Third Quarter 2016 Semi-Annual Groundwater Monitoring Report

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

Stantec

Prepared for:
Chevron Environmental
Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583

Prepared by:
Stantec Consulting Services Inc.
15575 Los Gatos Blvd., Building C
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November 8, 2016

Carryl MacLeod
Project Manager
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Chevron Environmental Management Company
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November 08, 2016

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 2016 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.

Sincerely,

Carryl MacLeod

Carryl MacLeod
Project Manager

November 8, 2016

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

Reference: **Third Quarter 2016 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 2016 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 2016 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.

THIRD QUARTER 2016 GROUNDWATER MONITORING AND SAMPLING PROGRAM

Gettler-Ryan Inc. (G-R) performed the Third Quarter 2016 groundwater monitoring and sampling event on August 24, 2016. 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.

Investigation-derived waste (IDW) generated during the Third Quarter 2016 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 2016 data) is shown on **Figure 2**. The direction of groundwater flow beneath the Site at the time of sampling was toward the west-southwest 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); total petroleum hydrocarbons as diesel range organics (TPH-DRO) with silica gel cleanup using US EPA Method 8015B; and total dissolved solids (TDS) using SM 2540 C-1997.

Groundwater Analytical Results

During Third Quarter 2016, 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 halogenated volatile organic compounds (HVOCs) are shown in **Table 3**. Historical monitored natural attenuation (MNA) parameters are presented in **Table 4**. Additional historical groundwater analytical data are included in **Attachment B**. 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**. An Isoconcentration map was not developed for TPH-DRO because concentrations were below method detection limits (MDLs) in all Site wells.

Certified laboratory analysis reports and chain-of-custody documents are presented as **Attachment C**. Hydrographs based on groundwater elevations and analytical results from Third Quarter 2011 to present are included in **Attachment D**. A summary of Third Quarter 2016 groundwater analytical results follows:

- **TPH-GRO** was detected in two Site wells, at concentrations of 280 micrograms per liter (µg/L; well MW-5) and 430 µg/L (well MW-8).
- **TPH-DRO** was not detected above the MDL (50 µg/L) in any Site well sampled.
- **Benzene** was detected in one Site well, at a concentration of 5 µg/L (well MW-8).
- **Toluene** was not detected above the MDL (0.5 µg/L) in any Site well sampled.

- **Ethylbenzene** was detected in one Site well, at a concentration of 0.6 µg/L (well MW-8).

- **Total Xylenes** were detected in one Site well, at a concentration of 0.9 µg/L (well MW-8).

To better evaluate groundwater quality, TDS were also analyzed. TDS were detected in all five Site wells, at concentrations ranging from 441,000 µg/L (well MW-8) to 600,000 µg/L (well MW-2). TDS levels were below the California Department of Public Health (CDPH) Secondary Maximum Contaminant Level (SMCL) drinking water standard for public water supplies of 500 milligrams per liter (mg/L) in wells MW-5, MW-6, MW-8, and MW-9, but above the drinking water standard in well MW-2. Because TDS levels were above the drinking water standard in one well, this generally indicates that Site groundwater cannot currently be used as a drinking water source. TDS will not be analyzed again.

CONCLUSIONS AND RECOMMENDATIONS

The maximum concentration of TPH-GRO and the 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 in well MW-5 at 280 µg/L, located near the former first-generation dispenser islands. TPH-DRO was not detected in any Site well. Current and historical groundwater quality data indicate the dissolved-phase petroleum hydrocarbon plume at the Site is adequately defined and stable or decreasing in size and concentration.

Given the quantity of data collected to-date, the well-established data trends since wells were first installed in 1987 or 1988, and because Site conditions satisfy low-threat closure groundwater-specific criteria, scenario 1, as presented in Stantec's *Low-Threat Closure Policy Evaluation and Request for Closure*, dated June 10, 2016, additional monitoring and sampling of Site wells appears unwarranted. Since additional groundwater data will not likely change the current Site conceptual model, Stantec requests that groundwater monitoring and sampling at this Site cease, pending the review from State Fund, which is currently underway according to the status noted on GeoTracker.

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

LIMITATIONS

This document entitled Third Quarter 2016 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
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Erin O'Malley
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Attachments:

Table 1 – Well Details / Screen Interval Assessment – Third Quarter 2016
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 2016
Figure 3 – Groundwater Flow Direction Rose Diagram – Third Quarter 2016
Figure 4 – Site Plan Showing Groundwater Concentrations – Third Quarter 2016
Figure 5 – TPH-GRO Isoconcentration Map – Third Quarter 2016
Figure 6 – Benzene Isoconcentration Map – Third Quarter 2016

Attachment A – Gettler-Ryan Inc. Field Data Sheets and Standard Operating Procedures – Third Quarter 2016
Attachment B – Historical Groundwater Analytical Data
Attachment C – Certified Laboratory Analysis Reports and Chain-of-Custody Documents
Attachment D – Hydrographs

cc:

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TABLES

Table 1
Well Details / Screen Interval Assessment
Third Quarter 2016
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 below TOC)	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	21.53	9.72	12-22	Depth-to-groundwater above screen interval.
MW-5	05/18/88	Monitoring	2	21.84	20.00	17.63	9.75	7-20	Depth-to-groundwater within screen interval.
MW-6	05/18/88	Monitoring	2	21.71	20.00	19.54	9.86	7-20	Depth-to-groundwater within screen interval.
MW-8	05/19/88	Monitoring	2	21.84	20.00	18.17	10.07	7-20	Depth-to-groundwater within screen interval.
MW-9	08/04/89	Monitoring	4	20.55	20.00	20.27	8.92	5.5-20	Depth-to-groundwater within screen interval.

Notes:
bgs = below ground surface
msl = mean sea level
TOC = top of casing
[1] = As measured on August 24, 2016.

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-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TDS (µg/L)
MW-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	--	--
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	--	--
08/24/15	21.31	9.97	11.34	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
03/11/16	21.31	6.28	15.03	<50[1]	25	<0.5	<0.5	<0.5	<0.5	--	480,000
08/24/16	**21.31**	**9.72**	**11.59**	**<50[1]**	**<22**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**600,000**
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	--	--
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	--	--
08/24/15	21.84	10.04	11.80	--	260	<0.5	<0.5	<0.5	<0.5	--	--
03/11/16	21.84	6.27	15.57	<50[1]	230	<0.5	<0.5	<0.5	<0.5	--	469,000
08/24/16	**21.84**	**9.75**	**12.09**	**<50[1]**	**280**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**491,000**
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	--

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-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TDS (µg/L)
MW-6 (cont)											
03/21/14	21.71	9.38	12.33	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
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	--	--
08/24/15	21.71	10.15	11.56	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
03/11/16	21.71	6.39	15.32	<50[1]	31	<0.5	<0.5	<0.5	<0.5	--	487,000
08/24/16	**21.71**	**9.86**	**11.85**	**<50[1]**	**<22**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**484,000**
MW-8											
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	--	--
08/24/15	21.84	10.33	11.51	--	2,700	39	2	5	7	--	--
03/11/16	21.84	6.48	15.36	210[1]	1,500	27	1	4	5	--	465,000
08/24/16	**21.84**	**10.07**	**11.77**	**<50[1]**	**430**	**5**	**<0.5**	**0.6**	**0.9**	**--**	**441,000**
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	--	--
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	--	--
08/24/15	20.55	9.53	11.02	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
03/11/16	20.55	5.80	14.75	<50[1]	<22	<0.5	<0.5	<0.5	<0.5	--	489,000
08/24/16	**20.55**	**8.92**	**11.63**	**<50[1]**	**<22**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**499,000**

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-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	TDS (µg/L)
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	--	--
09/11/14	--	--	--	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
03/10/15	--	--	--	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
08/24/15	--	--	--	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
03/11/16	--	--	--	--	<22	<0.5	<0.5	<0.5	<0.5	--	--
08/24/16	**--**	**--**	**--**	**--**	**<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

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
TPH-DRO = Total Petroleum Hydrocarbons as Diesel Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes

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

[1] With silica gel cleanup. Laboratory report indicates the reverse surrogate, capric acid, is present at <1%.

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)
MW-2			
03/10/15	<0.5	<0.5	<0.5
MW-5			
03/10/15	<0.5	<0.5	<0.5
MW-6			
03/10/15	<0.5	<0.5	<0.5
MW-8			
03/10/15	<0.5	<0.5	<0.5
MW-9			
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

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 $CaCO_3$)	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
09/11/14	490	<250	10,400	487,000	--	4,500	<270[1]	0.26	125
03/10/15	--	--	--	--	--	--	--	1.5	156
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	30,600	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[1]	0.11	81
03/10/15	--	--	--	--	--	--	--	1.4	143
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
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 $CaCO_3$)	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-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	5,700	468,000	--	22,300	<220[1]	0.38	-78
03/21/14	--	--	--	--	--	--	--	1.09	-51
09/11/14	2,900	<250	3,700	417,000	--	59,500	<540[1]	0.04	28
03/10/15	--	--	--	--	--	--	--	1.1	-76
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
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

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 $CaCO_3$) = Micrograms per liter as calcium carbonate

