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By Alameda County Environmental Health 11:47 am, Oct 06, 2015

**ARCADIS U.S., Inc.**

Mr. Mark Detterman  
Alameda County Health Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

100 Smith Ranch Road  
Suite 325  
San Rafael  
California 94903  
Tel 415.491.4530  
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ENVIRONMENT

Subject:  
Second Semiannual 2015 Groundwater Monitoring Report

Date:  
October 6, 2015

Dear Mr. Detterman:

Contact:  
Justin Sobieraj

On behalf of Chevron Environmental Management Company, ARCADIS U.S., Inc (ARCADIS) is pleased to submit the enclosed Second Semiannual 2015 Groundwater Monitoring Report for the following facility:

Phone:  
415.858.8310

<u>Facility No.</u>	<u>Case No.</u>	<u>Location</u>
20-6265	RO0002535	1520 Powell Street Emeryville, California

Email:  
[Justin.Sobieraj@arcadis-us.com](mailto:Justin.Sobieraj@arcadis-us.com)

If you have any questions, please contact Justin Sobieraj at 415.858.8310.

Our ref:  
B0047528.0011

Sincerely,

ARCADIS

Justin Sobieraj, P.G.  
Senior Geologist



Copies:

Mark Horne, Chevron Environmental Management Company  
Ms. Cherie McCaulou, San Francisco Regional Water Quality Control Board  
(Region 2)



September 29, 2015

**Mark Horne**  
Project Manager  
Marketing Business Unit

**Chevron Environmental Management Company**  
6101 Bollinger Canyon Road  
San Ramon, CA 94583  
Tel (925) 790-3964  
MarkHorne@chevron.com

Mr. Mark Detterman  
Alameda County Health Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

**RE: Second Semi-Annual 2015 Groundwater Monitoring Report**  
Former Chevron Asphalt Plant and Bulk Terminal #20-6265  
1520 Powell Street, Emeryville, California  
Case Number: *RO0002535*

Dear Mr. Detterman,

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me at (714) 671-3248.

Sincerely,

A handwritten signature in blue ink that reads "Mark E. Horne".

Mark Horne  
Chevron Environmental Management Company – Project Manager

Attachment  
Second Semi-Annual 2015 Groundwater Monitoring Report

**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**  
**SEMIANNUAL MONITORING REPORT**  
**SECOND SEMIANNUAL 2015**  
**October 6, 2015**

Facility No.: 206265 Address: 1520 Powell Street, Emeryville, California

Consulting Company/Contact Person/Phone No.: ARCADIS / Justin Sobieraj / 415.858.8310

Primary Agency/Contact Person/Regulatory ID No.: Alameda County Environmental Health Department (ACEHD) / Mr. Mark Detterman / Case No. RO0002535

**WORK PERFORMED DURING THIS REPORTING PERIOD (Second Semiannual – 2015) :**

1. ARCADIS conducted groundwater monitoring and sampling on July 20, 2015. Field data sheets are included as **Attachment 1**. Ten (10) groundwater monitoring wells associated with the site were gauged and nine (9) monitoring wells were purged, and sampled during this monitoring event. One monitoring well (MWX-2) was inaccessible for groundwater sampling due to property access issues.
2. Groundwater samples were analyzed for total petroleum hydrocarbons (TPH) quantified as diesel (TPH-D) and TPH quantified as gasoline range organics (TPH-GRO) by Environmental Protection Agency (EPA) Method 8015B Modified, benzene, toluene, ethylbenzene, and total xylenes (BTEX, collectively), and methyl tertiary butyl ether (MTBE) by EPA Method 8260B, and trichloroethene (TCE), tetrachloroethene (PCE), 1,1-Dichloroethene (1,2-DCE), trans-1,2-Dichloroethene (t-1,2-DCE), 1,1-Dichloroethane (1,1-DCA), 1,1,1-Trichloroethane (1,1,1-TCA), chloroform and vinyl chloride by EPA Method 8260B. The results for these analyses are summarized in **Table 1**.

In addition, as part of the settlement agreement between Chevron Environmental Management Company (CEMC) and City of Emeryville, CEMC agreed to analyze the groundwater samples for additional analyses to assist City of Emeryville's consultant Erler and Kalinowski, Inc. (EKI) in the bioremediation effort on the adjacent 1525 and 1535 Powell Street sites (collaboratively known as Site B; see **Figure 2**). Groundwater samples were also analyzed for methane, ethane, and ethene by EPA Method RSK-175, iron and manganese by EPA Method 200.7, sulfide by EPA Method SM4500S2-D, bicarbonate including alkalinity by Method SM2320B, total organic carbon (TOC) by EPA Method SM5310C, and sulfate and nitrate nitrogen by EPA Method 300.0. The results for these analyses are summarized in **Table 2**.

Site B was also sampled on July 20, 2015. Three monitoring wells, EPW01, EPW02, and EPW04, were analyzed for volatile organic compounds (VOCs) Full Scan by USEPA 8260B. Groundwater analytical results for monitoring wells EPW01, EPW02, and EPW04 are included in **Table 2**.

3. A copy of the laboratory analytical report and chain-of-custody documentation is included as **Attachment 2**. The site location map, the site vicinity map and the site map are presented as **Figures 1 through 3**. A groundwater elevation contour map for the site is presented as **Figure 4**. Detected fuel related hydrocarbon compounds in groundwater are presented as **Figure 5**, and detected chlorinated volatile organic compounds in groundwater are presented in **Figure 6**. Current Groundwater Monitoring Data and Analytical Results are summarized in **Table 1**. Current Additional Groundwater Analytical Results are summarized in **Table 2**. Current and Historical Groundwater Monitoring Data and Analytical Results are included as **Attachment 3**. Chlorinated Volatile Organic Compounds Concentration Trends are included as **Attachment 4**.

**WORK PROPOSED FOR THE NEXT REPORTING PERIOD (Fourth Quarter – 2015):**

1. Conduct air sampling within the onsite building garage area.

Current Phase of Project: Groundwater Monitoring

Site Use: Apartment Complex and City of Emeryville Parking Lot

Frequency of Sampling: TBD

**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**  
**SEMIANNUAL MONITORING REPORT**  
**SECOND SEMIANNUAL 2015**  
**October 6, 2015**

Facility No.: 206265 Address: 1520 Powell Street, Emeryville, California

Frequency of Monitoring: TBD

Are Separate-Phase Hydrocarbons (SPH) Present On-Site: Have not been historically detected

Cumulative SPH Recovered to Date: None

SPH Recovered This Quarter: None

Bulk Soil Removed to Date: 40,000 cubic yards

Bulk Soil Removed this Quarter: None

Water Wells or Surface Waters within a 500' Radius and Their Respective Directions:

Groundwater Use Designation: Shallow groundwater is not a drinking water resource

Current Remediation Techniques: Enhanced Bioremediation conducted by EKI in 2012

Permits for Discharge (No.): None

Approximate Depth to Groundwater: 4.26 (MW-19A) – 6.78 (MWX-11A) feet (ft) below top of casing (BTOC)

Measured  Estimated

Groundwater Gradient: (Magnitude) (Direction)  
0.01 foot West-southwest  
per foot  
(ft/ft)

**DISCUSSION:**

**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**  
**SEMIANNUAL MONITORING REPORT**  
**SECOND SEMIANNUAL 2015**  
**October 6, 2015**

Facility No.: 206265 Address: 1520 Powell Street, Emeryville, California

Concentrations of constituents of concern (COC) in groundwater were compared with San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESL) and the maximum contaminant levels (MCLs; California Department of Public Health 2012<sup>1</sup>) to evaluate the magnitude of site impacts. Preliminary screening levels are agency guidelines for initial evaluation of impacted sites.

San Francisco Bay RWQCB ESLs are presented in the RWQCB technical document titled, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, revised February 2013. Groundwater results were compared to *Table F-1a – Groundwater Screening Levels (groundwater is a current or potential drinking water resource)*. However, the groundwater beneath the site is not used as a potable water source.

