)	Screen Interval (feet bgs)	Screen Interval Assessment
MW-2	04/18/87	Monitoring	2	21.31	22.00	21.52	9.97	12-22	Depth-to-groundwater above screen interval.
MW-5	05/18/88	Monitoring	2	21.84	20.00	17.63	10.04	7-20	Depth-to-groundwater within screen interval.
MW-6	05/18/88	Monitoring	2	21.71	20.00	19.55	10.15	7-20	Depth-to-groundwater within screen interval.
MW-8	05/19/88	Monitoring	2	21.84	20.00	18.18	10.33	7-20	Depth-to-groundwater within screen interval.
MW-9	08/04/89	Monitoring	4	20.55	20.00	20.21	9.53	5.5-20	Depth-to-groundwater within screen interval.

Notes:  
bgs = below ground surface  
msl = mean sea level  
TOC = top of casing  
<sup>1</sup> = As measured prior to groundwater sampling on August 24, 2015.

**Table 2**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron-Branded Service Station 91723  
9757 San Leandro Street, Oakland, California

WELL ID/ DATE	TOC (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)
<b>Groundwater ESL</b>				<b>100</b>	<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5</b>
<b>MW-2</b>									
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	--
09/11/14	21.31	9.93	11.38	99	<0.5	<0.5	<0.5	<0.5	--
03/10/15	21.31	9.30	12.01	<22	<0.5	<0.5	<0.5	<0.5	--
<b>08/24/15</b>	<b>21.31</b>	<b>9.97</b>	<b>11.34</b>	<b>&lt;22</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>--</b>
<b>MW-5</b>									
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	--
09/11/14	21.84	9.94	11.90	150	<0.5	<0.5	<0.5	<0.5	--
03/10/15	21.84	9.36	12.48	120	<0.5	<0.5	<0.5	<0.5	--
<b>08/24/15</b>	<b>21.84</b>	<b>10.04</b>	<b>11.80</b>	<b>260</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>--</b>
<b>MW-6</b>									
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	--

**Table 2**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron-Branded Service Station 91723  
9757 San Leandro Street, Oakland, California

WELL ID/ DATE	TOC (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)
<b>Groundwater ESL</b>				<b>100</b>	<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5</b>
<b>MW-6 (cont)</b>									
09/11/14	21.71	10.07	11.64	52	<0.5	<0.5	<0.5	<0.5	--
03/10/15	21.71	9.47	12.24	28	<0.5	<0.5	<0.5	<0.5	--
<b>08/24/15</b>	<b>21.71</b>	<b>10.15</b>	<b>11.56</b>	<b>&lt;22</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>--</b>
<b>MW-8</b>									
09/23/11	21.84	10.15	11.69	1,900	55	2	10	8	<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
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	--
09/11/14	21.84	10.22	11.62	3,000	44	2	13	8	--
03/10/15	21.84	9.61	12.23	1,500	36	1	5	6	--
<b>08/24/15</b>	<b>21.84</b>	<b>10.33</b>	<b>11.51</b>	<b>2,700</b>	<b>39</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>--</b>
<b>MW-9</b>									
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	--
09/11/14	20.55	9.43	11.12	<22	<0.5	<0.5	<0.5	<0.5	--
03/10/15	20.55	8.10	12.45	<22	<0.5	<0.5	<0.5	<0.5	--
<b>08/24/15</b>	<b>20.55</b>	<b>9.53</b>	<b>11.02</b>	<b>&lt;22</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>--</b>
<b>TRIP BLANK</b>									
<b>QA</b>									
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

**Table 2**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron-Branded Service Station 91723  
9757 San Leandro Street, Oakland, California

WELL ID/ DATE	TOC (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)
	<b>Groundwater ESL</b>			<b>100</b>	<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5</b>
<b>QA (cont)</b>									
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	--
09/11/14	--	--	--	<22	<0.5	<0.5	<0.5	<0.5	--
03/10/15	--	--	--	<22	<0.5	<0.5	<0.5	<0.5	--
<b>08/24/15</b>	--	--	--	<b>&lt;22</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	--

**Table 2**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron-Branded Service Station 91723  
9757 San Leandro Street, Oakland, California

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**EXPLANATIONS:**

Current groundwater monitoring data provided by Gettler-Ryan 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

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

**Table 3**  
**Groundwater Analytical Results - Halogenated Volatile Organic Compounds**  
Former Chevron-Branded Service Station 91723  
9757 San Leandro Street, Oakland, California

WELL ID/ DATE	1,1-DCA (µg/L)	1,1-DCE (µg/L)	cis -1,2-DCE (µg/L)
<b>Groundwater ESL</b>	<b>5</b>	<b>6</b>	<b>6</b>
<b>MW-2</b>			
03/10/15	<0.5	<0.5	<0.5
<b>MW-5</b>			
03/10/15	<0.5	<0.5	<0.5
<b>MW-6</b>			
03/10/15	<0.5	<0.5	<0.5
<b>MW-8</b>			
03/10/15	<0.5	<0.5	<0.5
<b>MW-9</b>			
03/10/15	1	0.7	0.6

**EXPLANATIONS:**

Current groundwater monitoring data provided by Gettler-Ryan Inc.  
Current laboratory analytical results provided by Eurofins Lancaster Laboratories.

1,1-DCA = 1,1-Dichloroethane  
1,1-DCE = 1,1-Dichloroethene  
cis -1,2-DCE = cis -1,2-Dichloroethene  
(µg/L) = Micrograms per liter

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

**Table 4**  
**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 <sub>3</sub> )	ALKALINITY TO pH 8.3 (µg/L as CaCO <sub>3</sub> )	FERROUS IRON (µg/L)	SULFIDE (µg/L)	POST-PURGE DO (mg/L)	POST-PURGE ORP (mV)
<b>MW-2</b>									
03/30/12	330	320	10,600	545,000	<460	2,200	<270 <sup>1</sup>	1.08	219
06/12/12	300	290	12,900	460,000	<700	1,400	<220 <sup>1</sup>	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
09/11/14	490	<250	10,400	487,000	--	4,500	<270 <sup>1</sup>	0.26	125
03/10/15	--	--	--	--	--	--	--	1.5	156
<b>MW-5</b>									
03/30/12	110	440	30,200	370,000	<460	300	<270 <sup>1</sup>	1.11	222
06/12/12	120	890	44,800	387,000	<700	7,300	<220 <sup>1</sup>	0.87	124
09/27/12	110	980	30,200	370,000	<700	7,400	<110 <sup>1</sup>	0.98	136
03/13/13	170	570	30,600	398,000	--	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
09/11/14	99	<250	34,900	375,000	--	18,200	<270 <sup>1</sup>	0.11	81
03/10/15	--	--	--	--	--	--	--	1.4	143
<b>MW-6</b>									
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 <sup>1</sup>	0.84	115
09/27/12	170	640	8,500	434,000	<700	8,800	<110 <sup>1</sup>	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
09/11/14	320	<250	6,000	447,000	--	10,400	<54	0.21	109
03/10/15	--	--	--	--	--	--	--	1.6	179

**Table 4**  
**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 <sub>3</sub> )	ALKALINITY TO pH 8.3 (µg/L as CaCO <sub>3</sub> )	FERROUS IRON (µg/L)	SULFIDE (µg/L)	POST-PURGE DO (mg/L)	POST-PURGE ORP (mV)
<b>MW-8</b>									
03/30/12	2,100	2,300	32,200	454,000	<460	29,300	780 <sup>1</sup>	1.15	230
06/12/12	1,700	<250	9,200	441,000	<700	43,200	<220 <sup>1</sup>	0.98	47
09/27/12	1,900	420	7,900	444,000	<700	35,600	<270 <sup>1</sup>	1.21	50
03/13/13	1,800	<250	9,700	450,000	--	32,300	<540 <sup>1</sup>	1.61	-85
09/17/13	1,700	<250	5,700	468,000	--	22,300	<220 <sup>1</sup>	0.38	-78
03/21/14	--	--	--	--	--	--	--	1.09	-51
09/11/14	2,900	<250	3,700	417,000	--	59,500	<540 <sup>1</sup>	0.04	28
03/10/15	--	--	--	--	--	--	--	1.1	-76
<b>MW-9</b>									
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
09/11/14	<3.0	2,700	35,300	383,000	--	<10	<54	0.35	134
03/10/15	--	--	--	--	--	--	--	1.7	175



**Table 4**  
**Monitored Natural Attenuation Parameters**  
Former Chevron-Branded Service Station 91723  
9757 San Leandro Street, Oakland, California

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**EXPLANATIONS:**

Current groundwater monitoring data provided by Gettler-Ryan Inc. Current laboratory analytical results provided by Eurofins Lancaster Laboratories.