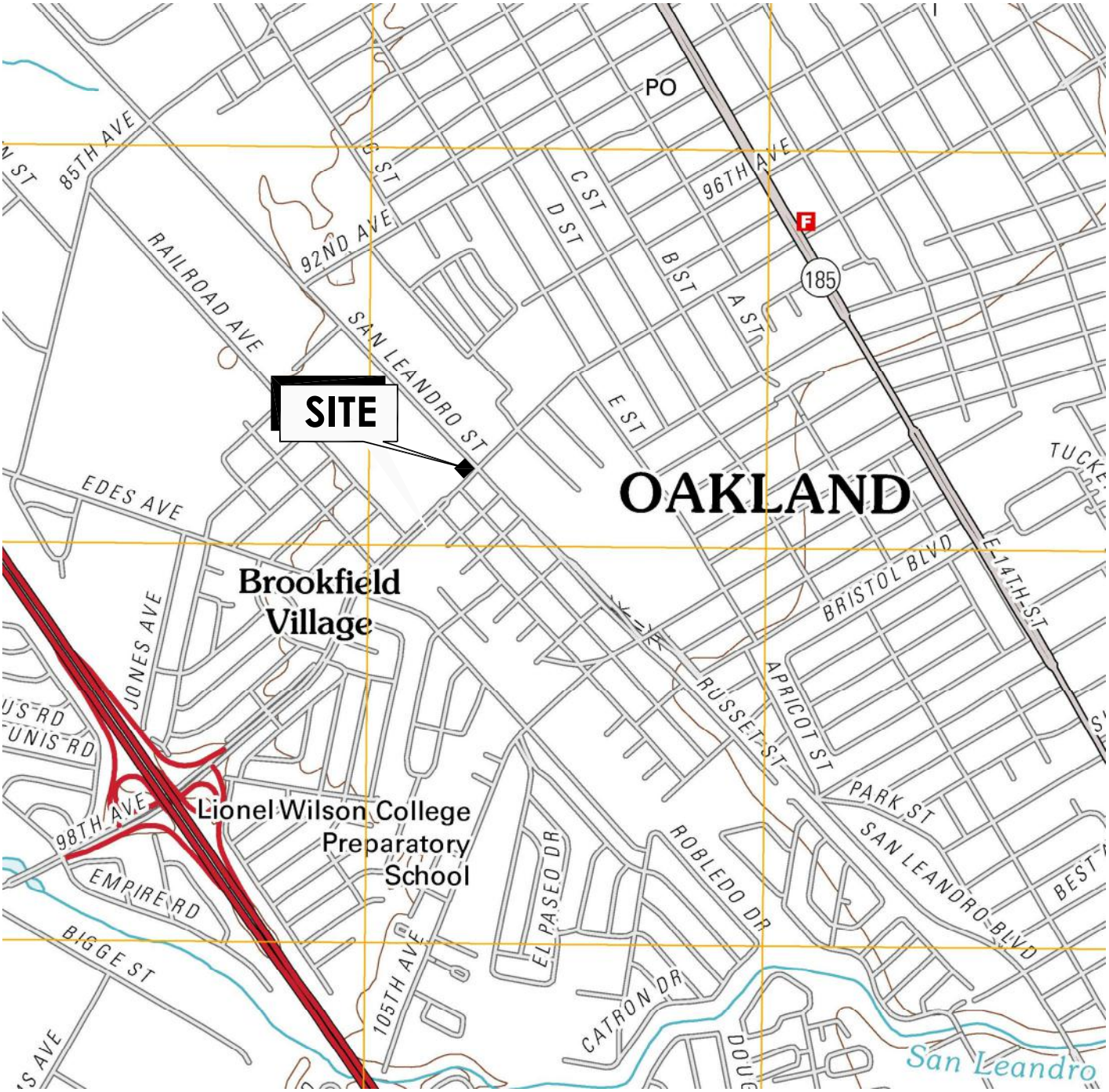
DO = Dissolved Oxygen

(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



CALIFORNIA

1 1/2 0 1

SCALE IN MILES

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE IN FEET

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

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Los Gatos, CA 95032
Phone: (408)356-6124 Fax: (408)356-6138

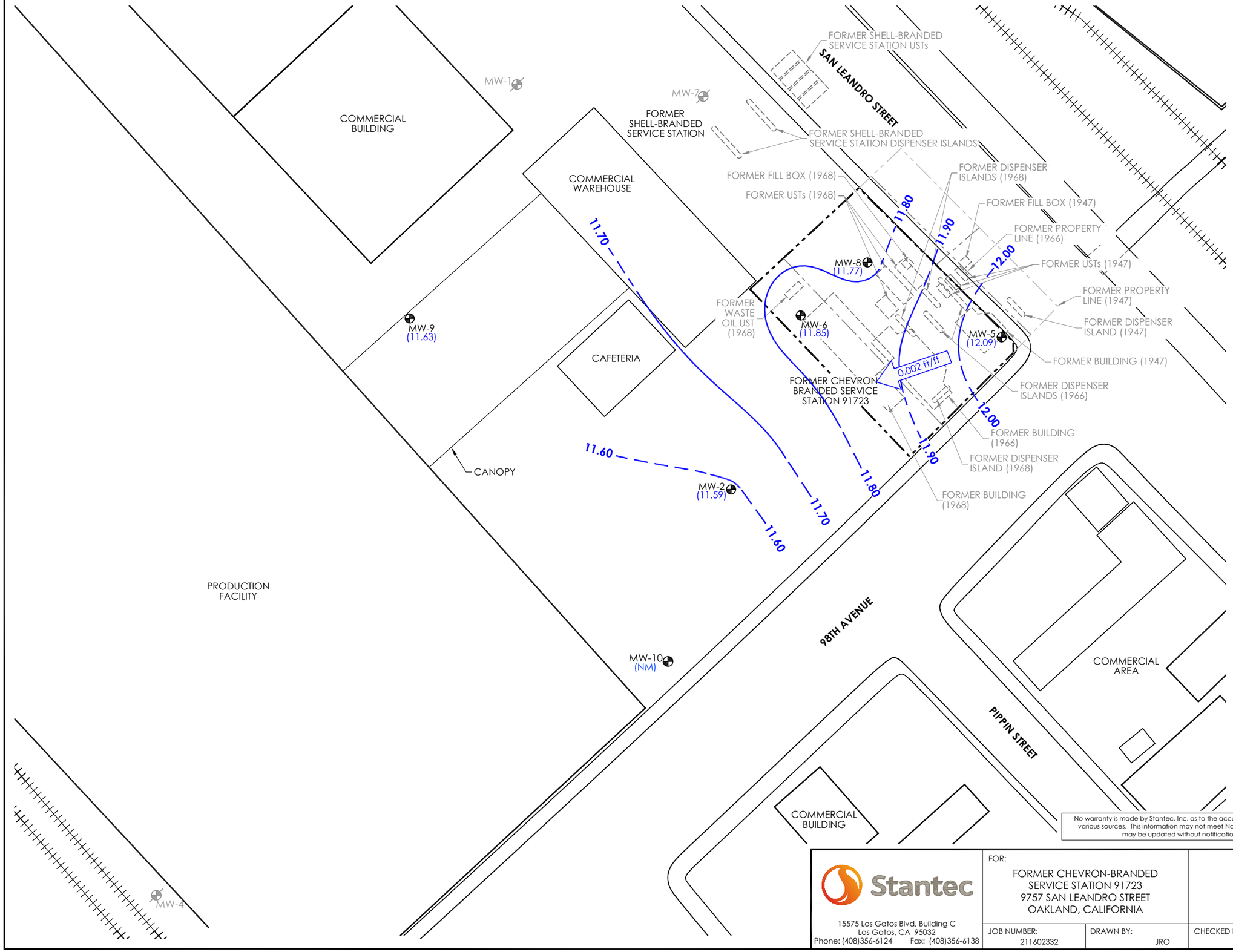
FOR: FORMER CHEVRON-BRANDED SERVICE STATION 91723
9757 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE: 1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	10/19/16

FILEPATH:U:\211602332\05_report_deliv\deliverables\reports\3q16_gwr\figures\cad\211602332_91723_3q16.dwg | jopalekopsahl | Oct 19, 2016 at 14:08 | Layout: fig1_slm



LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD LOCATION
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- ABANDONED/ DESTROYED GROUNDWATER MONITORING WELL
- (11.59) — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- GROUNDWATER ELEVATION CONTOUR; DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- (NM) — NOT MEASURED
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW. AVERAGE HYDRAULIC GRADIENT IS APPROXIMATELY 0.002 FEET PER FOOT (ft/ft).

NOTES

FORMER SITE FEATURES ARE IN APPROXIMATE LOCATIONS

GROUNDWATER ELEVATION DATA WERE COLLECTED ON AUGUST 24, 2016

GROUNDWATER CONTOURS WERE CREATED USING SURFER VERSION 11.6

N

0 60 120

APPROXIMATE SCALE IN FEET

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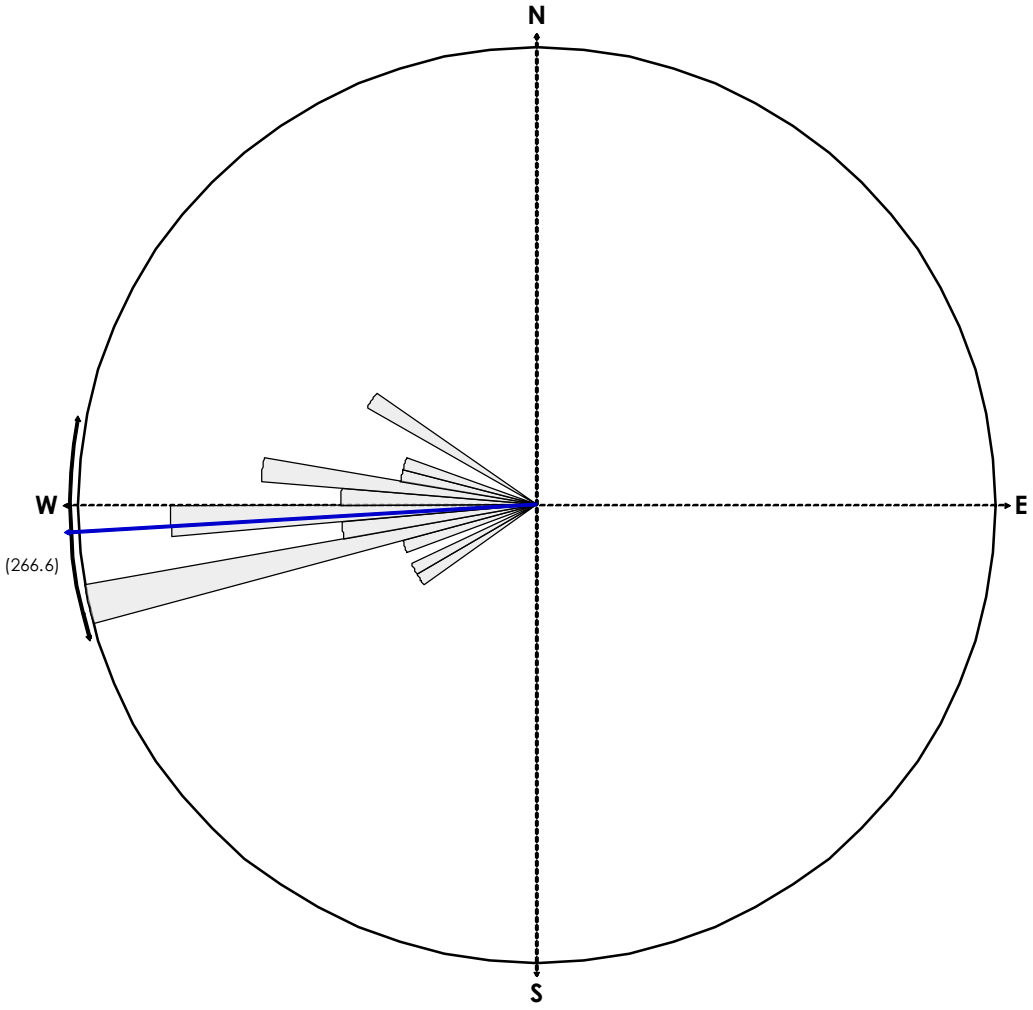
9757 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP - THIRD QUARTER 2016

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	10/19/16

FILEPATH:U:\211602332\05_report_deliv\deliverables\reports\3q16_gwr\figures\cad\211602332_91723_3q16.dwg | jopalekopsahl | Oct 25, 2016 at 14:42 | Layout: fig2_gwe



EQUAL AREA PLOT

Number of Points	33
Class Size	5
Vector Mean	266.62
Vector Magnitude	32.01
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.