Groundwater conditions during the second semiannual 2015 groundwater monitoring event remained generally consistent with previous quarters. The maximum dissolved concentrations of c-1,2-DCE (62 micrograms per liter [ $\mu\text{g/L}$ ]), and VC (19  $\mu\text{g/L}$ ) were detected in samples collected from MWX-3. The maximum dissolved concentration of TPH-DRO (680  $\mu\text{g/L}$ ) was detected in the sample collected from MWX-10A. The maximum dissolved concentrations of PCE (8  $\mu\text{g/L}$ ) and TCE (24  $\mu\text{g/L}$ ) were detected in samples collected from MWX-18. The maximum dissolved concentrations of t-1,2-DCE (2  $\mu\text{g/L}$ ) and 1,1-DCA (1  $\mu\text{g/L}$ ) were detected in samples collected from MWX-11A. TPH-GRO, benzene, toluene, ethylbenzene, total xylenes, MTBE, 1,1-DCE, t-1,2-DCE, 1,1,1-TCA, 1,1-DCA, and chloroform were not detected above the laboratory reporting limits in any wells during the second semiannual 2015 monitoring and sampling event.

Groundwater elevations across the site vary by approximately 2.57 feet, creating a hydraulic gradient of 0.01 ft/ft toward the west-southwest.

#### **CONCLUSIONS AND RECOMMENDATIONS:**

- Groundwater flow direction was toward the west-southwest across the site at an approximate horizontal hydraulic gradient of 0.01 ft/ft
- Groundwater elevations were measured between 5.46 feet above mean sea level (AMSL) in monitoring well MWX-9 and 8.03 feet AMSL in monitoring well MW-17
- Concentrations of petroleum hydrocarbon constituents and chlorinated volatile organic compounds detected in groundwater samples were generally consistent with the results of the previous 2012 sampling events. It should be noted that VOC concentrations have decreased significantly since the implementation of the enhanced bioremediation activity conducted by EKI in 2012.
- Concentrations of TPH-D, PCE, TCE, t-1,2-DCE, c-1,2-DCE, 1,1-DCA, and vinyl chloride were detected above their respective laboratory reporting limits in groundwater samples collected from the site
- Concentrations of TPH-D, PCE, TCE, c-1,2-DCE, and vinyl chloride were above their respective ESLs and/or MCLs in one or more groundwater samples collected this event.
- t-1,2-DCE and 1,1-DCA were detected above the respective laboratory reporting limits; however, the detected concentrations were not above the respective ESLs and/or MCLs
- No concentrations of TPH-GRO, benzene, toluene, ethylbenzene, total xylenes, MTBE, 1,1-DCE, 1,1,1-TCA, and chloroform were detected above their respective laboratory reporting limits in groundwater samples collected from the site
- SPH were not observed during the second semiannual 2015 monitoring and sampling event, nor have they historically been observed at the site
- ARCADIS submitted a Conceptual Site Model and Closure Request on December 14, 2012. ARCADIS recommends the site be considered for low-risk closure.

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<sup>1</sup> California Department of Public Health. 2012. *Chemicals and Contaminants in Drinking Water*. Title 22 of the California Code of Regulations.

**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**  
**SEMIANNUAL MONITORING REPORT**  
**SECOND SEMIANNUAL 2015**  
**October 6, 2015**

Facility No.: 206265 Address: 1520 Powell Street, Emeryville, California

**ATTACHMENTS:**

- Table 1: Current Groundwater Monitoring Data and Analytical Results
- Table 2: Current Additional Groundwater Analytical Results

- Figure 1: Site Location Map
- Figure 2: Site Vicinity Map
- Figure 3: Site Plan
- Figure 4: Groundwater Elevation Contour Map, July 20, 2015
- Figure 5: Detected Fuel Related Hydrocarbon Compounds in Groundwater
- Figure 6: Detected Chlorinated Volatile Organic Compounds in Groundwater

- Attachment 1: Groundwater Sampling Sheets
- Attachment 2: Laboratory Analytical Report and Chain-of-Custody Documentation
- Attachment 3: Current and Historical Groundwater Monitoring Data and Analytical Results
- Attachment 4: Chlorinated Volatile Organic Compounds Concentration Trends

**ARCADIS**

**Tables**

**TABLE 1**  
**CURRENT GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

Well Identification	Date	TOC Elevation (feet amsl)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet amsl)	TPH-GRO (µg/L)	TPH-D (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	t-1,2-DCE (µg/L)	c-1,2-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	VC (µg/L)	CF (µg/L)	
		ESL (Table F-1a)				100	100	1	40	30	20	5	5	5	6	10	6	62	5	0.5	70
		MCL				NA	NA	1	150	300	1,800	13	5	5	6	10	6	200	5	0.5	70
MW-17	7/20/2015	13.52	5.49	8.03	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	4	6	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	
MW-18	7/20/2015	12.95	4.98	7.97	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	8	24	<0.5	<0.5	3	<0.5	<0.5	<0.5	<0.5	
MW-19A	7/20/2015	11.79	4.26	7.53	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1	0.7	<0.5	<0.5	6	<0.5	0.7	15	<0.5	
MWX-10A	7/20/2015	12.78	5.11	7.67	<50	680	<0.5	<0.5	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	
MWX-11A	7/20/2015	14.18	6.78	7.40	<50	290	<0.5	<0.5	<0.5	<0.5	<0.5	14	<0.5	<0.5	2	7	<0.5	1	<0.5	<0.5	
MWX-2	7/20/2015	12.10	5.10	7.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MWX-3	7/20/2015	13.45	5.86	7.59	<50	390	<0.5	<0.5	<0.5	<0.5	<0.5	2	<0.5	1	62	<0.5	<0.5	19	<0.5		
MWX-6	7/20/2015	11.41	5.91	5.50	<50	65	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	
MWX-8	7/20/2015	13.12	5.42	7.70	<50	65	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	0.5	<0.5	<0.5	0.8	1	<0.5	
MWX-9	7/20/2015	11.46	6.00	5.46	<50	52	<0.5	<0.5	<0.5	<0.5	<0.5	5	14	<0.5	0.8	22	<0.5	<0.5	<0.5	<0.5	
EPW01	7/20/2015	10.14	5.21	4.93	n.a.	n.a.	<0.500	<0.500	<0.500	<0.500	<0.500	n.a.	<0.500	<0.500	<0.500	1.40	<0.500	<0.500	0.520	<0.500	
EPW02	7/20/2015	9.97	5.03	4.94	n.a.	n.a.	<0.500	<0.500	<0.500	<0.500	<0.500	n.a.	<0.500	<0.500	1.79	<0.500	<0.500	1.37	<0.500		
EPW04	7/20/2015	11.01	5.89	5.12	n.a.	n.a.	<0.500	<0.500	<0.500	<0.500	<0.500	n.a.	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500		
QA-T	7/20/2015	--	--	--	<50	n.a.	<0.5	<0.5	<0.5	<0.5	<0.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		

**Notes:**

1. Detected concentrations are in **Bold**.

2. Detected concentrations at or above the MCL or ESL are highlighted in yellow.

3. Wells EPW01, EPW02, and EPW04 were installed by Erler & Kalinowski in 2010 as part of the Site B project area.

-- = not available

[] = duplicate sample results

< = not detected at or above the indicated reporting limit

µg/L = micrograms per liter

btoc = below top of casing

ESL = environmental screening level (Table F-1a – Groundwater Screening Levels [groundwater is a current or potential drinking water resource]) (SFRWQCB 2013)

MCL = maximum contaminant level (California Department of Public Health 2012)