(µg/L) = Micrograms per liter

(µg/L as CaCO<sub>3</sub>) = Micrograms per liter as calcium carbonate

DO = Dissolved Oxygen

(mg/L) = Milligrams per liter

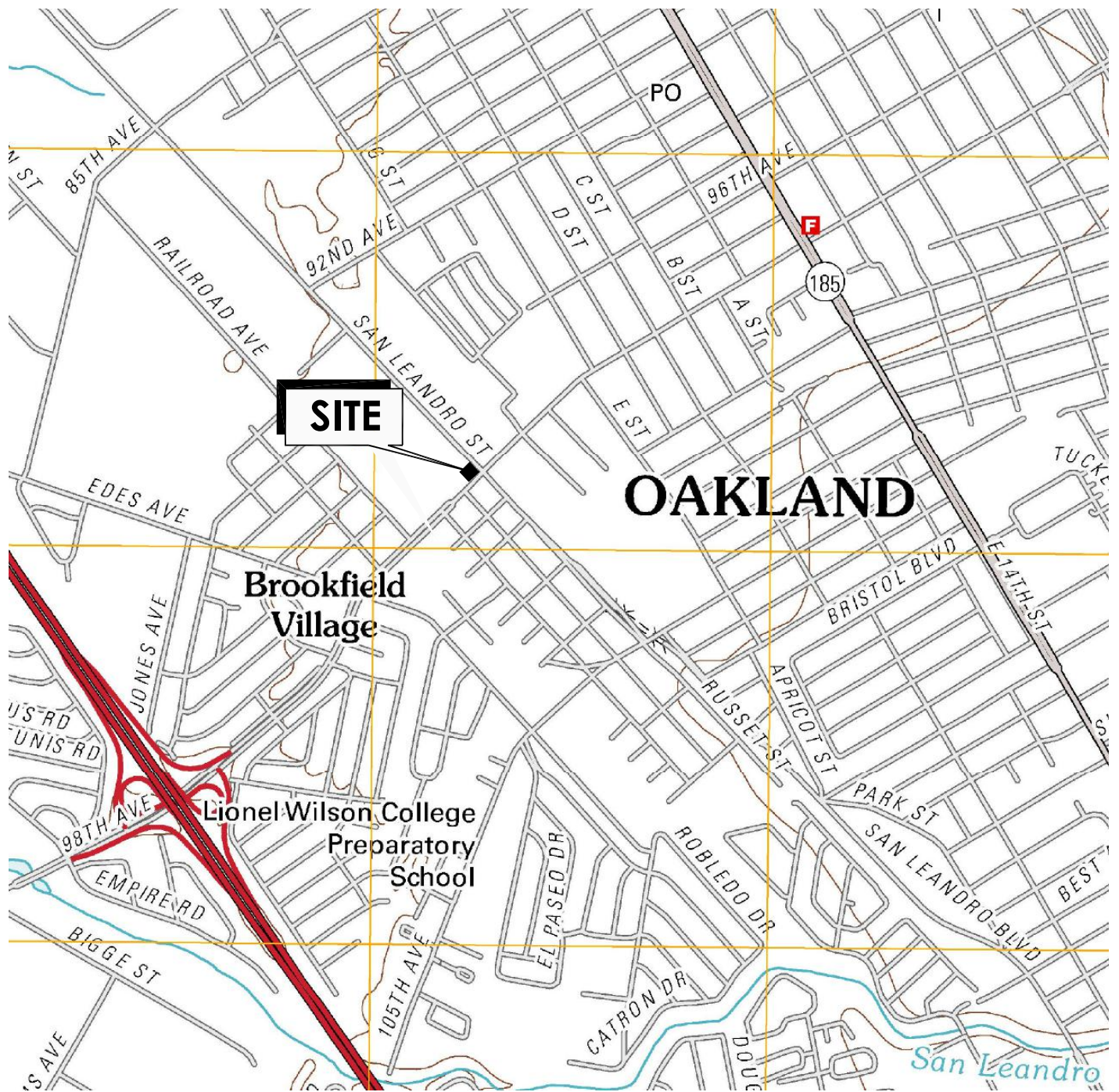
ORP = Oxidation Reduction Potential

(mV) = Millivolts

-- = Not Measured/Not Analyzed

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

## **FIGURES**



CALIFORNIA



SCALE IN MILES



SCALE IN FEET

REFERENCE: USGS 7.5 MINUTE QUADRANGLE;  
SAN LEANDRO, CALIFORNIA; 2012



15575 Los Gatos Blvd, Building C  
Los Gatos, CA 95032

Phone: (408)356-6124 Fax: (408)356-6138

FOR:  
FORMER CHEVRON-BRANDED  
SERVICE STATION 91723  
9757 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

JOB NUMBER:  
211602332

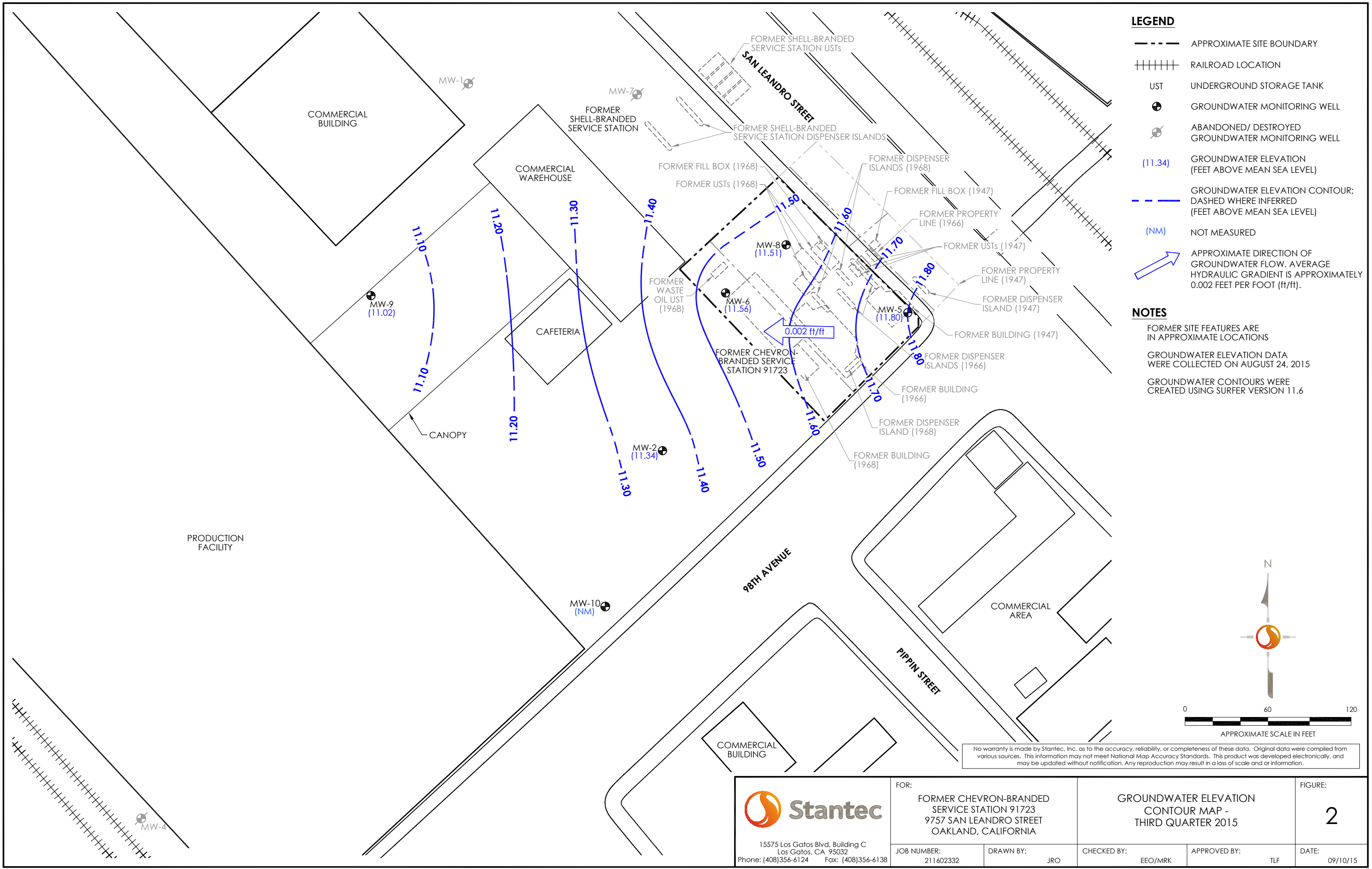
DRAWN BY:  
JRO

CHECKED BY:  
EEO/MRK