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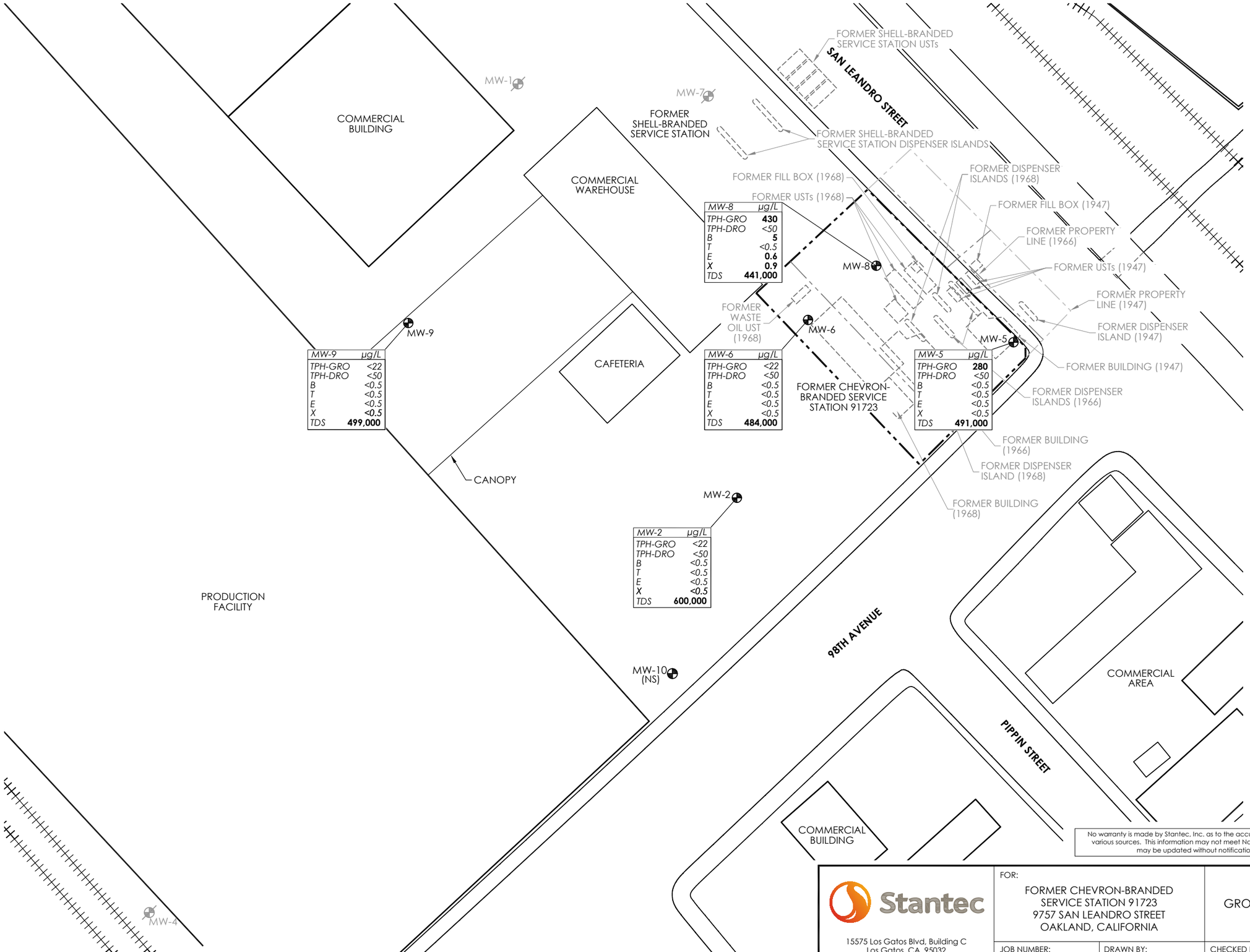
FOR:		FIGURE:
FORMER CHEVRON-BRANDED SERVICE STATION 91723 9757 SAN LEANDRO STREET OAKLAND, CALIFORNIA	GROUNDWATER FLOW DIRECTION ROSE DIAGRAM - THIRD QUARTER 2016	3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	10/19/16

FILEPATH:U:\211602332\05_report_deliv\deliverables\reports\3q16_gwr\figures\cad\211602332_91723_3q16.dwg | jopalekopsahl | Oct 25, 2016 at 14:45 | Layout: fig3_rose



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
- *TPH-DRO* — TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
- *B* — BENZENE
- *T* — TOLUENE
- *E* — ETHYLBENZENE
- *X* — TOTAL XYLENES
- *TDS* — TOTAL DISSOLVED SOLIDS

µg/L = MICROGRAMS PER LITER

N

0 60 120

APPROXIMATE SCALE IN FEET

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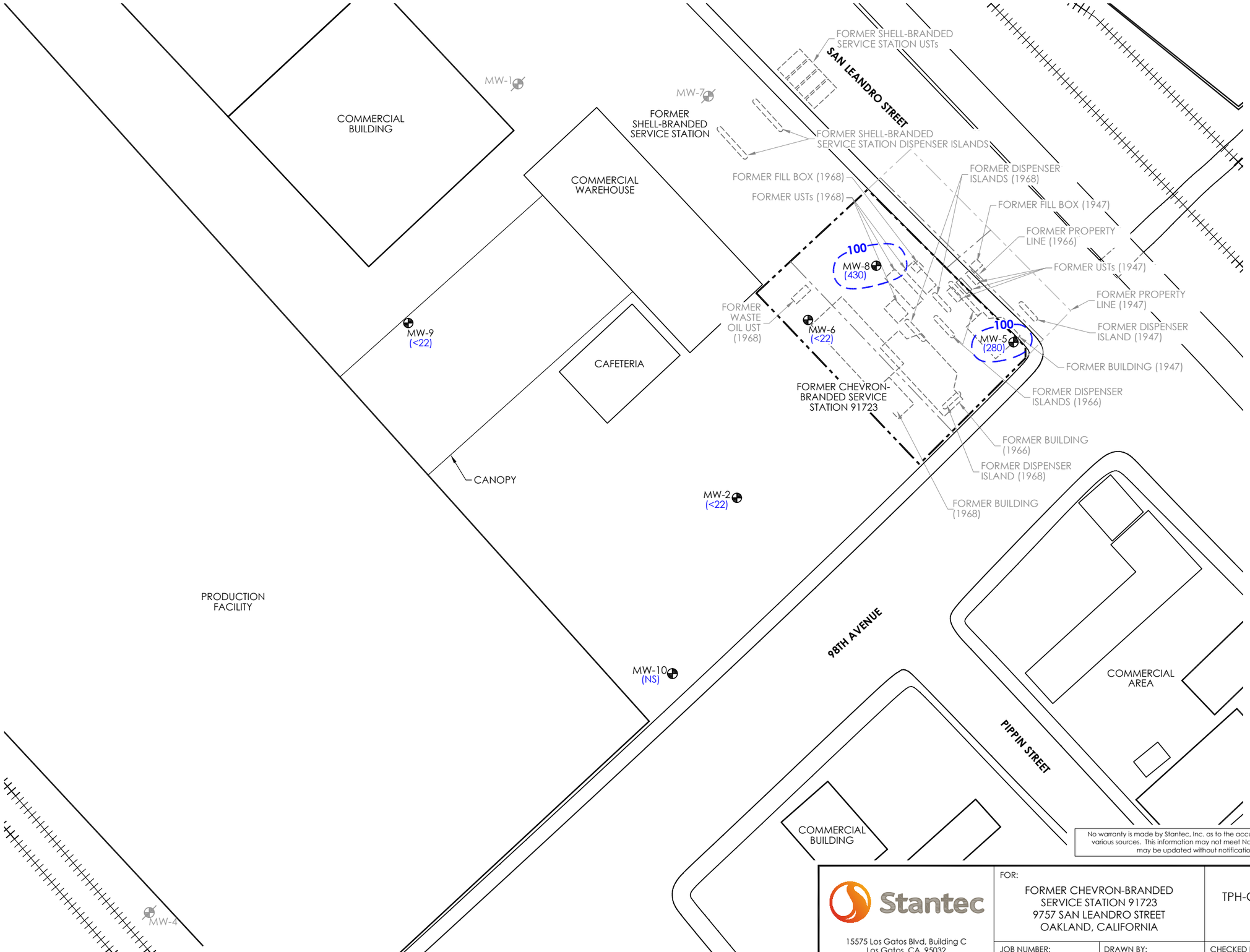
9757 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

SITE PLAN SHOWING GROUNDWATER CONCENTRATIONS - THIRD QUARTER 2016

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	10/19/16

FILEPATH:U:\211602332\05_report_deliv\deliverables\reports\3q16_gwr\figures\cad\211602332_91723_3q16.dwg | jopalekopsahl | Oct 24, 2016 at 9:34 | Layout: fig4_gwc



LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD LOCATION
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- ABANDONED/ DESTROYED GROUNDWATER MONITORING WELL
- (280) — 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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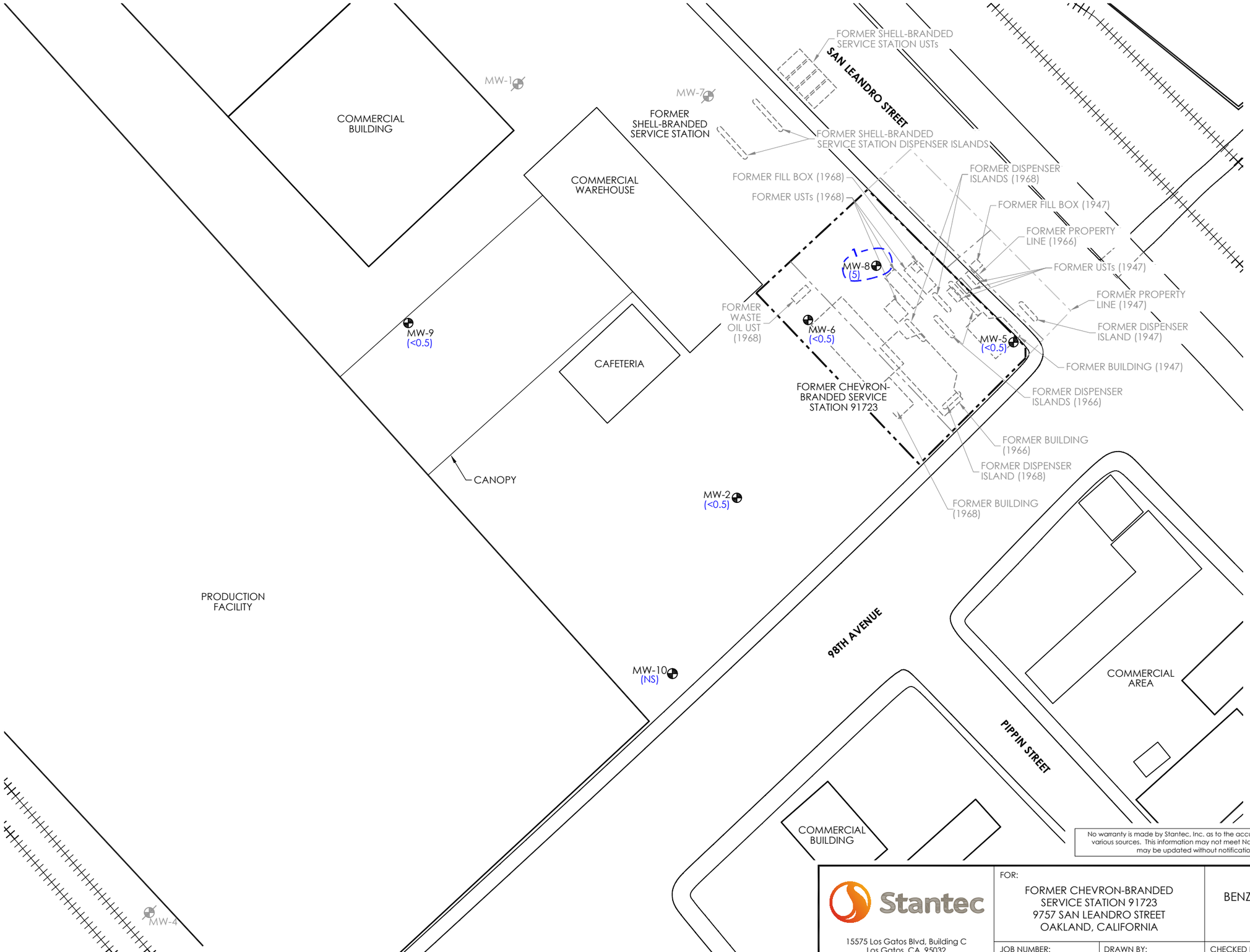
FOR: FORMER CHEVRON-BRANDED SERVICE STATION 91723
9757 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