TPH-GRO = Total Petroleum Hydrocarbons quantified as Gasoline Range Organics

TPH-D = Total Petroleum Hydrocarbons quantified as Diesel

MTBE = Methyl Tertiary Butyl Ether

TOC = top of casing

1,1-DCE = 1,1-Dichloroethene

t-1,2-DCE = trans-1,2-Dichloroethene

c-1,2-DCE = cis-1,2-Dichloroethene

1,1-DCA = 1,1-Dichloroethane

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

PCE = Tetrachloroethene

CF = Chloroform

VC = Vinyl Chloride

n.a. = not analyzed

NS = not sampled due to access issues

**TABLE 2**  
**CURRENT ADDITIONAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

Well Identification	Date	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Nitrate (µg/L)	Sulfate (µg/L)	TOC (µg/L)	Total Alkalinity (µg/L)	Bicarbonate Alkalinity (µg/L)	Sulfide (µg/L)	Iron (µg/L)	Manganese (µg/L)
MW-17	7/20/2015	<1.0	<1.0	3.6	2,000	57,000	2,400	129,000	129,000	<54	<33.3	151
MW-18	7/20/2015	<1.0	<1.0	81	1,700	42,000	960	171,000	171,000	<54	<33.3	295
MW-19A	7/20/2015	3.0	2.0	1,500	<250	21,400	4,500	296,000	296,000	<54	2,550	2,640
MW-10A	7/20/2015	<1.0	<1.0	<3.0	6,800	89,800	7,100	147,000	147,000	<54	47.2	48.4
MW-11A	7/20/2015	<1.0	<1.0	4.1	<250	151,000	9,600	419,000	419,000	<54	863	2,470
MWX-2	7/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MWX-3	7/20/2015	7.1	2.2	15,000	<250	87,500	5,200	739,000	739,000	<54	2,790	6,560
MWX-6	7/20/2015	<1.0	<1.0	240	<250	19,400	3,400	238,000	238,000	<54	336	1,800
MWX-8	7/20/2015	7.6	<1.0	2,600	<250	15,900	3,000	277,000	277,000	<54	4,590	4,780
MWX-9	7/20/2015	<1.0	<1.0	17	<250	19,500	2,600	211,000	211,000	<54	<33.3	216
EPW01	7/20/2015	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EPW02	7/20/2015	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EPW04	7/20/2015	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Notes:**

[ ] = duplicate sample results

< = not detected at or above the indicated reporting limit

µg/L = micrograms per liter

TOC = total organic carbon

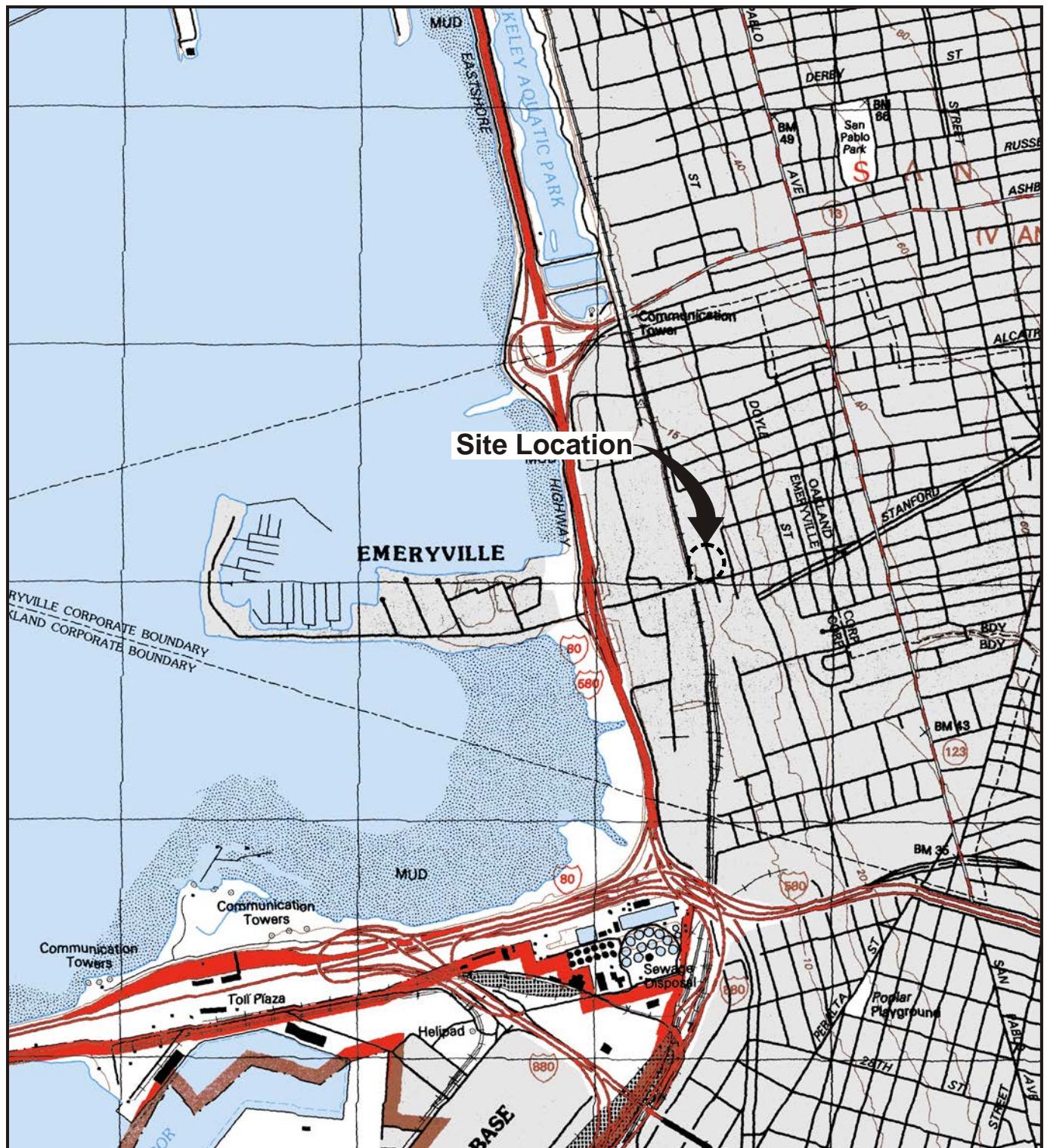
n.a. = not analyzed

NS = not sampled

1. Wells EPW01, EPW02, and EPW04 were installed by Erler & Kalinowski in 2010 as part of the Site B project area.

**ARCADIS**

**Figures**



2000' 0 2000'  
Approximate Scale: 1" = 2000'