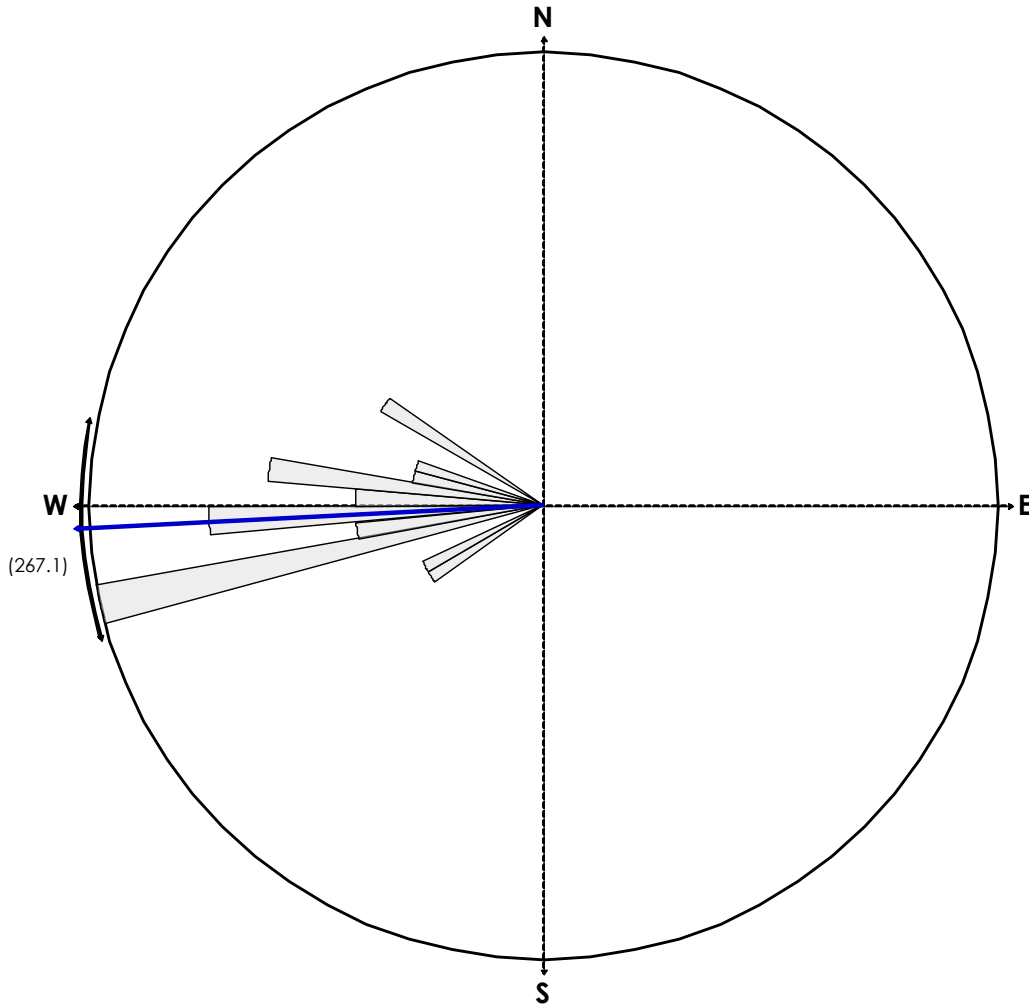
APPROVED BY:  
TLF

FIGURE:  
**1**  
DATE:  
09/10/15

SITE LOCATION MAP



<p>15575 Los Gatos Blvd, Building C Los Gatos, CA 95032 Phone: (408)356-6124 Fax: (408)356-6138</p>	FOR:	GROUNDWATER ELEVATION CONTOUR MAP - THIRD QUARTER 2015		FIGURE:
	FORMER CHEVRON-BRANDED SERVICE STATION 91723 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA			
JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	09/10/15



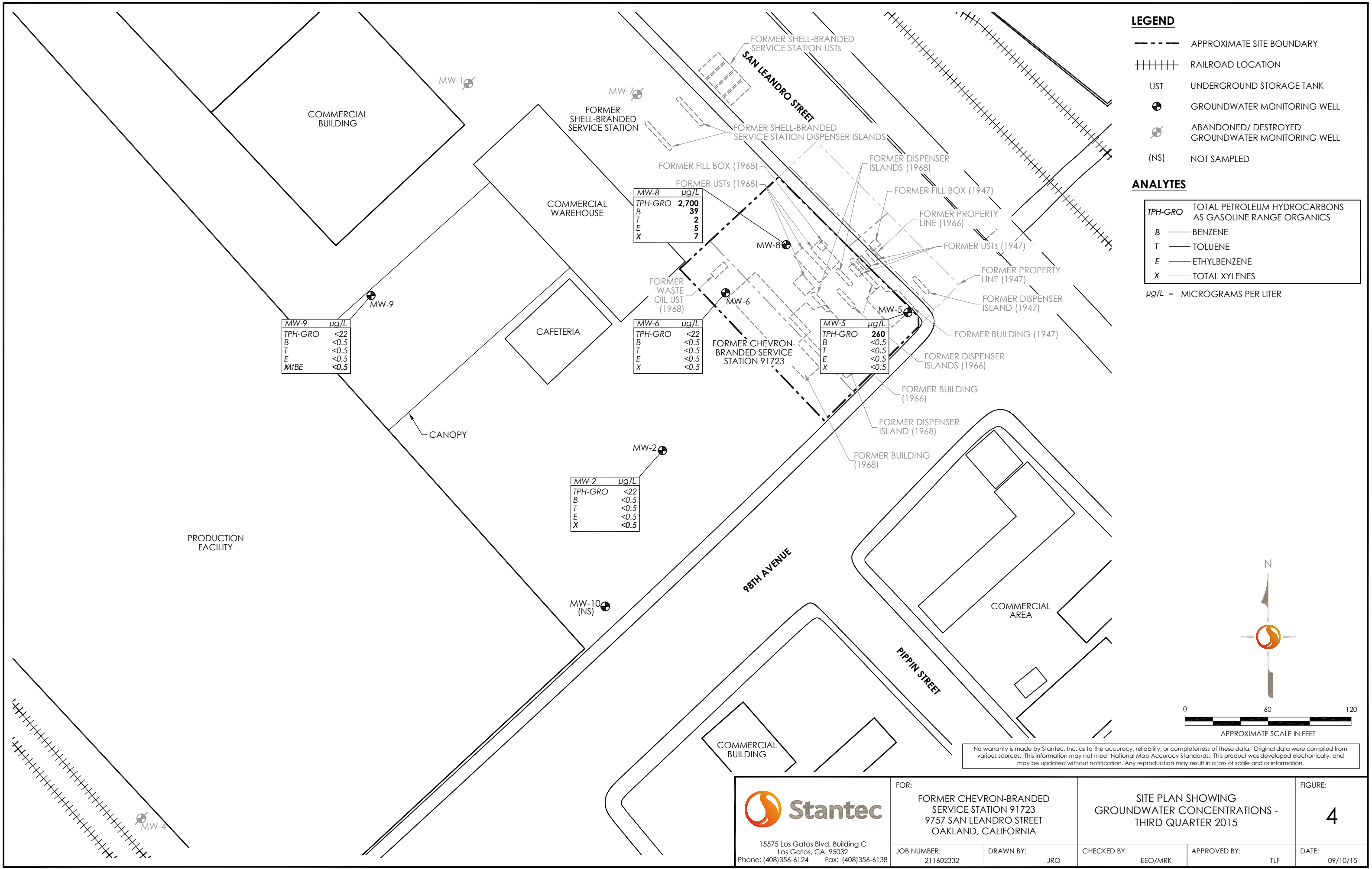
EQUAL AREA PLOT

Number of Points	31
Class Size	5
Vector Mean	267.13
Vector Magnitude	30.05
Consistency Ratio	0.97

NOTE: ROSE DIAGRAM IS BASED ON THE DIRECTION OF GROUNDWATER FLOW BEGINNING THIRD QUARTER 1988. DIRECTIONS OF GROUNDWATER FLOW WERE NOT INCLUDED FOR EVENTS WHERE THE GROUNDWATER FLOW DIRECTION VARIED.