TPH-GRO ISOCONCENTRATION MAP - THIRD QUARTER 2016

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	10/19/16

FILEPATH:U:\211602332\05_report_deliv\deliverables\reports\3q16_gwr\figures\cad\211602332_91723_3q16.dwg | jopalekopsahl | Oct 25, 2016 at 12:31 | Layout: fig5_gro



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FOR:
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9757 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

BENZENE ISOCONCENTRATION MAP - THIRD QUARTER 2016

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602332	JRO	EEO/MRK	TLF	10/19/16

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ATTACHMENT A
Gettler-Ryan Inc. Field Data Sheets and Standard Operating Procedures – Third Quarter 2016

GETTLER-RYAN INC.

TRANSMITTAL

September 2, 2016
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, 2016**

COMMENTS:

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

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

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

WELL CONDITION STATUS SHEET

Client/
Facility #: Chevron #9-1723
Site Address: 9757 San Leandro Street
City: Oakland, CA

Job #: 386496
Event Date: 8/24/16
Sampler: JV

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
MW-2	OK			SM	OK			N	N	12" Morrison	N
MW-5	OK	N/A			OK					Christy	
MW-6	OK	N/A			C	OK				Christy Box ◊ plate Lid	
MW-8	OK									12" Emco	
MW-9	OK	M	M	2RS	C	OK				12" Morrison	Y

Comments: MW-9 Well Box Lid missing - Replaced with a 12" Steel plate - Needs New Lid

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 Job Number: 386496
Site Address: 9757 San Leandro Street Event Date: 8/24/16 (inclusive)
City: Oakland, CA Sampler: JH

Well ID MW-2 Date Monitored: 8/24/16
Well Diameter (2)4 in.
Total Depth 21.53 ft.
Depth to Water 9.72 ft.

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

☐ Check if water column is less then 0.50 ft.

11.81 xVF .17 = 2.00 x3 case volume = Estimated Purge Volume: 6.02 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.08

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

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

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

Start Time (purge): 1345 Weather Conditions: Clear
Sample Time/Date: 1430 / 8/24/16 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: — gpm. Sediment Description: None
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 10.60

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/ mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1350	2	6.84	571	22.4		
1355	4	6.75	578	22.3		
1400	6	6.73	586	22.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 x voa vial	YES	HCL	LANCASTER	TPH-GRO GC/MS/BTEX(8260B)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN
	1 x 500ml poly	YES	NP	LANCASTER	TOTAL DISSOLVED SOLIDS

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: 8/24/16 (inclusive)

City: **Oakland, CA** Sampler: SH

Well ID **MW-5** Date Monitored: 8/24/16

Well Diameter (2) 4 in.

Total Depth 17.63 ft.

Depth to Water 9.75 ft.

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

☐ Check if water column is less then 0.50 ft.

7.88 xVF .17 = 1.33 x3 case volume = Estimated Purge Volume: 4.01 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.32

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

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

Start Time (purge): 1145 Weather Conditions: Clear

Sample Time/Date: 1215 / 8/24/16 Water Color: Cloudy Odor: Y (N)

Approx. Flow Rate: — gpm. Sediment Description: Light

Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 10.02

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1148	1.5	6.73	617	22.4		
1152	2.5	6.70	625	22.3		
1156	4.0	6.64	631	22.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 x voa vial	YES	HCL	LANCASTER	TPH-GRO GC/MS/BTEX(8260B)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN
	1 x 500ml poly	YES	NP	LANCASTER	TOTAL DISSOLVED SOLIDS

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: 8/24/16 (inclusive)

City: **Oakland, CA** Sampler: JV

Well ID **MW- 6** Date Monitored: 8/24/16

Well Diameter (2) 4 in.

Total Depth 19.54 ft.

Depth to Water 9.86 ft.

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

☐ Check if water column is less then 0.50 ft.

9.68 xVF .17 = 1.64 x3 case volume = Estimated Purge Volume: 4.93 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.79

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

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

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

Start Time (purge): 1240 Weather Conditions: Clear

Sample Time/Date: 1320 / 8/24/16 Water Color: Cloudy Odor: Y / (N)

Approx. Flow Rate: — gpm. Sediment Description: Low silt

Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 10.17

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS (umhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1244	1.5	7.20	584	22.1		
1249	3.0	7.13	591	22.0		
1254	5.0	7.05	617	22.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 6	3 x voa vial	YES	HCL	LANCASTER	TPH-GRO GC/MS/BTEX(8260B)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN
	1 x 500ml poly	YES	NP	LANCASTER	TOTAL DISSOLVED SOLIDS

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: 8/24/16 (inclusive)
City: Oakland, CA Sampler: JH

Well ID MW-8 Date Monitored: 8/24/16
Well Diameter (2) 4 in.
Total Depth 18.17 ft.
Depth to Water 10.07 ft.

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

☐ Check if water column is less then 0.50 ft.

8.10 xVF .17 = 1.37 x3 case volume = Estimated Purge Volume: 4.13 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.69

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

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

Start Time (purge): 1100 Weather Conditions: Clear
Sample Time/Date: 1130 / 8/24/16 Water Color: Cloudy Odor: (Y) / N Strong
Approx. Flow Rate: — gpm. Sediment Description: Light
Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 10.37

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1103	1.5	7.07	632	21.7		
1106	3.0	7.01	626	21.6		
1110	4.0	6.95	620	21.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3 x voa vial	YES	HCL	LANCASTER	TPH-GRO GC/MS/BTEX(8260B)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN
	1 x 500ml poly	YES	NP	LANCASTER	TOTAL DISSOLVED SOLIDS

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: 8/24/16 (inclusive)

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

Well ID MW- 9 Date Monitored: 8/24/16

Well Diameter 2 (4) in.

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

Total Depth 20.27 ft.

Depth to Water 8.92 ft. ☐ Check if water column is less then 0.50 ft.

11.35 xVF .66 = 7.49 x3 case volume = Estimated Purge Volume: 22.47 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.19

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	X
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

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

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

Start Time (purge): 1445 Weather Conditions: Clear

Sample Time/Date: 1530 / 8/24/16 Water Color: Clear Odor: Y / (N)

Approx. Flow Rate: 1-2 gpm. Sediment Description: None

Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 9.61

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1449	8	6.84	560	22.4		
1453	16	6.91	572	22.2		
1457	23	6.98	587	22.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 9	3 x voa vial	YES	HCL	LANCASTER	TPH-GRO GC/MS/BTEX(8260B)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN
	1 x 500ml poly	YES	NP	LANCASTER	TOTAL DISSOLVED SOLIDS

COMMENTS: _____

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

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Ø82516-Ø4

Ø824AS 25AUG16 5Ø0

For Eurofins Lancaster Laboratories use only

Acct. # _____ Group # _____ Sample # _____

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility # SS#9-1723-OML G-R#386496 Global ID#T0600101789 WBS

Site Address 3757 SAN LEANDRO STREET, OAKLAND, CA

Chevron PM CW STANTECTF Lead Consultant Flora

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

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

Consultant Phone # (925) 551-7444 x180

Sampler Jim Herrin

2 Sample Identification

Sample Identification	Soil Depth	Collected Date	Collected Time	3 Grab	3 Composite	4 Matrix: Soil	Water	Oil	Total Number of Containers	5 Analyses Requested: BTEX + MTBE 8021	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	Total Dissolved solids
QA	160824	~~8/24/16~~	—	Y			Y		2	Y	Y							
MW-2		160824	1130						6				X					X
MW-5			1215															
MW-6			1320															
MW-8			1130															
MW-9			1530															

SCR #: _____

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

6 Remarks

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day

72 hour | 48 hour | 24 hour | EDF/EDD

8 Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default)

Other: _____

Relinquished by	Date	Time	Received by	Date	Time
	8/24/16	1800			
	8/25/16	1330	A. Salazar	25AUG16	1330

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Temperature Upon Receipt _____ °C

Received by | Date | Time

Custody Seals Intact? Yes No

9

ATTACHMENT B
Historical Groundwater Analytical Data

Table 2. Summary of Chemical Results from Ground-water Samples

WELL NUMBER	SAMPLING DATE	TPH (GASOLINE) mg/l	BENZENE ug/l	TOLUENE ug/l	ETHYL BENZENE ug/l	XYLENES, TOTAL ug/l	OTHER DETECTABLE VOLATILE COMPOUNDS 1,1-DCE ug/l	1,1-DCA ug/l	1,1,1-TCA ug/l	1,2-DCA ug/l
MW-1	18-Apr-87	NT	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	61	9.5	93.1	0.5
	03-Jun-88	NT	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	8	40	ND(5)
	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	47	9	21	ND(1)
MW-2	18-Apr-87	NT	76.9	121	93.4	477	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)
	03-Jun-88	NT	64	18	48	60	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	1.1	48	9	33	55	ND(1)	ND(1)	ND(1)	ND(1)
MW-4	18-Apr-87	NT	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)
	03-Jun-88	NT	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
MW-5	03-Jun-88	NT	93	ND(5)	100	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	ND(0.05)	49	8	15	63	ND(1)	ND(1)	ND(1)	ND(1)
MW-6	03-Jun-88	NT	110	140	35	210	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	1.0	45	8	15	74	ND(1)	ND(1)	ND(1)	ND(1)
MW-7	03-Jun-88	NT	ND(5)	ND(5)	ND(5)	ND(5)	25	5	18	ND(5)
	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	39	8	13	ND(1)
MW-8	03-Jun-88	NT	2300	2000	950	4100	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	77	1900	820	1000	3600	ND(1)	ND(1)	ND(1)	ND(1)
MW-9	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	3	ND(1)	ND(1)	ND(1)
MW-10	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Field Blank	03-Jun-88	NT	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
	08-Aug-89	ND(0.05)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)

NOTES:

mg/l: milligrams per liter (equivalent to parts per million)
ug/l: micrograms per liter (equivalent to parts per billion)
NT: Not Tested
ND: Not detected; Limit of detection indicated in parenthesis
1,1-DCE: 1,1-Dichloroethene
1,1-DCA: 1,1-Dichloroethane
1,1,1-TCA: 1,1,1-Trichloroethane
1,2-DCA: 1,2-Dichloroethane

Volatile Organics in Water by EPA Method 624
Total Petroleum Hydrocarbons (TPH) as Gasoline in Aqueous Solutions by EPA Method 8015 (Modified)
Extraction by EPA Method 5030, Purge and Trap

April 18, 1987 Results from Beta Associates (1987)
June 3, 1988 Results from Groundwater Technology (1988)
August 8, 1989 Results from Curtis & Tompkins, Ltd.