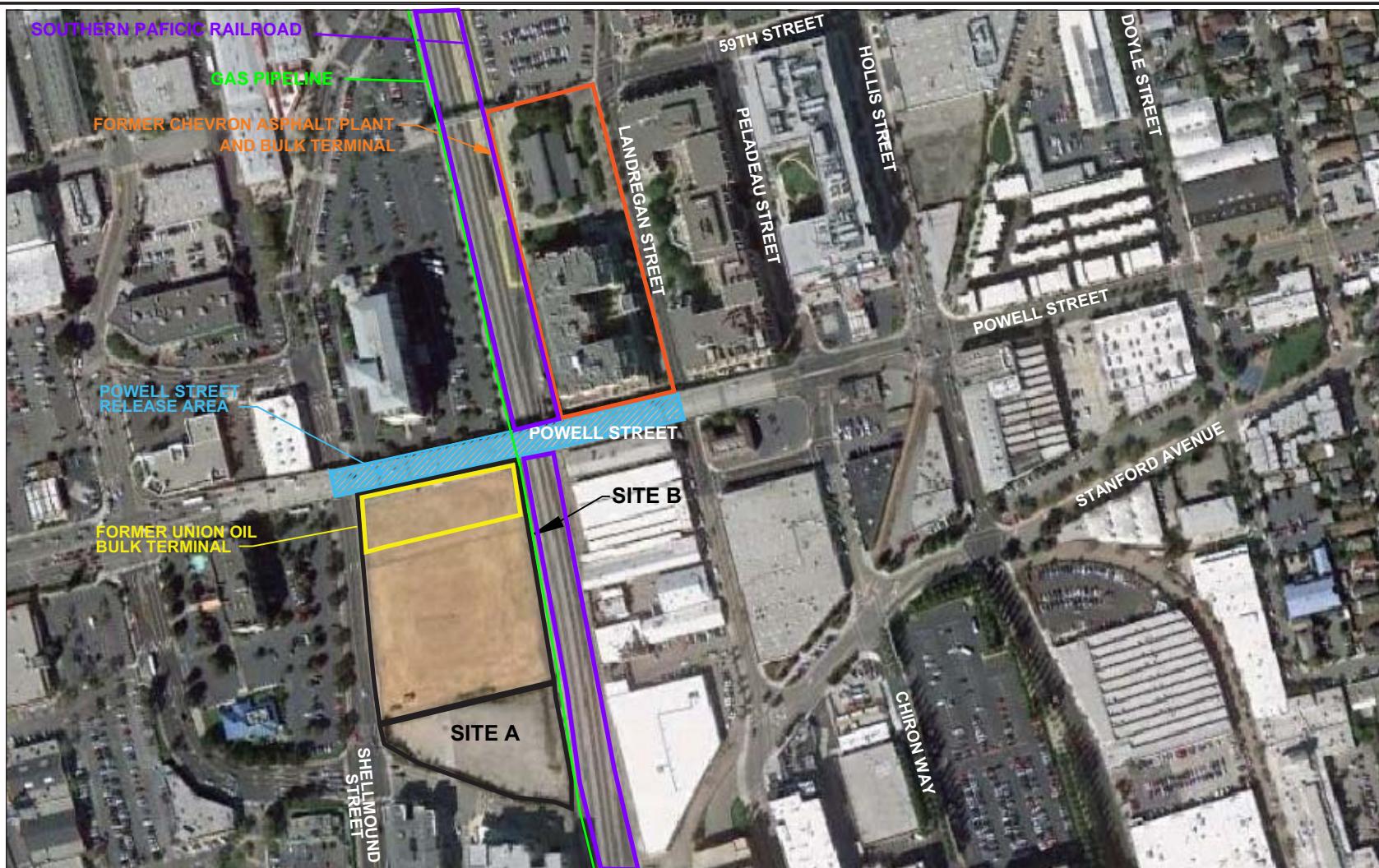
FORMER CHEVRON ASPHALT TERMINAL 206265  
1520 POWELL STREET  
EMERYVILLE, CA

## SITE LOCATION MAP

 **ARCADIS**

FIGURE  
**1**

XREFS: IMAGES:  
46257X01.jpg

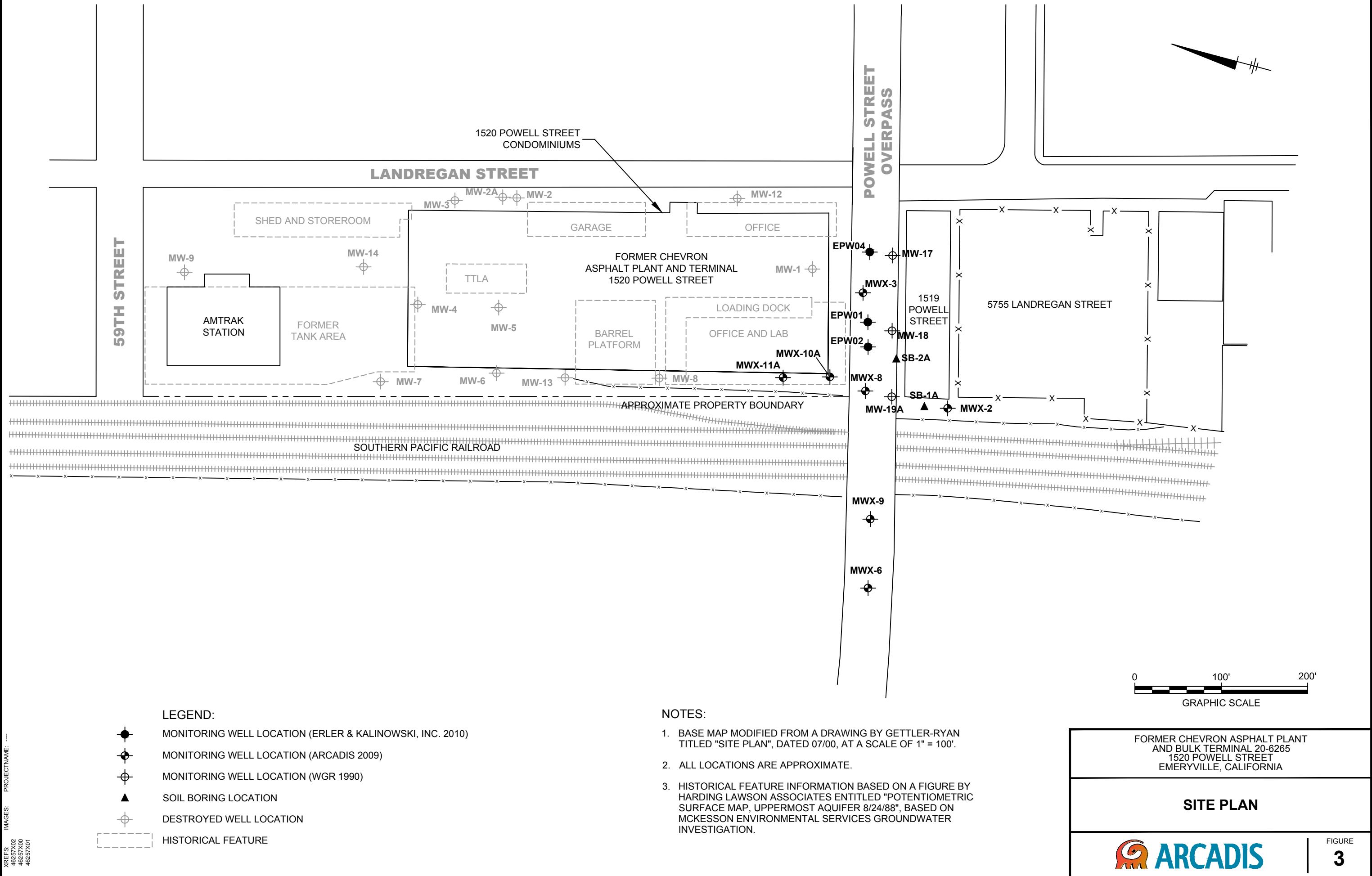