 15575 Los Gatos Blvd, Building C Los Gatos, CA 95032 Phone: (408)356-6124 Fax: (408)356-6138	FOR: FORMER CHEVRON-BRANDED SERVICE STATION 91723 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA	GROUNDWATER FLOW DIRECTION ROSE DIAGRAM - THIRD QUARTER 2015		FIGURE: <b>3</b>
	JOB NUMBER: 211602332	DRAWN BY: JRO	CHECKED BY: EEO/MRK	APPROVED BY: TLF





**LEGEND**

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

**ANALYTES**

TPH-GRO	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES

µg/L = MICROGRAMS PER LITER

MW-9	µg/L
TPH-GRO	<22
B	<0.5
T	<0.5
E	<0.5
X	<0.5

MW-8	µg/L
TPH-GRO	2,700
B	39
T	2
E	5
X	7

MW-6	µg/L
TPH-GRO	<22
B	<0.5
T	<0.5
E	<0.5
X	<0.5

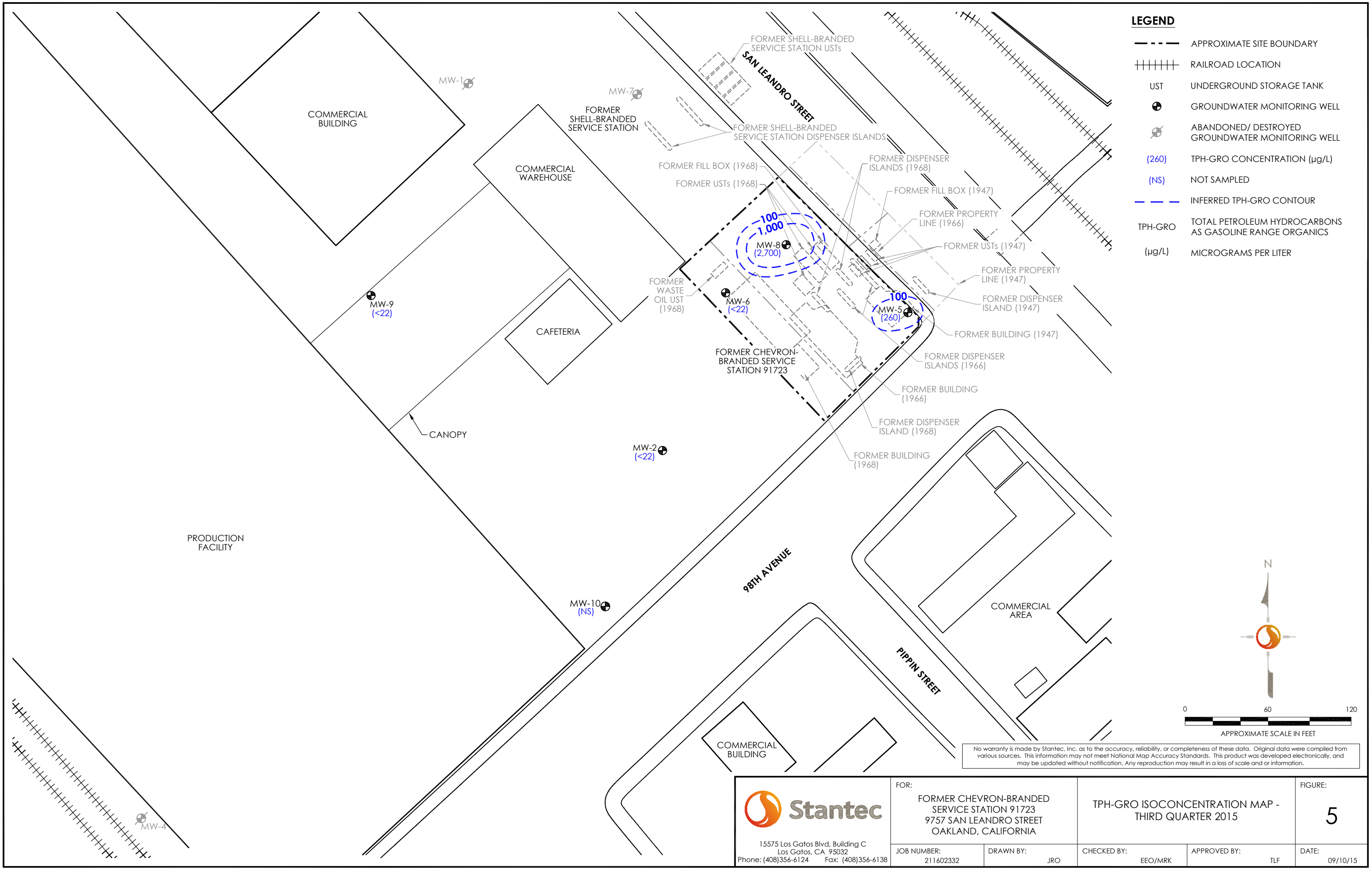
MW-5	µg/L
TPH-GRO	260
B	<0.5
T	<0.5
E	<0.5
X	<0.5

MW-2	µg/L
TPH-GRO	<22
B	<0.5
T	<0.5
E	<0.5
X	<0.5

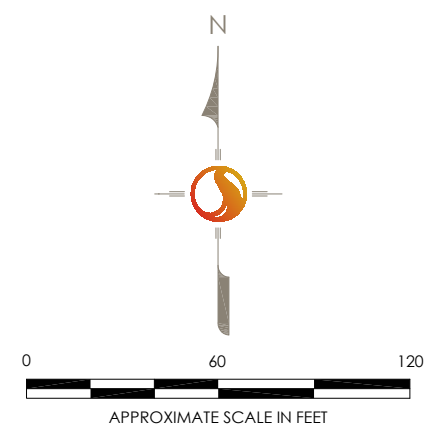
MW-10 (NS)

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<p>15575 Los Gatos Blvd, Building C Los Gatos, CA 95032 Phone: (408)356-6124 Fax: (408)356-6138</p>	<p>FOR: FORMER CHEVRON-BRANDED SERVICE STATION 91723 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA</p>	<p>SITE PLAN SHOWING GROUNDWATER CONCENTRATIONS - THIRD QUARTER 2015</p>		<p>FIGURE: <b>4</b></p>
	<p>JOB NUMBER: 211602332</p>	<p>DRAWN BY: JRO</p>	<p>CHECKED BY: EEO/MRK</p>	<p>APPROVED BY: TLF</p>