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Lead	MTBE
MW-1											
11/02/93	20.92	10.68	10.24	--	--	--	--	--	--	--	--
02/10/94	20.92	--	--	--	--	--	--	--	--	--	--
05/12/94	20.92	--	--	--	--	--	--	--	--	--	--
08/26/94	20.92	--	--		--	--	--	--	--	--	--
NO LONGER MONITORED OR SAMPLED											
MW-2											
11/02/93	21.31	10.83	10.48	--	--	--	--	--	--	--	--
02/10/94	21.31	--	--	--	--	--	--	--	--	--	--
05/12/94	21.31	11.94	9.37	--	390	6.8	2.0	6.3	14	--	--
08/26/94	21.31	--	--	Sampled biannually	--	--	--	--	--	--	--
02/01/95	21.31	13.76	7.55	--	78	10	1.2	<0.5	0.51	--	--
08/02/95	21.31	11.53	9.78	--	100	3.5	<0.5	2.6	4.1	--	--
01/31/96	21.31	14.38	6.93	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	21.31	11.49	9.82	--	73	<0.5	<0.5	<0.5	<0.5	--	610
12/17/96	21.31	12.75	8.56	--	--	--	--	--	--	--	--
02/20/97	21.31	12.30	9.01	--	280	6.7	0.56	1.5	2.9	--	11
05/02/97	21.31	11.78	9.53	--	--	--	--	--	--	--	--
07/23/97	21.31	11.23	10.08	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
02/04/98	21.31	16.06	5.25	--	<50	1.1	<0.5	<0.5	<0.5	--	5.6
07/17/98	21.31	11.71	9.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
MW-4											
11/02/93	--	--	10.23	--	--	--	--	--	--	--	--
02/10/94	--	--	--	--	--	--	--	--	--	--	--
05/12/94	--	--	--	--	--	--	--	--	--	--	--
08/26/94	--	--	--		--	--	--	--	--	--	--
NO LONGER MONITORED OR SAMPLED											

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Lead	MTBE
MW-5											
11/02/93	21.84	11.15	10.69	--	790	43	3.4	22	12	<400	--
02/10/94	21.84	13.10	8.74	--	1400	52	3.0	50	40	--	--
05/12/94	21.84	12.40	9.44	--	1800	87	6.2	77	66	--	--
08/26/94	21.84	--	--	--	--	--	--	--	--	--	--
11/11/94	21.84	13.50	8.34	--	380	18	<1.0	18	11	--	--
02/01/95	21.84	14.32	7.52	--	570	36	0.59	21	11	--	--
05/18/95	21.84	12.87	8.97	--	590	29	1.0	16	9.8	--	--
08/02/95	21.84	11.98	9.86	--	210	9.2	<0.5	4.0	1.2	--	--
11/01/95	21.84	11.58	10.26	--	210	5.6	<0.5	1.9	<0.5	--	<2.5
01/31/96	21.84	14.72	7.12	--	1200	50	<5.0	19	29	--	<25
05/16/96	21.84	14.22	7.62	--	440	14	<0.5	17	8.6	--	11
08/01/96	21.84	11.86	9.98	--	58	1.4	<0.5	<0.5	<0.5	--	2.5
12/17/96	21.84	13.13	8.71	--	300	9.7	<0.5	11	6.3	--	6.9
02/20/97	21.84	12.81	9.03	--	350	6.7	<0.5	4.3	1.9	--	5.0
05/02/97	21.84	12.50	9.34	--	270	4.8	<0.5	3.5	1.3	--	7.3
07/23/97	21.84	11.70	10.14	--	290	3.4	<0.5	<0.5	<0.5	--	3.1
11/04/97	21.84	11.69	10.15	--	180	3.8	<0.5	1.5	<0.5	--	8.6
02/04/98	21.84	16.54	5.30	--	140	4.3	<0.5	8.5	<0.5	--	<2.5
05/01/98	21.84	12.77	9.07	--	1200	19	<1.0	9.7	1.7	--	25
07/17/98	21.84	12.19	9.65	--	900	3.6	<2.0	12	2.6	--	11

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Lead	MTBE
MW-6											
11/02/93	21.71	10.93	10.78	--	300	19	1.8	2.5	5.0	<400	--
02/10/94	21.71	12.86	8.85	--	200	10	0.9	2.0	4.0	--	--
05/12/94	21.71	12.08	9.63	--	210	10	1.1	1.2	3.1	--	--
08/26/94	21.71	10.82	10.89	--	310	16	1.4	2.3	7.1	--	--
11/11/94	21.71	13.25	8.46	--	<50	1.3	<0.5	<0.5	1.0	--	--
02/01/95	21.71	14.02	7.69	--	<50	1.9	<0.5	<0.5	0.51	--	--
05/18/95	21.71	12.43	9.28	--	<50	8.2	<0.5	<0.5	<0.5	--	--
08/02/95	21.71	11.64	10.07	--	<50	2.3	<0.5	<0.5	<0.5	--	--
11/01/95	21.71	11.31	10.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
01/31/96	21.71	13.63	8.08	--	<50	0.98	<0.5	<0.5	<0.5	--	<2.5
05/16/96	21.71	13.91	7.80	--	<50	1.6	<0.5	<0.5	<0.5	--	<2.5
08/01/96	21.71	11.56	10.15	--	<50	0.82	<0.5	<0.5	<0.5	--	<2.5
12/17/96	21.71	13.26	8.45	--	63	2.6	<0.5	<0.5	<0.5	--	<2.5
02/20/97	21.71	--	--	Inaccessible	--	--	--	--	--	--	--
05/02/97	21.71	--	--	Inaccessible	--	--	--	--	--	--	--
05/29/97	21.71	11.72	9.99	--	120	1.8	<0.5	<0.5	<0.5	--	2.6
07/23/97	21.71	11.31	10.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
11/04/97	21.71	11.38	10.33	--	63	1.2	<0.5	<0.5	<0.5	--	<2.5
02/04/98	21.71	16.19	5.52	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/01/98	21.71	12.40	9.31	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
07/17/98	21.71	11.84	9.87	--	<50	1.0	<0.5	<0.5	<0.5	--	<2.5

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Lead	MTBE
MW-7											
11/02/93	20.95	10.88	10.07	--	--	--	--	--	--	--	--
02/10/94	20.95	--	--	--	--	--	--	--	--	--	--
05/12/94	20.95	--	--	--	--	--	--	--	--	--	--
08/26/94	20.95	--	--	--		--	--	--	--	--	--
NO LONGER MONITORED OR SAMPLED											
MW-8											
11/02/93	21.84	11.02	10.82	--	15,000	2000	440	420	1400	<400	--
02/10/94	21.84	12.97	8.87	--	6500	1200	380	250	7900	--	--
05/12/94	21.84	12.19	9.65	--	30,000	1400	2900	800	3800	--	--
08/26/94	21.84	10.90	10.94	--	17,000	720	200	330	930	--	--
11/11/94	21.84	13.38	8.46	--	6800	250	170	190	650	--	--
02/01/95	21.84	14.36	7.48	--	330	68	2.8	2.7	4.3	--	--
05/18/95	21.84	12.54	9.30	--	540	120	12	11	23	--	--
08/02/95	21.84	11.73	10.11	--	1100	150	9.7	20	40	--	--
11/01/95	21.84	11.36	10.48	--	1700	120	15	16	39	--	<5.0
01/31/96	21.84	14.64	7.20	--	57	5.3	<0.5	<0.5	<0.5	--	<2.5
05/16/96	21.84	13.99	7.85	--	2100	260	43	56	130	--	64
08/01/96	21.84	11.59	10.25	--	1100	45	0.92	8.9	25	--	7.4
12/17/96	21.84	12.95	8.89	--	2000	280	30	51	88	--	22
02/20/97	21.84	--	--	Inaccessible	--	--	--	--	--	--	--
05/02/97	21.84	--	--	Inaccessible	--	--	--	--	--	--	--
05/29/97	21.84	11.79	10.05	--	3400	280	31	53	120	--	<50
07/23/97	21.84	11.48	10.36	--	760	20	2.2	2.6	5.0	--	9.7
11/04/97	21.84	11.49	10.35	--	1100	150	13	22	39	--	49
02/04/98	21.84	16.29	5.55	--	270	6.8	<0.5	3.3	<0.5	--	<2.5
05/01/98	21.84	12.62	9.22	--	190	5.3	<0.5	<0.5	0.75	--	2.8
07/17/98	21.84	11.89	9.95	--	1400	210	20	24	54	--	<25

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Lead	MTBE
MW-9											
11/02/93	20.55	10.53	10.02	--	--	--	--	--	--	--	--
02/10/94	20.55	--	--	--	--	--	--	--	--	--	--
05/12/94	20.55	11.60	8.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	20.55	--	--	Sampled biannually	--	--	--	--	--	--	--
02/01/95	20.55	13.35	7.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/02/95	20.55	11.22	9.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/96	20.55	14.10	6.45	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	20.55	11.20	9.35	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
12/17/96	20.55	12.29	8.26	--	--	--	--	--	--	--	--
02/20/97	20.55	12.09	8.46	--	55*	1.1	<0.5	<0.5	<0.5	--	<2.5
05/02/97	20.55	11.45	9.10	--	--	--	--	--	--	--	--
07/23/97	20.55	10.95	9.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
02/04/98	20.55	15.51	5.04	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
07/17/98	20.55	11.37	9.18	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
MW-10											
11/02/93	21.25	10.93	10.32	--	--	--	--	--	--	--	--
02/10/94	21.25	--	--	--	--	--	--	--	--	--	--
05/12/94	21.25	--	--	--	--	--	--	--	--	--	--
08/26/94	21.25	--	--	--		--	--	--	--	--	--

NO LONGER MONITORED OR SAMPLED

* Chromatogram pattern indicates an unidentified hydrocarbon.