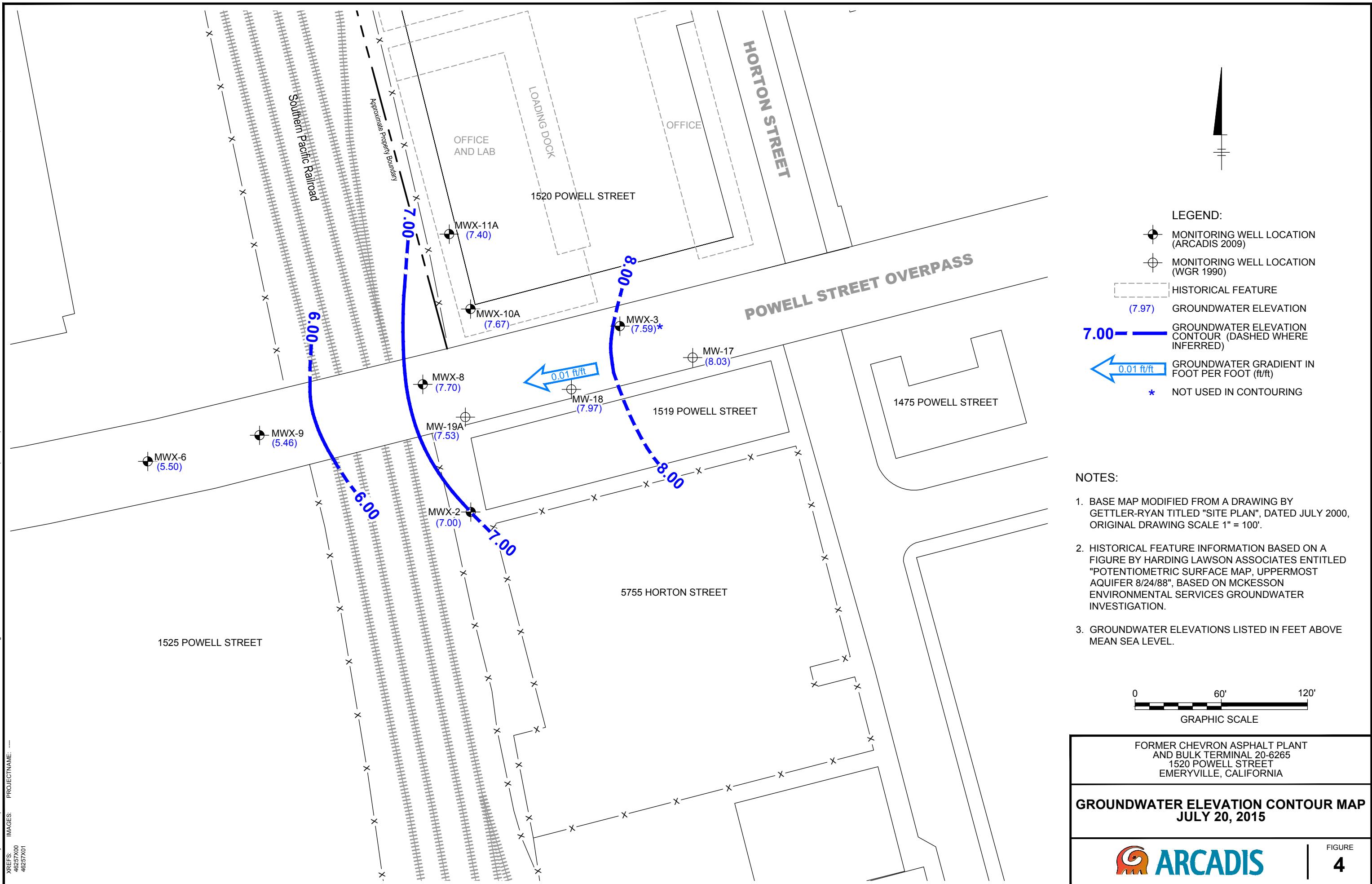
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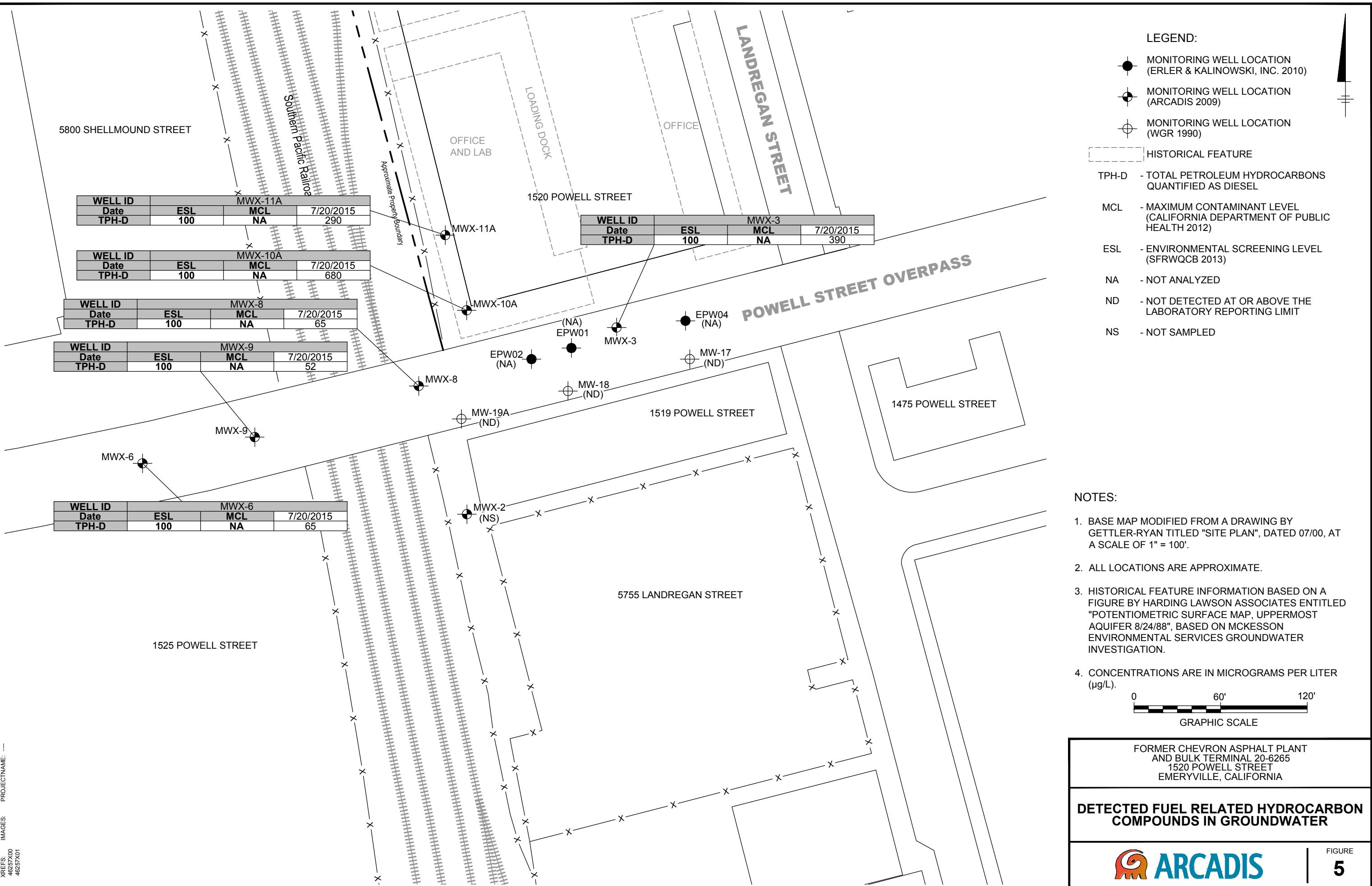
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GOOGLE EARTH ON AUGUST 4, 2010.