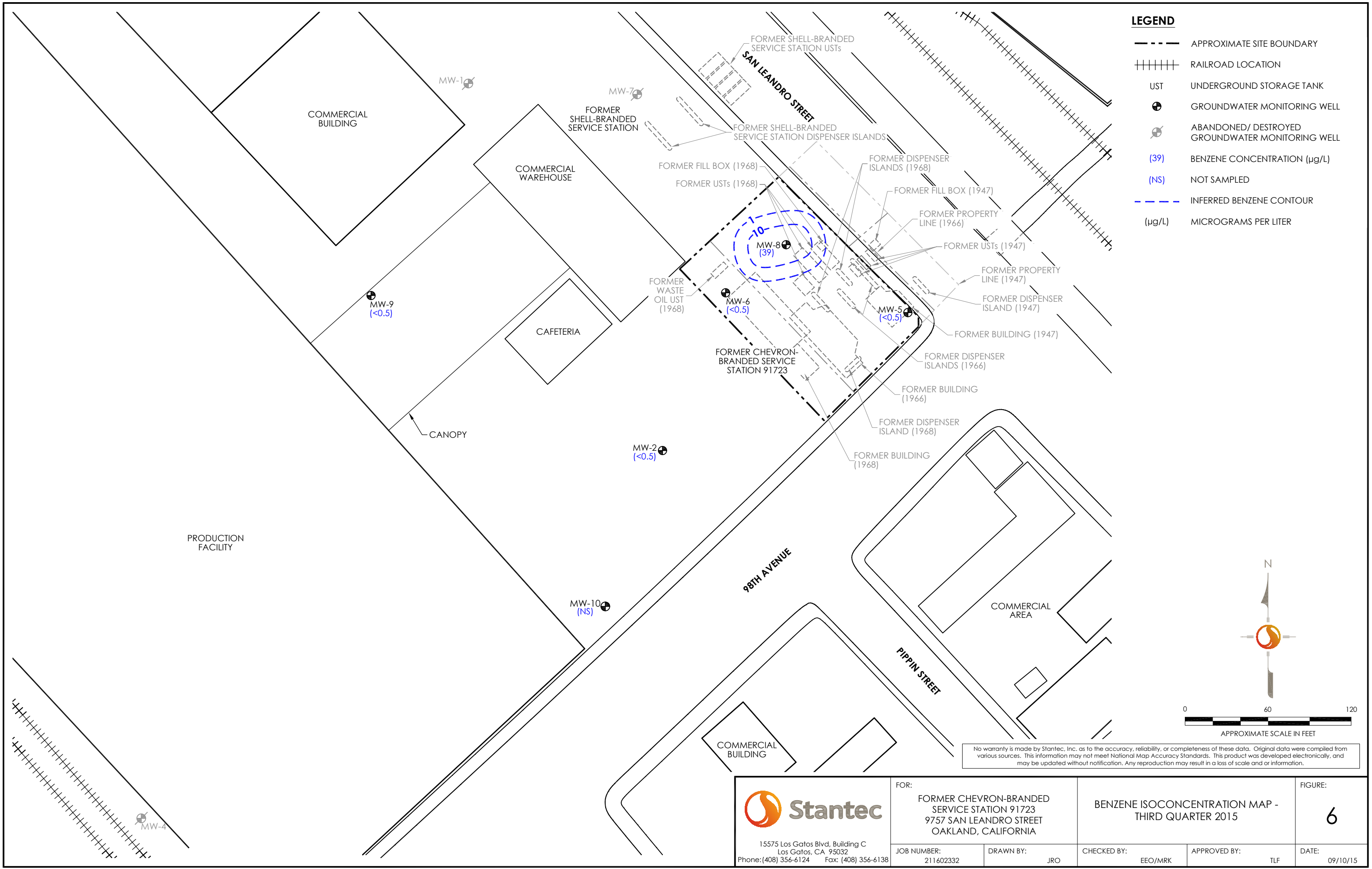


- LEGEND**
- APPROXIMATE SITE BOUNDARY
  - ++++ RAILROAD LOCATION
  - UST UNDERGROUND STORAGE TANK
  - ⊕ GROUNDWATER MONITORING WELL
  - ⊖ ABANDONED/ DESTROYED GROUNDWATER MONITORING WELL
  - (260) TPH-GRO CONCENTRATION (µg/L)
  - (NS) NOT SAMPLED
  - - - - INFERRED TPH-GRO CONTOUR
  - TPH-GRO TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS (µg/L)
  - MICROGRAMS PER LITER

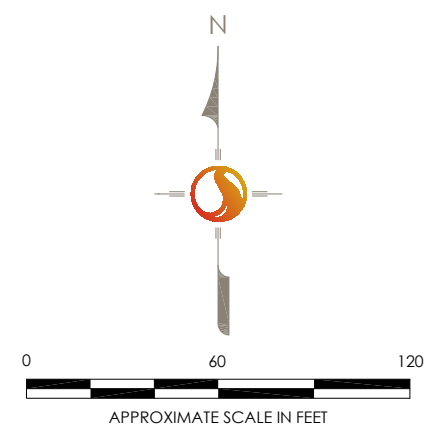


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 15575 Los Gatos Blvd, Building C Los Gatos, CA 95032 Phone: (408)356-6124 Fax: (408)356-6138	FOR: FORMER CHEVRON-BRANDED SERVICE STATION 91723 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA	TPH-GRO ISOCONCENTRATION MAP - THIRD QUARTER 2015		FIGURE: <b>5</b>
	JOB NUMBER: 211602332	DRAWN BY: JRO	CHECKED BY: EEO/MRK	APPROVED BY: TLF



- LEGEND**
- APPROXIMATE SITE BOUNDARY
  - ++++ RAILROAD LOCATION
  - UST
  - ⊕ GROUNDWATER MONITORING WELL
  - ⊖ ABANDONED/ DESTROYED GROUNDWATER MONITORING WELL
  - (39) BENZENE CONCENTRATION (µg/L)
  - (NS) NOT SAMPLED
  - - - - INFERRED BENZENE CONTOUR
  - (µg/L) MICROGRAMS PER LITER



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 15575 Los Gatos Blvd, Building C Los Gatos, CA 95032 Phone: (408) 356-6124 Fax: (408) 356-6138	FOR: FORMER CHEVRON-BRANDED SERVICE STATION 91723 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA	BENZENE ISOCONCENTRATION MAP - THIRD QUARTER 2015			FIGURE: <b>6</b>
	JOB NUMBER: 211602332	DRAWN BY: JRO	CHECKED BY: EEO/MRK	APPROVED BY: TLF	DATE: 09/10/15



**ATTACHMENT A**

**Gettler-Ryan Inc. Field Data Sheets and Standard  
Operating Procedures – Third Quarter 2015**



# GETTLER-RYAN INC.

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## TRANSMITTAL

September 3, 2015

G-R # 385899

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, Suite G  
Dublin, California 94568

RE: **Former Chevron Station**  
**SS# 9-1723**  
**9757 San Leandro Street.**  
**Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

---

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Report Second Semi Annual Event of August 24, 2015

---

### 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.



## 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 #9-1723  
 Site Address: 9757 San Leandro Street  
 City: Oakland, CA

Job Number: 386496  
 Event Date: 8.24.15 (inclusive)  
 Sampler: FT

Well ID: MW-2  
 Well Diameter: 2 1/4 in.  
 Total Depth: 21.52 ft.  
 Depth to Water: 9.97 ft.

Date Monitored: 8.24.15

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

Check if water column is less than 0.50 ft.

11.55 xVF .17 = 1.96 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.28

### Purge Equipment:

Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 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 / Absorbent Sock (circle one)	_____
Amt Removed from Skimmer:	_____ ltr
Amt Removed from Well:	_____ ltr
Water Removed:	_____ ltr

Start Time (purge): 1105  
 Sample Time/Date: 1127 / 8.24.15  
 Approx. Flow Rate: ✓ gpm.  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: Cloudy  
 Water Color: 604 Odor: Y / N  
 Sediment Description: S. SILTY  
 DTW @ Sampling: 10.02

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (US) mS μmhos/cm	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1109</u>	<u>2.0</u>	<u>6.84</u>	<u>795</u>	<u>21.9</u>	_____	_____
<u>1113</u>	<u>4.0</u>	<u>6.81</u>	<u>789</u>	<u>21.4</u>	_____	_____
<u>1117</u>	<u>6.0</u>	<u>6.79</u>	<u>782</u>	<u>21.0</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO GC/MS/BTEX(8260B)</u>

### 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 #9-1723 Job Number: 386496  
 Site Address: 9757 San Leandro Street Event Date: 8.24.15 (inclusive)  
 City: Oakland, CA Sampler: FR

Well ID: MW-5 Date Monitored: 8.24.15

Well Diameter: 214 in.

Total Depth: 17.63 ft.

Depth to Water: 10.04 ft.

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

Check if water column is less than 0.50 ft.

7.59 xVF .17 = 1.29 x3 case volume = Estimated Purge Volume: 4.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.55

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 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 / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ ltr  
 Amt Removed from Well: \_\_\_\_\_ ltr  
 Water Removed: \_\_\_\_\_ ltr

Start Time (purge): 1145 Weather Conditions: SUNNY  
 Sample Time/Date: 1205 8.24.15 Water Color: gray Odor: DIRTY SWEAT  
 Approx. Flow Rate: / gpm. Sediment Description: SILTY  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 10.03

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>1148</u>	<u>1.5</u>	<u>6.89</u>	<u>767</u>	<u>21.6</u>	_____	_____
<u>1151</u>	<u>3.0</u>	<u>6.86</u>	<u>761</u>	<u>21.2</u>	_____	_____
<u>1155</u>	<u>4.0</u>	<u>6.84</u>	<u>757</u>	<u>19.9</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO GC/MS/BTEX(8260B)</u>

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 #9-1723 Job Number: 386496  
 Site Address: 9757 San Leandro Street Event Date: 8-24-15 (inclusive)  
 City: Oakland, CA Sampler: FT

Well ID: MW-6 Date Monitored: 8.24.15  
 Well Diameter: 0.14 in. Volume 3/4"= 0.02 1"= 0.04 2"= 0.17 3"= 0.38  
 Total Depth: 19.55 ft. Factor (VF) 4"= 0.66 5"= 1.02 6"= 1.50 12"= 5.80  
 Depth to Water: 10.15 ft.  Check if water column is less than 0.50 ft.  
9.40 xVF .17 = 1.59 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.03

### Purge Equipment:

Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 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: \_\_\_\_\_ ltr  
 Amt Removed from Well: \_\_\_\_\_ ltr  
 Water Removed: \_\_\_\_\_ ltr

Start Time (purge): 1030 Weather Conditions: Sunny / Cloudy  
 Sample Time/Date: 1050 / 8.24.15 Water Color: Gray Odor: Y / (N)  
 Approx. Flow Rate: — gpm. Sediment Description: SILTY  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 10.18

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) mS (µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>1033</u>	<u>1.5</u>	<u>6.79</u>	<u>784</u>	<u>22.0</u>	_____	_____
<u>1036</u>	<u>3.0</u>	<u>6.77</u>	<u>779</u>	<u>21.9</u>	_____	_____
<u>1040</u>	<u>5.0</u>	<u>6.75</u>	<u>772</u>	<u>21.2</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>3</u> x vov vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO GC/MS/BTEX(8260B)</u>