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	Lead	MTBE
TRIP BLANK											
02/10/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/11/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/18/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/02/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/16/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
12/17/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
02/20/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/02/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
07/23/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
02/04/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/01/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
07/17/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.
Earlier field data and analytical results are drawn from the September 14, 1994 Groundwater Technology, Inc. report.

ABBREVIATIONS:
TPH = Total Petroleum Hydrocarbons
MTBE = Methyl t-Butyl Ether

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

eurofins | Lancaster Laboratories Environmental

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

Analysis Report

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

Report Date: September 12, 2016

Project: 91723

Submittal Date: 08/26/2016
Group Number: 1700015
PO Number: 0015188594
Release Number: CMACLEOD
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
QA-T-160824 NA Water	8550018
MW-2-W-160824 Grab Groundwater	8550019
MW-5-W-160824 Grab Groundwater	8550020
MW-6-W-160824 Grab Groundwater	8550021
MW-8-W-160824 Grab Groundwater	8550022
MW-9-W-160824 Grab Groundwater	8550023

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: Marisa Kaffenberger
Electronic Copy To	Stantec	Attn: Erin O'Malley
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-160824 NA Water
Facility# 91723 Job# 386496 GRD
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8550018
LL Group # 1700015
Account # 10906

Project Name: 91723

Collected: 08/24/2016

Submitted: 08/26/2016 09:35
Reported: 09/12/2016 17:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOQA

CAT No.	Analysis Name	CAS Number	Result	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

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	Z162502AA	09/06/2016 17:26	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z162502AA	09/06/2016 17:26	Daniel H Heller	1

Sample Description: MW-2-W-160824 Grab Groundwater
Facility# 91723 Job# 386496 GRD
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8550019
LL Group # 1700015
Account # 10906

Project Name: 91723

Collected: 08/24/2016 14:30 by JH

Submitted: 08/26/2016 09:35
Reported: 09/12/2016 17:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOM2

CAT No.	Analysis Name	CAS Number	Result	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
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Wet Chemistry	**SM 2540 C-1997**		**ug/l**	**ug/l**	
00212	Total Dissolved Solids	n.a.	600,000	77,600	1

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	Z162502AA	09/06/2016 17:50	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z162502AA	09/06/2016 17:50	Daniel H Heller	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	162430018A	09/07/2016 12:21	Christine E Dolman	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	162430018A	08/31/2016 02:00	Denise L Trimby	1
00212	Total Dissolved Solids	SM 2540 C-1997	1	16243021202A	08/30/2016 08:30	Amy L Hankins	1

Sample Description: MW-5-W-160824 Grab Groundwater
Facility# 91723 Job# 386496 GRD
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8550020
LL Group # 1700015
Account # 10906

Project Name: 91723

Collected: 08/24/2016 12:15 by JH

Submitted: 08/26/2016 09:35
Reported: 09/12/2016 17:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOM5

CAT No.	Analysis Name	CAS Number	Result	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.	280	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
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Wet Chemistry	**SM 2540 C-1997**		**ug/l**	**ug/l**	
00212	Total Dissolved Solids	n.a.	491,000	19,400	1

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	Z162502AA	09/06/2016 18:15	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z162502AA	09/06/2016 18:15	Daniel H Heller	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	162430018A	09/07/2016 12:42	Christine E Dolman	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	162430018A	08/31/2016 02:00	Denise L Trimby	1
00212	Total Dissolved Solids	SM 2540 C-1997	1	16243021201A	08/30/2016 08:26	Nathan T Morgan	1

Sample Description: MW-6-W-160824 Grab Groundwater
Facility# 91723 Job# 386496 GRD
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8550021
LL Group # 1700015
Account # 10906

Project Name: 91723

Collected: 08/24/2016 13:20 by JH

Submitted: 08/26/2016 09:35
Reported: 09/12/2016 17:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOM6

CAT No.	Analysis Name	CAS Number	Result	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
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Wet Chemistry	**SM 2540 C-1997**		**ug/l**	**ug/l**	
00212	Total Dissolved Solids	n.a.	484,000	19,400	1

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	Z162502AA	09/06/2016 18:39	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z162502AA	09/06/2016 18:39	Daniel H Heller	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	162430018A	09/07/2016 13:04	Christine E Dolman	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	162430018A	08/31/2016 02:00	Denise L Trimby	1
00212	Total Dissolved Solids	SM 2540 C-1997	1	16243021201A	08/30/2016 08:26	Nathan T Morgan	1

Sample Description: MW-8-W-160824 Grab Groundwater
Facility# 91723 Job# 386496 GRD
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8550022
LL Group # 1700015
Account # 10906

Project Name: 91723

Collected: 08/24/2016 11:30 by JH

Submitted: 08/26/2016 09:35
Reported: 09/12/2016 17:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOM8

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	5	0.5	1
10945	C6-C12-TPH-GRO	n.a.	430	22	1
10945	Ethylbenzene	100-41-4	0.6	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	0.9	0.5	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Wet Chemistry	**SM 2540 C-1997**		**ug/l**	**ug/l**	
00212	Total Dissolved Solids	n.a.	441,000	19,400	1

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	Z162502AA	09/06/2016 19:03	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z162502AA	09/06/2016 19:03	Daniel H Heller	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	162430018A	09/07/2016 13:26	Christine E Dolman	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	162430018A	08/31/2016 02:00	Denise L Trimby	1
00212	Total Dissolved Solids	SM 2540 C-1997	1	16243021201A	08/30/2016 08:26	Nathan T Morgan	1

Sample Description: MW-9-W-160824 Grab Groundwater
Facility# 91723 Job# 386496 GRD
9757 San Leandro-Oakland T0600101789

LL Sample # WW 8550023
LL Group # 1700015
Account # 10906

Project Name: 91723

Collected: 08/24/2016 15:30 by JH

Submitted: 08/26/2016 09:35
Reported: 09/12/2016 17:53

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SLOM9

CAT No.	Analysis Name	CAS Number	Result	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
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
Wet Chemistry	**SM 2540 C-1997**		**ug/l**	**ug/l**	
00212	Total Dissolved Solids	n.a.	499,000	19,400	1

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	Z162502AA	09/06/2016 19:27	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z162502AA	09/06/2016 19:27	Daniel H Heller	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	162430018A	09/07/2016 13:48	Christine E Dolman	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	162430018A	08/31/2016 02:00	Denise L Trimby	1
00212	Total Dissolved Solids	SM 2540 C-1997	1	16243021202A	08/30/2016 08:30	Amy L Hankins	1

Quality Control Summary

Client Name: Chevron
Reported: 09/12/2016 17:53

Group Number: 1700015

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.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: Z162502AA	Sample number(s): 8550018-8550023	
Benzene	N.D.	0.5
C6-C12-TPH-GRO	N.D.	22
Ethylbenzene	N.D.	0.5
Toluene	N.D.	0.5
Xylene (Total)	N.D.	0.5
Batch number: 162430018A	Sample number(s): 8550019-8550023	
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32
Batch number: 16243021201A	Sample number(s): 8550020-8550022	
Total Dissolved Solids	N.D.	9,700
Batch number: 16243021202A	Sample number(s): 8550019,8550023	
Total Dissolved Solids	N.D.	9,700

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: Z162502AA	Sample number(s): 8550018-8550023								
Benzene	20	17.85	20	18.33	89	92	78-120	3	30
C6-C12-TPH-GRO	1000	1063.55	1000	1056.56	106	106	77-120	1	30
Ethylbenzene	20	18.42	20	18.83	92	94	78-120	2	30
Toluene	20	19.14	20	19.22	96	96	80-120	0	30
Xylene (Total)	60	56.89	60	58.52	95	98	80-120	3	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162430018A	Sample number(s): 8550019-8550023								
TPH-DRO CA C10-C28 w/ Si Gel	1600	961.62	1600	942	60	59	40-105	2	20
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16243021201A	Sample number(s): 8550020-8550022								
Total Dissolved Solids	200000	199000			100		70-124		
Batch number: 16243021202A	Sample number(s): 8550019,8550023								
Total Dissolved Solids	200000	225000			113		70-124		

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron
Reported: 09/12/2016 17:53

Group Number: 1700015

MS/MSD

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

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: Z162502AA	Sample number(s): 8550018-8550023 UNSPK: P563402									
Benzene	N.D.	20	21.11	20	21.76	106	109	78-120	3	30
Ethylbenzene	N.D.	20	20.98	20	21.65	105	108	78-120	3	30
Toluene	N.D.	20	21.63	20	22.27	108	111	80-120	3	30
Xylene (Total)	N.D.	60	63.7	60	65.49	106	109	80-120	3	30
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 16243021201A	Sample number(s): 8550020-8550022 UNSPK: P548046									
Total Dissolved Solids	2644000	1600000	4172000			96		70-124		
Batch number: 16243021202A	Sample number(s): 8550019,8550023 UNSPK: P549931									
Total Dissolved Solids	47100000	40000000	87300000	40000000	75400000	101	71	70-124	15	23

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc ug/l	DUP Conc ug/l	DUP RPD	DUP RPD Max
Batch number: 16243021201A	Sample number(s): 8550020-8550022 BKG: P548046			
Total Dissolved Solids	2644000	2620000	1	5
Batch number: 16243021202A	Sample number(s): 8550019,8550023 BKG: P549931			
Total Dissolved Solids	47100000	49200000	4	5

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: Z162502AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8550018	100	102	99	96
8550019	101	102	99	96
8550020	98	100	101	100
8550021	101	103	99	96
8550022	98	100	99	99
8550023	101	101	99	96
Blank	102	101	99	95
LCS	97	102	101	102
LCSD	97	101	101	102

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron
Reported: 09/12/2016 17:53

Group Number: 1700015

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.

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
MS	99	103	101	103
MSD	98	98	100	101
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 162430018A

	Orthoterphenyl
8550019	61
8550020	70
8550021	54
8550022	79
8550023	72
Blank	58
LCS	72
LCSD	75
Limits:	42-126

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Ø82516-Ø4
Ø824AS 25AUG16 500

Acct. # 10906 | For Eurofins Lancaster Laboratories use only: Group # 1700015 Sample # 855 0018-23
Instructions on reverse side correspond with circled numbers.