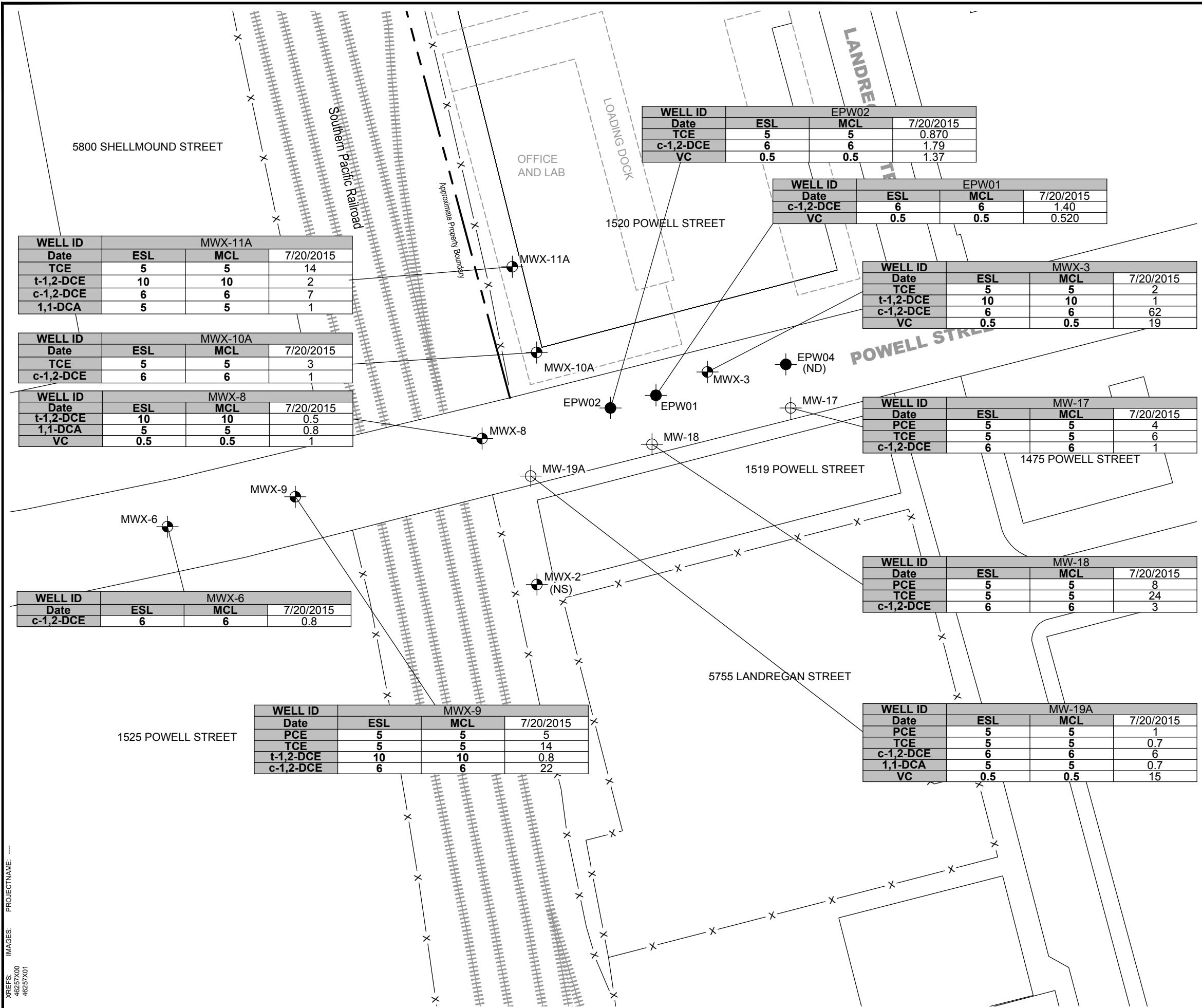
FORMER CHEVRON ASPHALT TERMINAL 206265  
1520 POWELL STREET  
EMERYVILLE, CA

### SITE VICINITY MAP







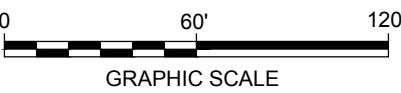


#### LEGEND:

- MONITORING WELL LOCATION (ERLER & KALINOWSKI, INC. 2010)
- MONITORING WELL LOCATION (ARCADIS 2009)
- MONITORING WELL LOCATION (WGR 1990)
- HISTORICAL FEATURE
- 1,1-DCA - 1,1-DICHLOROETHANE
- c-1,2-DCE - cis-1,2-DICHLOROETHENE
- t-1,2-DCE - TRANS-1,2-DICHLOROETHENE
- PCE - TETRACHLOROETHENE
- TCE - TRICHLOROETHENE
- VC - VINYL CHLORIDE
- MCL - MAXIMUM CONTAMINANT LEVEL (CALIFORNIA DEPARTMENT OF PUBLIC HEALTH 2012)
- ESL - ENVIRONMENTAL SCREENING LEVEL (SFRWQCB 2013)
- ND - NOT DETECTED AT OR ABOVE THE LABORATORY REPORTING LIMIT
- NS - NOT SAMPLED

#### NOTES:

- BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00, AT A SCALE OF 1" = 100'.
- ALL LOCATIONS ARE APPROXIMATE.
- HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPER MOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
- CONCENTRATIONS ARE IN MICROGRAMS PER LITER ( $\mu\text{g/L}$ ).



FORMER CHEVRON ASPHALT PLANT  
AND BULK TERMINAL 20-6265  
1520 POWELL STREET  
EMERYVILLE, CALIFORNIA

DETECTED CHLORINATED VOLATILE  
ORGANIC COMPOUNDS IN GROUNDWATER

**ARCADIS**

**Attachment 1**

Groundwater Sampling Sheets



# ***GETTLER-RYAN INC.***



## ***TRANSMITTAL***

Revised August 3, 2015

July 30, 2015

G-R #385161

**TO:** Mr. Justin Sobieraj  
Arcadis  
100 Smith Ranch Road, Suite 329  
San Rafael, CA 94903

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

**RE:** **Former Chevron Asphalt Plant**  
**Terminal #206265 (100-1067)**  
**Powell @ Landregan**  
**Emeryville, California**  
**MTI: 61H-1953**

WE HAVE ENCLOSED THE FOLLOWING:

<b>COPIES</b>	<b>DESCRIPTION</b>
<b>VIA PDF</b>	Groundwater Monitoring and Sampling Report <b>Third Quarter Event of July 20, 2015</b>

### **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 #206265**  
**Site Address:** **Powell @ Landregan**  
**City:** **Emeryville, CA**

Job #: 385161  
Event Date: 7/20/16  
Sampler: 3K

**Comments** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **WELL CONDITION STATUS SHEET**

**Client/  
Facility #:**

Chevron #206265

**Site Address:** Powell @ Landregan

**City:** Emeryville, CA

Job #: 385161

**Event Date:** 7.20.15

Sampler: FT

Comments M4-18 DAMAGED END (SEE PHOTO)

MW#-6 & MW#-9 BOTH HAVE NO LIDS (SEE PHOTO)

## **Standard Operating Procedure, Low-Flow Purging and Sampling**

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - "*Low-Flow (Minimal-Drawdown) Ground-Water Sampling Procedures.*"

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

### ***Initial Pump Discharge Test Procedures***

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. The in-line flow cell is then connected to the discharge tubing. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute with the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter as allowed by site conditions; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. Once achieved, the ODR will be confirmed by volumetric discharge measurement and recorded on the field data sheet.

### ***Purging and Water Quality Parameter Measurement***

When the ODR has been determined and the SWL drawdown has been established within the acceptable range, and a minimum of one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T ( $\pm 10\%$ ), pH ( $\pm 0.1$  unit), and Ec ( $\pm 10$  uS) are required to stabilize. Additional parameters that may be required are DO ( $\pm 0.2$  mg/l) and ORP ( $\pm 20$  mV).

### ***Sample Collection***

When water quality parameters have stabilized, and the SWL drawdown remains established within the acceptable range, groundwater sample collection may begin. If used, the in-line flow cell and its tubing are disconnected from the discharge tubing prior to sample collection. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. 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. 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. 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.

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 LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265  
 Site Address: Powell @ Landregan  
 City: Emeryville, CA

Job Number: 385161  
 Event Date: 7.20.15 (inclusive)  
 Sampler: FT

Well ID MW-17  
 Well Diameter 2 in.  
 Total Depth 11.88 ft.  
 Depth to Water 5.49 ft.  
6.39 xVF — = —

Date Monitored: 7.20.15

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
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Check if water column is less than 0.50 ft.