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 #9-1723 Job Number: 386496  
 Site Address: 9757 San Leandro Street Event Date: 8.24.15 (inclusive)  
 City: Oakland, CA Sampler: FT

Well ID: MW-8 Date Monitored: 8.24.15  
 Well Diameter: Ø14 in.  
 Total Depth: 18.18 ft.  
 Depth to Water: 10.33 ft.  Check if water column is less than 0.50 ft.  
7.85 xVF .17 = 1.33 x3 case volume = Estimated Purge Volume: 4.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.90

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

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 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: \_\_\_\_\_ ltr  
 Amt Removed from Well: \_\_\_\_\_ ltr  
 Water Removed: \_\_\_\_\_ ltr

Start Time (purge): 1220 Weather Conditions: SUNNY  
 Sample Time/Date: 1240 / 8.24.15 Water Color: 60 Odor: Ø / N STRONG  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: SILT  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 10.37

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS (µmhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1223</u>	<u>1.5</u>	<u>6.78</u>	<u>810</u>	<u>21.7</u>	_____	_____
<u>1226</u>	<u>3.0</u>	<u>6.75</u>	<u>801</u>	<u>21.3</u>	_____	_____
<u>1229</u>	<u>4.0</u>	<u>6.73</u>	<u>796</u>	<u>21.1</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-8</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO GC/MS/BTEX(8260B)</u>

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 #9-1723 Job Number: 386496  
 Site Address: 9757 San Leandro Street Event Date: 8.24.15 (inclusive)  
 City: Oakland, CA Sampler: FT

Well ID: MW-9 Date Monitored: 8.24.15  
 Well Diameter: 2 1/4 in.  
 Total Depth: 20.21 ft.  
 Depth to Water: 9.53 ft.  Check if water column is less than 0.50 ft.  
10.68 x VF .66 = 7.04 x3 case volume = Estimated Purge Volume: 21.0 gal.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.66

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump  \_\_\_\_\_  
 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 / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ ltr  
 Amt Removed from Well: \_\_\_\_\_ ltr  
 Water Removed: \_\_\_\_\_ ltr

Start Time (purge): 1300 Weather Conditions: Sunny  
 Sample Time/Date: 1325 / 8.24.15 Water Color: CLEAR Odor: Y 10  
 Approx. Flow Rate: ~2.5 gpm. Sediment Description: NONE  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 9.56

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS mS / µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>1303</u>	<u>7.0</u>	<u>7.02</u>	<u>772</u>	<u>19.5</u>	_____	_____
<u>1306</u>	<u>14.0</u>	<u>6.99</u>	<u>765</u>	<u>19.2</u>	_____	_____
<u>1309</u>	<u>21.0</u>	<u>6.95</u>	<u>758</u>	<u>19.0</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>3 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO GC/MS/BTEX(8260B)</u>

COMMENTS: \_\_\_\_\_

Add/Replaced Gasket: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_ Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_

# Chevron California Region Analysis Request/Chain of Custody



**Lancaster Laboratories**

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

Ø 82415-Ø4

<b>1 Client Information</b>				<b>4 Matrix</b>				<b>5 Analyses Requested</b>									
Facility # <b>SS#9-1723-OML G-R#386496 Global WBS ID#T0600101789</b>				Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>				Total Number of Containers BTEX <del>8021</del> 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> B TPH-GRO <del>8015</del> 8015 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> B TPH-DRO 8015 without Silica Gel Cleanup <input type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Method Dissolved Lead Method									
Site Address <b>9757 SAN LEANDRO STREET, OAKLAND, CA</b>																	
Chevron PM <b>CM</b>		Lead Consultant <b>Flora</b>															
Consultant/Office <b>Grinc-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568</b>																	
Consultant Project Mgr. <b>Deanna L. Harding, deanna@grinc.com</b>																	
Consultant Phone # <b>(925) 551-7444 x180</b>				Grab <input type="checkbox"/> Composite <input type="checkbox"/>				SCR #: _____									
Sampler <b>FRANK TENNINO</b>																	
<b>2 Sample Identification</b>		<b>Soil Depth</b>		<b>Collected</b>		<b>6 Remarks</b>											
QA		8-24-15															
MW-2		1127		X													
MW-5		1205		X													
MW-6		1050		X													
MW-8		1240		X													
MW-9		1325		X													

<b>7 Turnaround Time Requested (TAT) (please circle)</b>				Relinquished by _____		Date <b>8-24-15</b>		Time _____		Received by _____		Date <b>24 AUG 15</b>		Time <b>1518</b>	
Standard <input checked="" type="radio"/> 5 day      4 day 72 hour      48 hour      24 hour				Relinquished by _____		Date _____		Time _____		Received by _____		Date _____		Time _____	

<b>8 Data Package (circle if required)</b>		<b>EDD (circle if required)</b>		Relinquished by Commercial Carrier: _____				Received by _____		Date _____		Time _____	
Type I - Full		EDFFLAT (default)		UPS _____ FedEx _____ Other _____									
Type VI (Raw Data)		Other: _____		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

September 01, 2015

### Project: 91723

Submittal Date: 08/25/2015  
Group Number: 1587398  
PO Number: 0015167993  
Release Number: CMACLEOD  
State of Sample Origin: CA

#### Client Sample Description

QA-T-150824 NA Water  
MW-2-W-150824 Grab Groundwater  
MW-5-W-150824 Grab Groundwater  
MW-6-W-150824 Grab Groundwater  
MW-8-W-150824 Grab Groundwater  
MW-9-W-150824 Grab Groundwater

#### Lancaster Labs (LL) #

8020498  
8020499  
8020500  
8020501  
8020502  
8020503

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>.

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

Respectfully Submitted,



Amek Carter  
Specialist

(717) 556-7252

Sample Description: QA-T-150824 NA Water  
Facility# 91723 Job# 386496 GRD  
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8020498  
LL Group # 1587398  
Account # 10906

Project Name: 91723

Collected: 08/24/2015

Chevron

Submitted: 08/25/2015 09:40

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Reported: 09/01/2015 21:26

SLOQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>		<b>SW-846 8260B</b>	<b>ug/l</b>	<b>ug/l</b>	
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

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
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F152401AA	08/28/2015 12:59	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152401AA	08/28/2015 12:59	Daniel H Heller	1

Sample Description: MW-2-W-150824 Grab Groundwater  
Facility# 91723 Job# 386496 GRD  
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8020499  
LL Group # 1587398  
Account # 10906

Project Name: 91723

Collected: 08/24/2015 11:27 by FT

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 08/25/2015 09:40

Reported: 09/01/2015 21:26

SLOM2

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>		<b>SW-846 8260B</b>	<b>ug/l</b>	<b>ug/l</b>	
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

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
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F152401AA	08/28/2015 14:26	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152401AA	08/28/2015 14:26	Daniel H Heller	1

Sample Description: MW-5-W-150824 Grab Groundwater  
 Facility# 91723 Job# 386496 GRD  
 9757 San Leandro-Oakland T0600101789

LL Sample # WW 8020500  
 LL Group # 1587398  
 Account # 10906

Project Name: 91723

Collected: 08/24/2015 12:05 by FT

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 08/25/2015 09:40

Reported: 09/01/2015 21:26

SLOM5

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>		<b>SW-846 8260B</b>	<b>ug/l</b>	<b>ug/l</b>	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	C6-C12-TPH-GRO	n.a.	260	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

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
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F152401AA	08/28/2015 14:48	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152401AA	08/28/2015 14:48	Daniel H Heller	1



Sample Description: MW-6-W-150824 Grab Groundwater  
Facility# 91723 Job# 386496 GRD  
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8020501  
LL Group # 1587398  
Account # 10906

Project Name: 91723

Collected: 08/24/2015 10:50 by FT

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 08/25/2015 09:40

Reported: 09/01/2015 21:26

SLOM6

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>		<b>SW-846 8260B</b>	<b>ug/l</b>	<b>ug/l</b>	
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

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
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F152401AA	08/28/2015 15:10	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152401AA	08/28/2015 15:10	Daniel H Heller	1

Sample Description: MW-8-W-150824 Grab Groundwater  
Facility# 91723 Job# 386496 GRD  
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8020502  
LL Group # 1587398  
Account # 10906

Project Name: 91723

Collected: 08/24/2015 12:40 by FT

Chevron

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 08/25/2015 09:40

Reported: 09/01/2015 21:26

SLOM8

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>		<b>SW-846 8260B</b>	<b>ug/l</b>	<b>ug/l</b>	
10945	Benzene	71-43-2	39	0.5	1
10945	C6-C12-TPH-GRO	n.a.	2,700	22	1
10945	Ethylbenzene	100-41-4	5	0.5	1
10945	Toluene	108-88-3	2	0.5	1
10945	Xylene (Total)	1330-20-7	7	0.5	1