(1) Client Information

Facility # SS#9-1723-OML G-R#386496 Global ID#T0600101789 WBS #
Site Address 9757 SAN LEANDRO STREET, OAKLAND, CA
Chevron PM CM | Lead Consultant STANTECTF Flora
Consultant/Office Getter-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568
Consultant Project Mgr. Deanna L. Harding, deanna@grinc.com
Consultant Phone # (925) 551-7444 x180
Sampler Jim Herron

(4) Matrix

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

(3) Grab / Composite

(5) Analyses Requested

(2) Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX 8260 ☐ 8021 ☐	TPH-GRO 8260 ☐ 8015 ☐ /MS	TPH-DRO 8015 without Silica Gel Cleanup ☐	TPH-DRO 8015 with Silica Gel Cleanup ☒ Collard	8260 Full Scan	Oxygenates ____	Total Lead Method ____	Dissolved Lead Method ____	Total Dissolved Solids
QA	160824	~~160824~~	—	X		2	X	X							
MW-2		160824	1430			6				X					X
MW-5			1215												
MW-6			1320												
MW-8			1130												
MW-9			1530												

SCR #: _____

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

(6) Remarks

(7) Turnaround Time Requested (TAT) (please circle)

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

(8) Data Package (circle if required)

Type I - Full
Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default)
Other: _____

	Date	Time	Received by	Date	Time
Relinquished by	8/24/16	1800			
Relinquished by	8/25/16	1330	A. Salazar 25AUG16		1330
Relinquished by ~~Commercial Carrier~~: A. Salazar 25AUG16 ~~UPS~~ ___ ~~FedEx~~ ___ Other 1630			FX	82616	935

Temperature Upon Receipt 0.3-1.9 °C

Custody Seals Intact? Yes / No

(9)

Client: CA Office

9-1723

Delivery and Receipt Information

Delivery Method:	BASC	Arrival Timestamp:	08/26/2016 9:35
Number of Packages:	11	Number of Projects:	9
State/Province of Origin:	CA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Brandy Barclay (2299) at 11:58 on 08/26/2016

Samples Chilled Details: 9-1723

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.4	DT	Wet	Y	Bagged	N
2	DT121	0.7	DT	Wet	Y	Bagged	N
3	DT121	1.1	DT	Wet	Y	Bagged	N
4	DT121	1.9	DT	Wet	Y	Bagged	N
5	DT121	0.3	DT	Wet	Y	Bagged	N
6	DT121	1.5	DT	Wet	Y	Bagged	N
7	DT121	0.4	DT	Wet	Y	Bagged	N
8	DT121	0.4	DT	Wet	Y	Bagged	N
9	DT121	0.3	DT	Wet	Y	Bagged	N
10	DT121	1.2	DT	Wet	Y	Bagged	N
11	DT121	1.8	DT	Wet	Y	Bagged	N

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Lancaster, PA 17605-2425

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Explanation of Symbols and Abbreviations

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

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

<	less than
>	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.

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 ≥ 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, and ISO 17025) 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.

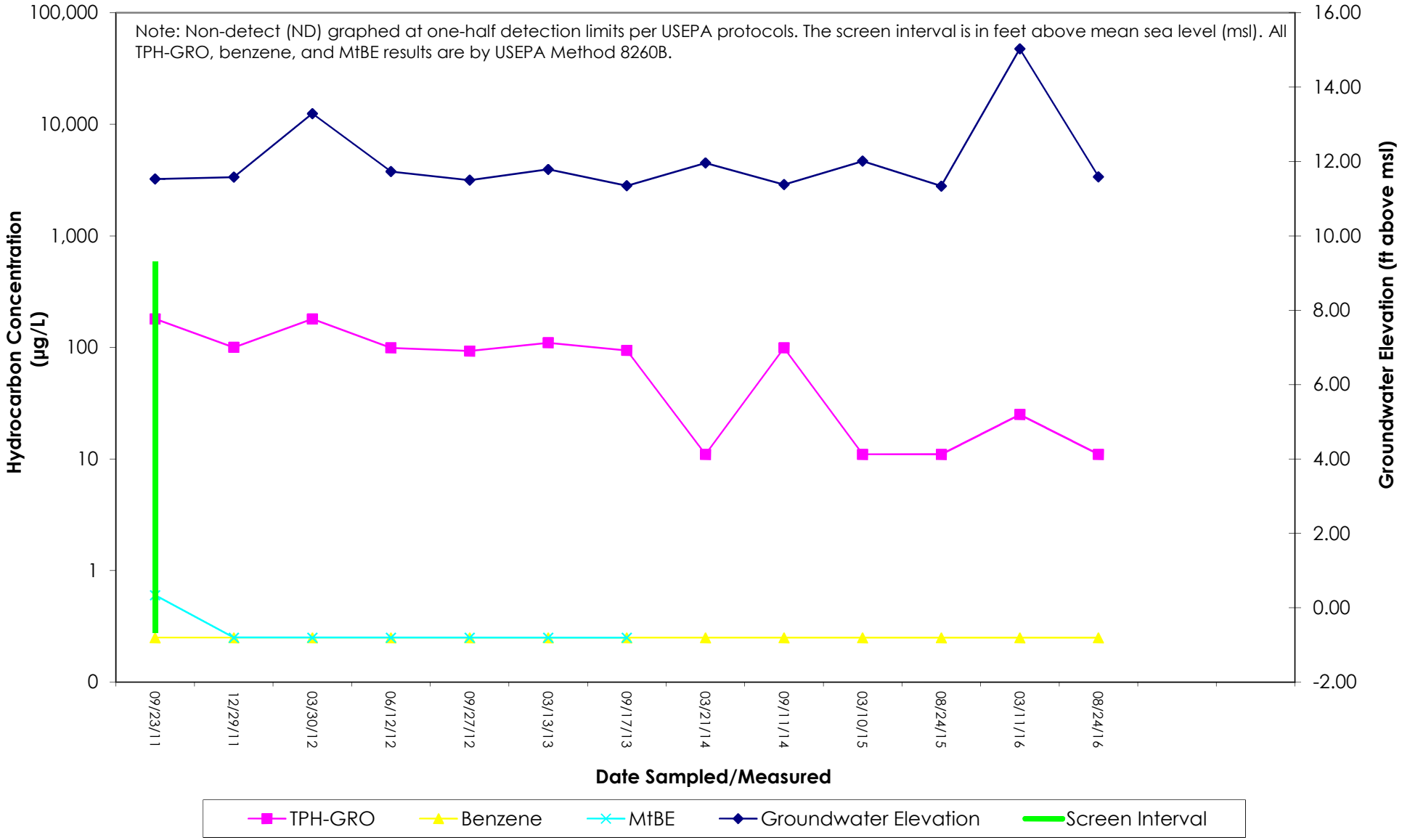
Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ATTACHMENT D
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



cht_91723_3q16_hydrographs.xlsx

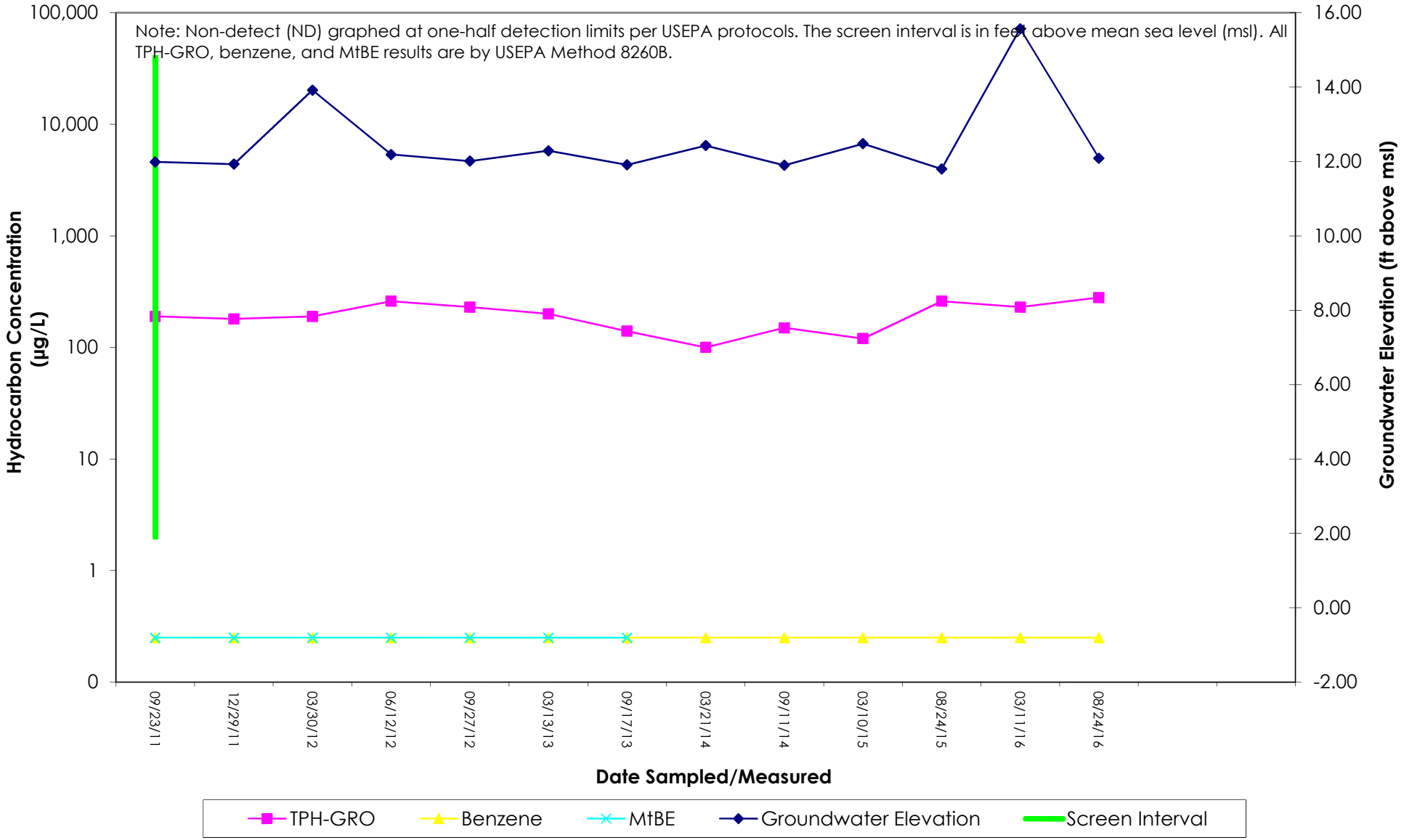
Stantec Consulting Services Inc.