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

Purge Equipment:  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump ✓  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_

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:	litr
Amt Removed from Well:	litr
Water Removed:	litr

Start Time (purge): 1105  
 Sample Time/Date: 1150 / 7.20.15  
 Approx. Flow Rate: 200 ml lpm.  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 5.52

Time (2400 hr.)	Volume (Liters)	pH	Conductivity ( $\mu\text{s}$ mS $\mu\text{mhos/cm}$ )	Temperature ( $^{\circ}\text{C}$ / $^{\circ}\text{F}$ )	D.O. (mg/L)	ORP (mV)	TURBIDITY	Gauge DTW as parameters are recorded
<u>1123</u>	<u>3.6</u>	<u>6.42</u>	<u>527</u>	<u>19.7</u>	<u>RE: 1.8</u>	<u>155</u>	<u>36.59</u>	<u>5.51</u>
<u>1124</u>	<u>4.2</u>	<u>6.40</u>	<u>525</u>	<u>19.7</u>				<u>5.51</u>
<u>1129</u>	<u>4.8</u>	<u>6.39</u>	<u>522</u>	<u>19.8</u>				<u>5.52</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-17</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
<u>2</u>	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
<u>2</u>	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
<u>1</u>	x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
<u>2</u>	x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
<u>3</u>	x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
<u>1</u>	x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 8'

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Mounson 8" (2SE)

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: 2"



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265  
 Site Address: Powell @ Landregan  
 City: Emeryville, CA

Job Number: 385161  
 Event Date: 7.20.15 (inclusive)  
 Sampler: FT

Well ID: MW-18

Well Diameter: 2 in.

Total Depth: 10.72 ft.

Depth to Water: 4.98 ft.

5.74 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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

**Purge Equipment:**

Disposable Bailer

Stainless Steel Bailer

Stack Pump

Peristaltic Pump

QED Bladder Pump

**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): 12:10

Sample Time/Date: 12:55 7.20.15

Approx. Flow Rate: 200 m lpm.

Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 5.01

Weather Conditions: SUNNY

Water Color: CLEAR Odor: Y / N \_\_\_\_\_

Sediment Description: None

Time (2400 hr.)	Volume (Liters)	pH	Conductivity <u>µS / mS</u> <u>µmhos/cm</u>	Temperature <u>°C / °F</u>	D.O. (mg/L)	ORP (mV)	TURBIDITY	Gauge DTW as parameters are recorded
<u>12.28</u>	<u>3.6</u>	<u>6.35</u>	<u>502</u>	<u>19.6</u>	<u>1.4</u>	<u>184</u>	<u>0.00</u>	<u>4.99</u>
<u>12.31</u>	<u>4.2</u>	<u>6.34</u>	<u>505</u>	<u>19.6</u>				<u>4.99</u>
<u>12.34</u>	<u>4.8</u>	<u>6.33</u>	<u>507</u>	<u>19.5</u>				<u>5.01</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-18</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	<u>1</u> x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	<u>2</u> x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	<u>3</u> x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	<u>1</u> x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>1</u> x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 7'

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Enclosed 12" (1BF) Damaged Lid (SEE PHOTO)

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: 2"



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265 Job Number: 385161  
 Site Address: Powell @ Landregan Event Date: 7/20/15 (inclusive)  
 City: Emeryville, CA Sampler: JH

Well ID	<u>MW-19A</u>	Date Monitored:	<u>7/20/15</u>	
Well Diameter	<u>2</u> in.	Volume Factor (VF)	3/4"= 0.02 4"= 0.66	
Total Depth	<u>14.78</u> ft.	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	
Depth to Water	<u>4.26</u> ft.	3"= 0.38 12"= 5.80		
	<u>10.52</u> xVF <u>—</u> = <u>—</u>	x3 case volume = Estimated Purge Volume: <u>—</u> gal.		
Check if water column is less than 0.50 ft.				
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>6.36</u>				
Purge Equipment:		Sampling Equipment:		
Disposable Bailer	_____	Disposable Bailer	_____	Time Started: _____ (2400 hrs)
Stainless Steel Bailer	_____	Pressure Bailer	_____	Time Completed: _____ (2400 hrs)
Stack Pump	_____	Metal Filters	<u>X</u>	Depth to Product: _____ ft
Peristaltic Pump	<u>X</u>	Peristaltic Pump	<u>X</u>	Depth to Water: _____ ft
QED Bladder Pump	_____	QED Bladder Pump	_____	Hydrocarbon Thickness: _____ ft
	Other: _____	Visual Confirmation/Description:		
Skimmer / Absorbant Sock (circle one) Amt Removed from Skimmer: _____ ltr Amt Removed from Well: _____ ltr Water Removed: _____ ltr				

Start Time (purge): 1040 Weather Conditions: Cloudy  
 Sample Time/Date: 1130 7/20/15 Water Color: Cloudy Odor: Y/N  
 Approx. Flow Rate: 200 ml lpm. Sediment Description: 1017  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 9.85

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU	Gauge DTW as parameters are recorded
<u>Pre-</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>1058</u>	<u>3.6</u>	<u>7.26</u>	<u>877</u>	<u>18.5</u>	<u>1.1</u>	<u>80</u>	<u>234</u>	<u>4.98</u>
<u>1101</u>	<u>4.2</u>	<u>7.20</u>	<u>864</u>	<u>18.4</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>4.71</u>
<u>1104</u>	<u>4.8</u>	<u>7.05</u>	<u>851</u>	<u>18.2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>4.86</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-19A</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	<u>1</u> x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	<u>2</u> x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	<u>3</u> x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	<u>1</u> x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>—</u> x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>1</u> x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 6.50

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: X 2"



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #206265**  
 Site Address: **Powell @ Landregan**  
 City: **Emeryville, CA**

Job Number: **385161**  
 Event Date: **7/20/15** (inclusive)  
 Sampler: **JH**

Well ID **MwX-2**  
 Well Diameter **2** in.  
 Total Depth **13.18** ft.  
 Depth to Water **5.10** ft.  
**8.08**

Check if water column is less than 0.50 ft.

Volume Factor (VF)	3/4" = 0.02 4" = 0.66	1" = 0.04 5" = 1.02	2" = 0.17 6" = 1.50	3" = 0.38 12" = 5.80
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xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **6.71**

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

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):  
 Sample Time/Date: **/**  
 Approx. Flow Rate: **1pm.**  
 Did well de-water?

Weather Conditions:  
 Water Color: \_\_\_\_\_ Odor: Y / N \_\_\_\_\_  
 Sediment Description:  
 Itr. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY	Gauge DTW as parameters are recorded
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<b>MwX-2</b>	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT:

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS

8' Cmns

Re-tap Rusty Flange

M/o Per Arcal's

No access system

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: **X**

Add/Replaced Plug: **X 2"**



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #206265**  
 Site Address: **Powell @ Landregan**  
 City: **Emeryville, CA**

Job Number: **385161**  
 Event Date: **7.20.15** (inclusive)  
 Sampler: **FF**

Well ID: **MWY-3**  
 Well Diameter: **2** in.  
 Total Depth: **13.08** ft.  
 Depth to Water: **5.86** ft.

Date Monitored: **7.20.15**  

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 than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **7.22** xVF **—** = **—** x3 case volume = Estimated Purge Volume: **—** gal.

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

**Purge Equipment:**

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump **✓**  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_

**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: **Itr**

Amt Removed from Well: **Itr**

Water Removed: **Itr**

Start Time (purge): **1315**

Weather Conditions: **Sunny / cloudy**

Sample Time/Date: **1358 17.20.15**

Water Color: **CLEAR** Odor: **Y / N**

Approx. Flow Rate: **200 ml/min.**

Sediment Description: **none**

Did well de-water? **No** If yes, Time: **—** Volume: **—** Itr. DTW @ Sampling: **7.02**