### General Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F152401AA	08/28/2015 15:32	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152401AA	08/28/2015 15:32	Daniel H Heller	1

Sample Description: MW-9-W-150824 Grab Groundwater  
 Facility# 91723 Job# 386496 GRD  
 9757 San Leandro-Oakland T0600101789

LL Sample # WW 8020503  
 LL Group # 1587398  
 Account # 10906

Project Name: 91723

Collected: 08/24/2015 13:25 by FT

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 08/25/2015 09:40

Reported: 09/01/2015 21:26

SLOM9

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles</b>		<b>SW-846 8260B</b>	<b>ug/l</b>	<b>ug/l</b>	
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

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
10945	8260 BTEX+ GRO C6-C12	SW-846 8260B	1	F152401AA	08/28/2015 15:54	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152401AA	08/28/2015 15:54	Daniel H Heller	1

## Quality Control Summary

Client Name: Chevron  
Reported: 09/01/2015 21:26

Group Number: 1587398

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>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: F152401AA	Sample number(s): 8020498-8020503							
Benzene	N.D.	0.5	ug/l	95		78-120		
C6-C12-TPH-GRO	N.D.	22.	ug/l	98	98	52-154	1	30
Ethylbenzene	N.D.	0.5	ug/l	90		78-120		
Toluene	N.D.	0.5	ug/l	92		80-120		
Xylene (Total)	N.D.	0.5	ug/l	91		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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: F152401AA	Sample number(s): 8020498-8020503 UNSPK: P019872								
Benzene	103	106	78-120	3	30				
Ethylbenzene	100	104	78-120	3	30				
Toluene	102	107	80-120	5	30				
Xylene (Total)	100	104	80-120	4	30				

### Surrogate Quality Control

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

Analysis Name: 8260 BTEX+ GRO C6-C12  
Batch number: F152401AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8020498	98	100	101	93
8020499	98	99	99	94
8020500	96	99	101	95
8020501	98	98	100	95
8020502	96	97	101	101
8020503	98	98	100	94
Blank	97	100	101	94
LCS	98	102	102	96
LCSD	97	100	104	97
MS	97	101	100	97

\*- 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  
Reported: 09/01/2015 21:26

Group Number: 1587398

**Surrogate Quality Control**

MSD	97	100	102	98
Limits:	80-116	77-113	80-113	78-113

\*- Outside of specification

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

# Chevron California Region Analysis Request/Chain of Custody

**eurofins**  
 82415-04

**Lancaster Laboratories**

Acct. # 10906

For Eurofins Lancaster Laboratories use only  
 Group # 158798 Sample # 8020498-503  
 Instructions on reverse side correspond with circled numbers.

1061

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks						
Facility # <b>SS-19-1723-OML G-R#386496 Global ID# T0600101789</b> Site Address <b>9757 SAN LEANDRO STREET, OAKLAND, CA</b> Chevron PM <b>CM</b> STANTECTF Lead Consultant <b>Flora</b> Consultant/Office <b>Grinc-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568</b> Consultant Project Mgr. <b>Deanna L. Harding, deanna@grinc.com</b> Consultant Phone # <b>(925) 551-7444 x180</b> Sampler <b>FRANK TENNINOPI</b>				<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil				Total Number of Containers BTEX 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> B TPH-GRO <input type="checkbox"/> 8015 <input checked="" type="checkbox"/> B TPH-DRO 8015 without Silica Gel Cleanup <input type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Method Dissolved Lead Method										SCR #: _____ <input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input checked="" type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run _____ oxy's on highest hit <input type="checkbox"/> Run _____ oxy's on all hits						
2 Sample Identification		Soil Depth	3 Collected		Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX	8021	8260	TPH-GRO	8015	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead	Method	Dissolved Lead	Method	
			Date	Time																				
QA			8-24-15					W		2	X	X												
MW-2				1127	X					3	X	X												
MW-5				1205	X																			
MW-6				1050	X																			
MW-8				1240	X																			
MW-9				1325	X																			
<b>7 Turnaround Time Requested (TAT) (please circle)</b> Standard 5 day 4 day 72 hour 48 hour 24 hour				Relinquished by <i>[Signature]</i> Date <b>8-24-15</b> Time _____ Relinquished by <i>[Signature]</i> Date <b>24 AUG 15</b> Time <b>1630</b>		Received by <i>[Signature]</i> Date <b>24 AUG 15</b> Time <b>1514</b>		Relinquished by Commercial Carrier: UPS _____ FedEx <input checked="" type="checkbox"/> Other _____ Temperature Upon Receipt <b>0.3-2.3 °C</b>		Received by <i>[Signature]</i> Date <b>8/25/15</b> Time <b>940</b>		Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No												
<b>8 Data Package</b> (circle if required) Type I - Full Type VI (Raw Data)				EDD (circle if required) EDFFLAT (default) Other: _____																				

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	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.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

## Laboratory Data Qualifiers:

- B - Analyte detected in the blank
- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value  $\geq$  the Method Detection Limit (MDL or DL) and the  $<$  Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column  $>40\%$ . The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column  $>100\%$ . The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

## Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) 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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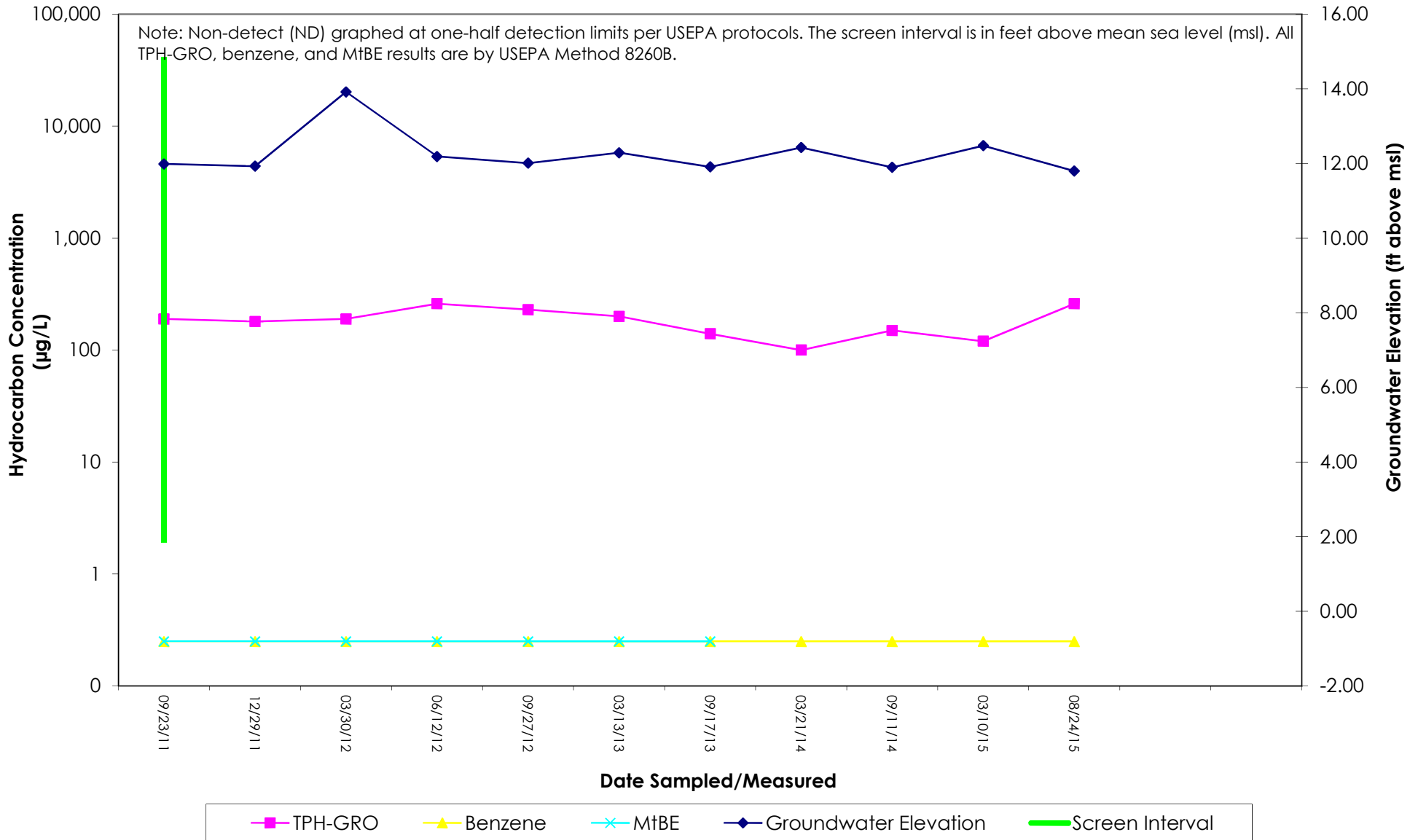
**ATTACHMENT C**  
**Hydrographs**