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

Former Chevron-branded Service Station 91723

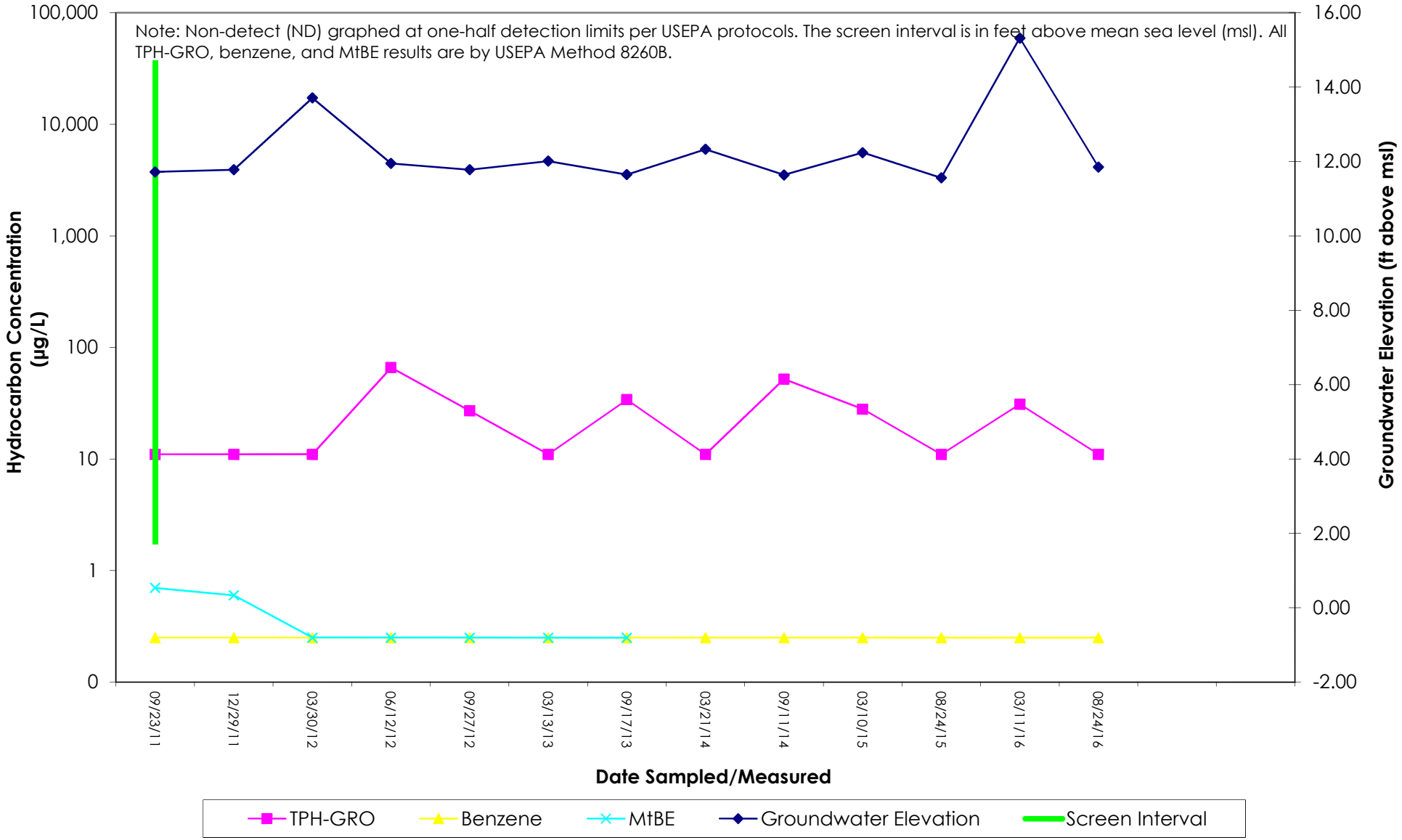
9757 San Leandro Street

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

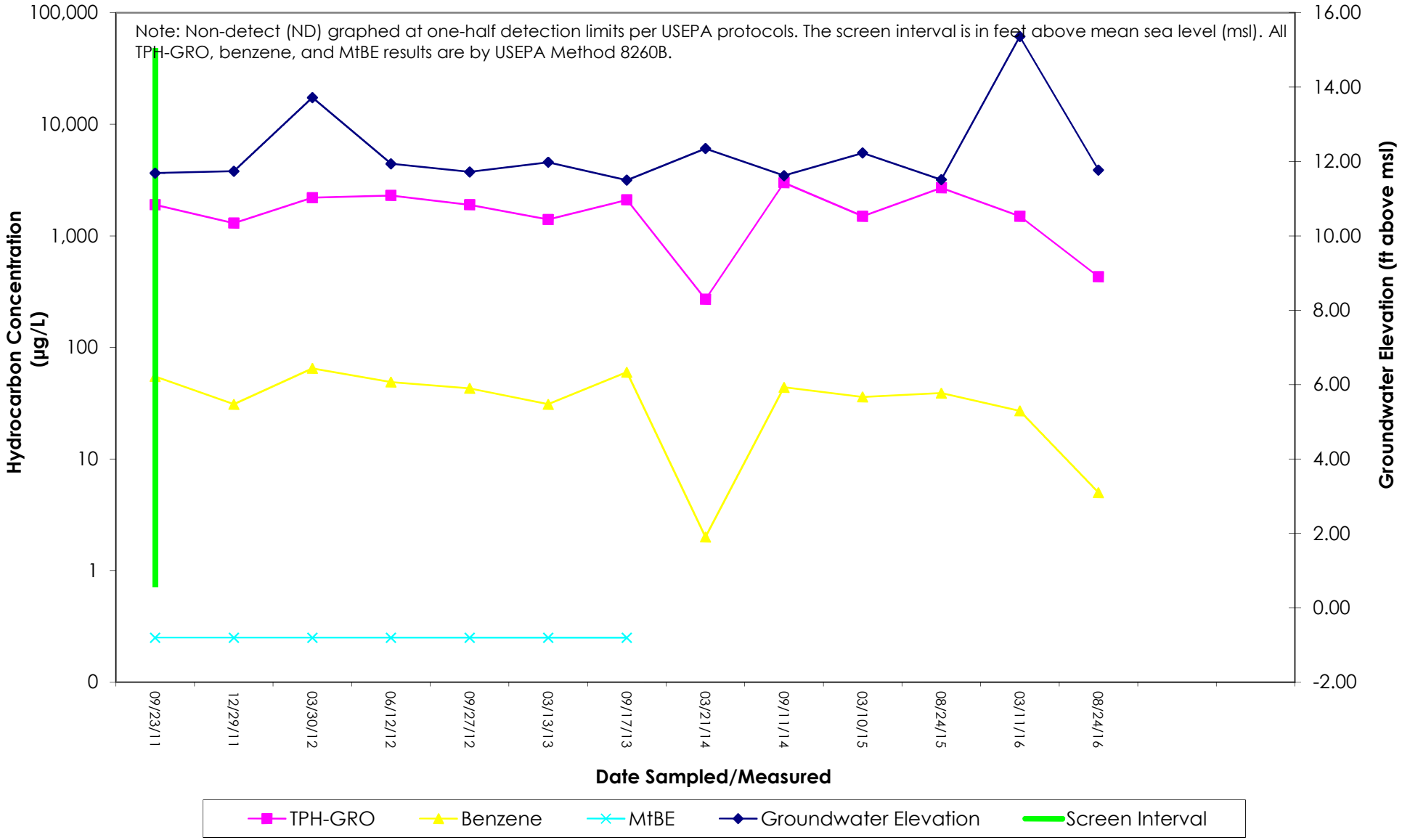


cht_91723_3q16_hydrographs.xlsx

Stantec Consulting Services Inc.

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

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

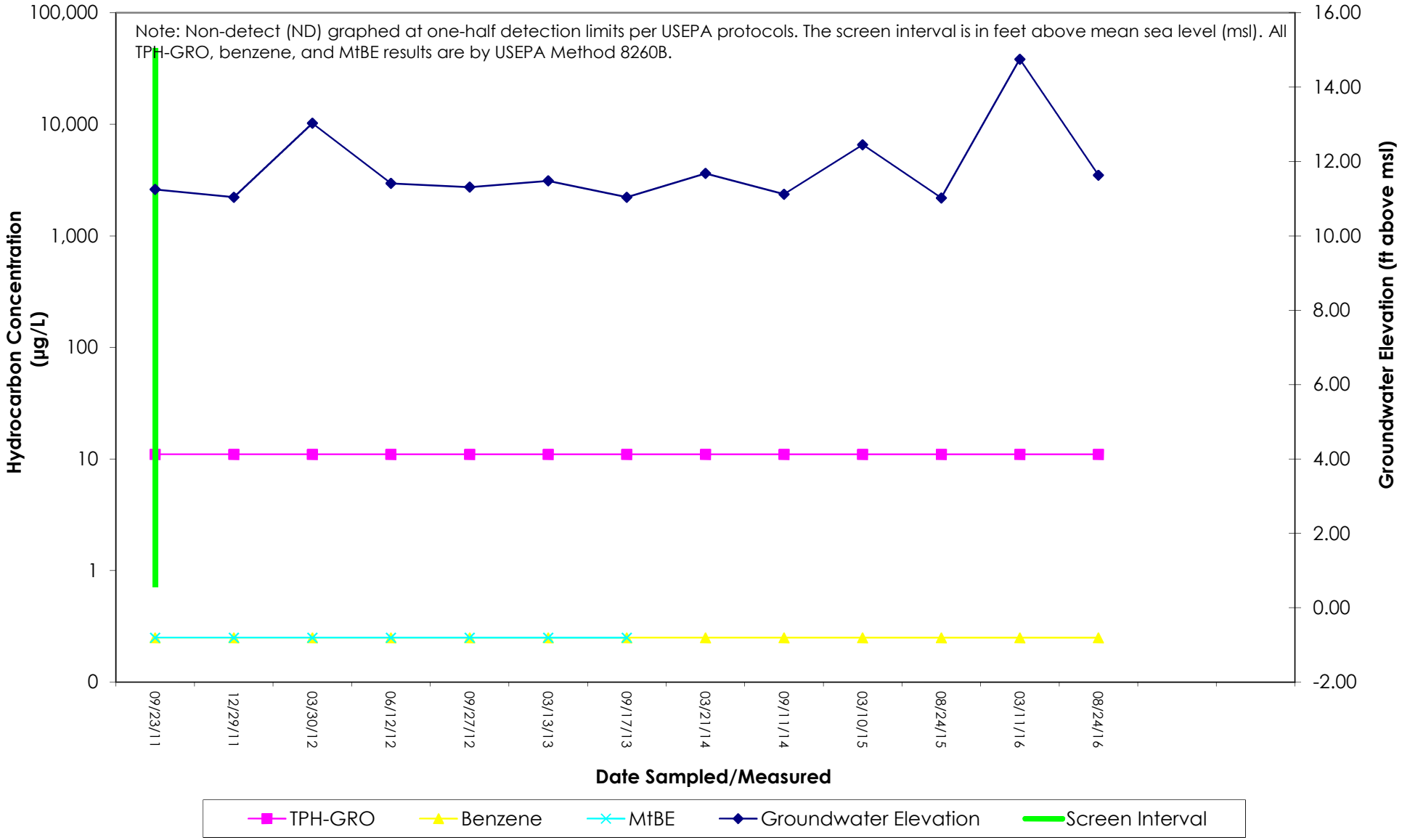


MW-9 TPH-GRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Former Chevron-branded Service Station 91723

9757 San Leandro Street

Oakland, California



cht_91723_3q16_hydrographs.xlsx

Stantec Consulting Services Inc.