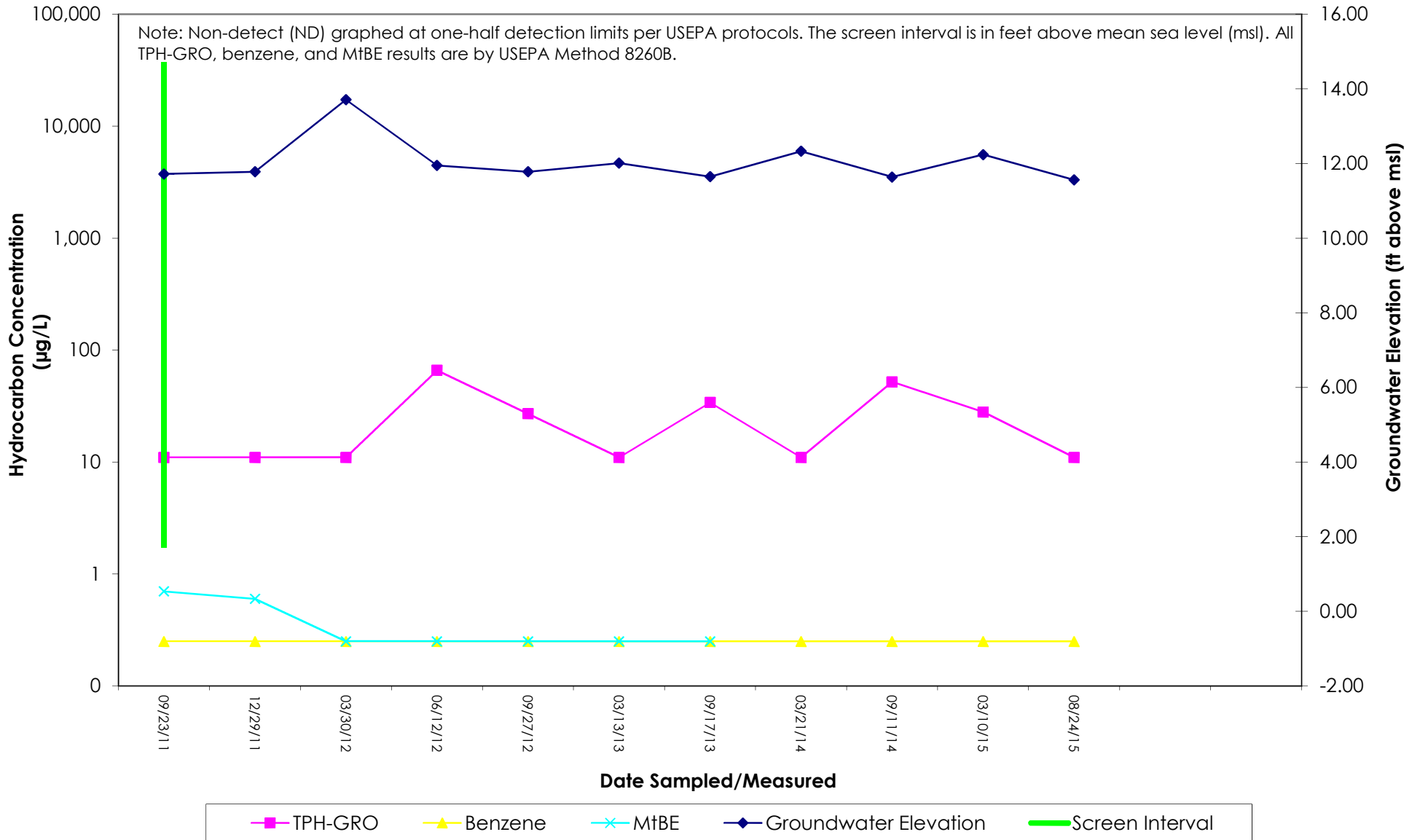
**MW-2 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time**  
 Former Chevron-branded Service Station 91723  
 9757 San Leandro Street  
 Oakland, California



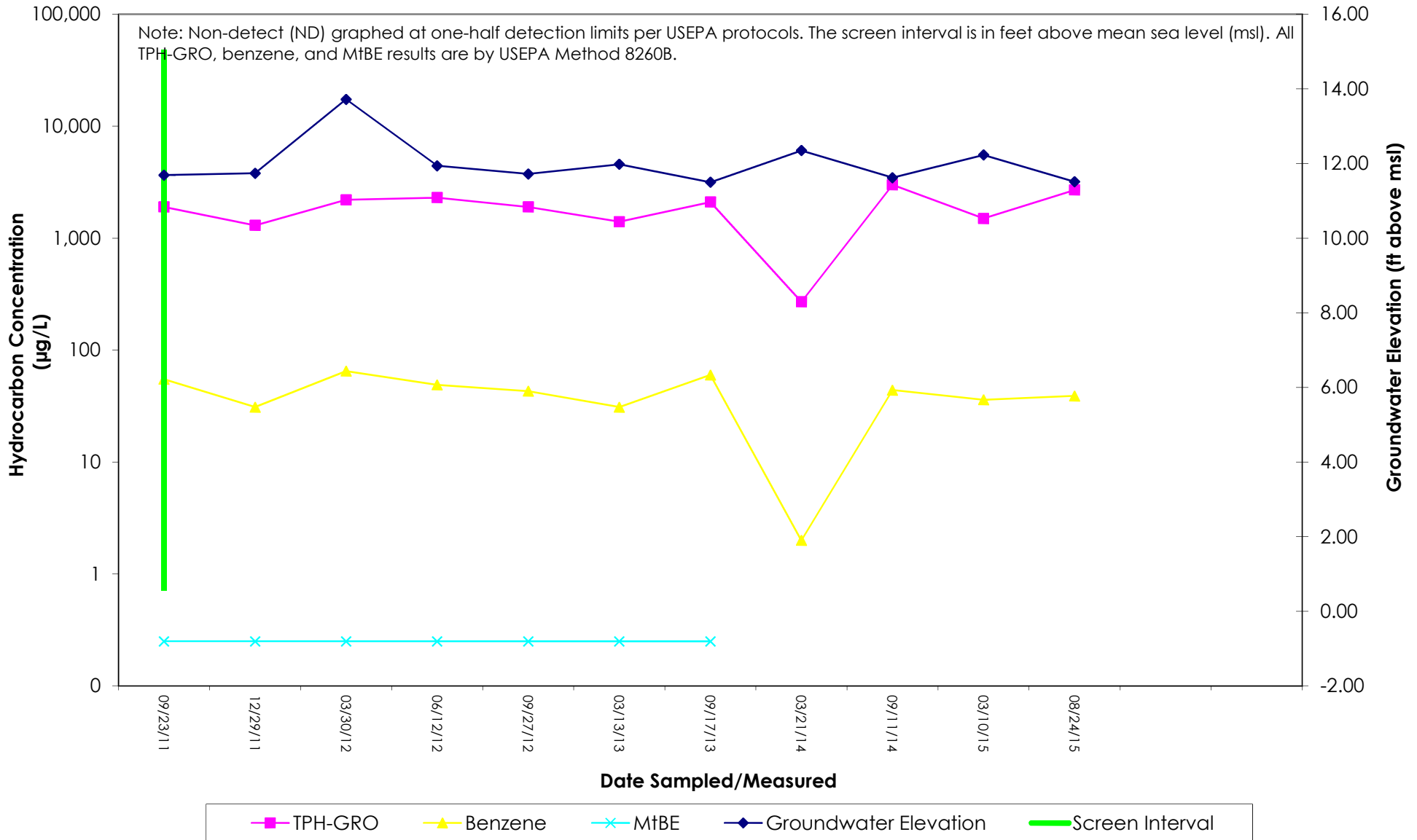
**MW-5 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time**  
 Former Chevron-branded Service Station 91723  
 9757 San Leandro Street  
 Oakland, California



**MW-6 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time**  
 Former Chevron-branded Service Station 91723  
 9757 San Leandro Street  
 Oakland, California



**MW-8 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time**  
 Former Chevron-branded Service Station 91723  
 9757 San Leandro Street  
 Oakland, California



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

Former Chevron-branded Service Station 91723

9757 San Leandro Street

Oakland, California