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS mmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY	Gauge DTW as parameters are recorded
<b>1333</b>	<b>3.6</b>	<b>6.62</b>	<b>1545</b>	<b>18.3</b>	<b>Prec: 1.3</b>	<b>177</b>	<b>0.00</b>	<b>5.92</b>
<b>1336</b>	<b>4.2</b>	<b>6.60</b>	<b>1524</b>	<b>18.3</b>				<b>6.10</b>
<b>1339</b>	<b>4.8</b>	<b>6.61</b>	<b>1493</b>	<b>18.4</b>				<b>7.02</b>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<b>MWY-3</b>	<b>10 x voa vial</b>	<b>YES</b>	<b>HCL</b>	<b>LANCASTER</b>	<b>TPH-GRO(8015)/FULL SCAN(8260)</b>
<b>2</b>	<b>x 500ml ambers</b>	<b>YES</b>	<b>NP</b>	<b>LANCASTER</b>	<b>TPH-DRO(8015M)</b>
<b>2</b>	<b>x 500ml ambers</b>	<b>YES</b>	<b>NP</b>	<b>LANCASTER</b>	<b>TPH-DRO w/sgc(8015)</b>
<b>1</b>	<b>x 250ml clear glass</b>	<b>YES</b>	<b>NaOH &amp; ZnAc</b>	<b>LANCASTER</b>	<b>SULFIDE(SM20 4500 S2D)</b>
<b>2</b>	<b>x amber voas</b>	<b>YES</b>	<b>H3PO4</b>	<b>LANCASTER</b>	<b>TOTAL ORGANIC CARBON TOC(SM20 5310C)</b>
<b>3</b>	<b>x voa vial</b>	<b>YES</b>	<b>HCL</b>	<b>LANCASTER</b>	<b>METHANE/ETHANE/THENE(RSK-175)</b>
<b>1</b>	<b>x 250ml poly</b>	<b>YES</b>	<b>HNO3</b>	<b>LANCASTER</b>	<b>DISSOLVED METALS(200.7)</b>
<b>1</b>	<b>x 500ml poly</b>	<b>YES</b>	<b>HNO3</b>	<b>LANCASTER</b>	<b>DISSOLVED METALS(200.7)</b>
<b>1</b>	<b>x 250ml poly</b>	<b>YES</b>	<b>NP</b>	<b>LANCASTER</b>	<b>ALKALINITY BICARBONATE(pH 4.5 &amp; 8.3)(SM20 2320)</b>
<b>2</b>	<b>x voa vial</b>	<b>YES</b>	<b>NP</b>	<b>LANCASTER</b>	<b>NITRATE/SULFATE/NITROGEN(EPA 300.0)</b>

COMMENTS: **DEPTH PUMP SET AT: 8'**

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

**EMCO 8" - DV**

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: **X**

Add/Replaced Plug: **2"**



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265  
 Site Address: Powell @ Landregan  
 City: Emeryville, CA

Job Number: 385161  
 Event Date: 7-20-15 (inclusive)  
 Sampler: FT

Well ID MWX-6  
 Well Diameter 2 in.  
 Total Depth 13.68 ft.  
 Depth to Water 5.91 ft.  
7.77 xVF — = —

Date Monitored: 7.20.15  

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 than 0.50 ft.

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

Purge Equipment:  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump ✓  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_

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): 1000  
 Sample Time/Date: 1045 7-20-15  
 Approx. Flow Rate: 200 m lpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 6.05

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS umhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY	Gauge DTW as parameters are recorded
<u>1018</u>	<u>3.6</u>	<u>6.69</u>	<u>585</u>	<u>19.1</u>	<u>pH: 1.6</u>	<u>181</u>	<u>0.00</u>	<u>5.95</u>
<u>1021</u>	<u>4.2</u>	<u>6.71</u>	<u>581</u>	<u>19.2</u>				<u>5.99</u>
<u>1024</u>	<u>4.8</u>	<u>6.74</u>	<u>577</u>	<u>19.3</u>				<u>6.05</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MWX-6</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
<u>2</u>	<u>2 x 500ml ambers</u>	YES	NP	LANCASTER	TPH-DRO(8015M)
<u>2</u>	<u>2 x 500ml ambers</u>	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
<u>1</u>	<u>x 250ml clear glass</u>	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
<u>2</u>	<u>x amber voas</u>	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
<u>3</u>	<u>3 x voa vial</u>	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
<u>1</u>	<u>x 250ml polt</u>	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
<u>1</u>	<u>x 500ml poly</u>	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
<u>1</u>	<u>1 x 250ml poly</u>	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
<u>2</u>	<u>2 x voa vial</u>	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 8'

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Emco 8" NO CID (SEE PHOTO)

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: 2"



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265 Job Number: 385161  
 Site Address: Powell @ Landregan Event Date: 7/20/15 (inclusive)  
 City: Emeryville, CA Sampler: SH

Well ID	<u>MWX-8</u>	Date Monitored:	<u>7/20/15</u>	
Well Diameter	<u>2</u> in.	Volume Factor (VF)		
Total Depth	<u>12.38</u> ft.	3/4"= 0.02	1"= 0.04	2"= 0.17
Depth to Water	<u>5.42</u> ft.	4"= 0.66	5"= 1.02	6"= 1.50
	<u>6.96</u>	x VF	=	x3 case volume = Estimated Purge Volume: _____ gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>6.81</u>				
Purge Equipment:		Sampling Equipment:		
Disposable Bailer	_____	Disposable Bailer	_____	Time Started: _____ (2400 hrs)
Stainless Steel Bailer	_____	Pressure Bailer	_____	Time Completed: _____ (2400 hrs)
Stack Pump	_____	Metal Filters	X	Depth to Product: _____ ft
Peristaltic Pump	X	Peristaltic Pump	X	Depth to Water: _____ ft
QED Bladder Pump	_____	QED Bladder Pump	_____	Hydrocarbon Thickness: _____ ft
		Other: _____		Visual Confirmation/Description: _____
		Skimmer / Absorbant Sock (circle one) Amt Removed from Skimmer: _____ ltr		
		Amt Removed from Well: _____ ltr		
		Water Removed: _____ ltr		

Start Time (purge): 0815 Weather Conditions: clear  
 Sample Time/Date: 0100 / 7/20/15 Water Color: cloudy Odor: O/N 1.00  
 Approx. Flow Rate: 200 m lpm. Sediment Description: 1.00  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 5.85

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS mmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU	Gauge DTW as parameters are recorded
Pre	—	—	—	—	1.2	83	197	—
0833	3.6	7.05	990	18.8	/	/	/	5.60
0836	4.2	7.02	983	18.7	/	/	/	5.72
0839	4.8	6.98	980	18.4	/	/	/	5.89

### LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MWX-8	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	1 x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	2 x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	3 x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	250ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	1 x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	1 x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 8.00

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: X

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# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265  
 Site Address: Powell @ Landregan  
 City: Emeryville, CA

Job Number: 385161  
 Event Date: 7.20.15 (inclusive)  
 Sampler: FT

Well ID: MWX-9  
 Well Diameter: 2 in.  
 Total Depth: 12.88 ft.  
 Depth to Water: 6.00 ft.

Date Monitored: 7.20.15  

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 than 0.50 ft.

6.88 x VF — = — x3 case volume = Estimated Purge Volume: — gal.

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

**Purge Equipment:**

Disposable Bailer         
 Stainless Steel Bailer         
 Stack Pump         
 Peristaltic Pump         
 QED Bladder Pump       

**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): 0900  
 Sample Time/Date: 0945 / 7.20.15  
 Approx. Flow Rate: 200 mlpm.  
 Did well de-water? NO If yes, Time:        Volume:        ltr. DTW @ Sampling: 6.01

Weather Conditions: Sunny  
 Water Color: CLEAR Odor: Y / N  
 Sediment Description: none

Time (2400 hr.)	Volume (Liters)	pH	Conductivity ( $\mu\text{S}$ / mS mmhos/cm)	Temperature ( $^{\circ}\text{C}$ / $^{\circ}\text{F}$ )	D.O. (mg/L)	ORP (mV)	TURBIDITY	Gauge DTW as parameters are recorded
<u>0918</u>	<u>3.6</u>	<u>7.11</u>	<u>500</u>	<u>19.9</u>	<u>1.9</u>	<u>191</u>	<u>0.00</u>	<u>6.00</u>
<u>0921</u>	<u>4.2</u>	<u>7.12</u>	<u>501</u>	<u>20.0</u>				<u>6.00</u>
<u>0924</u>	<u>4.8</u>	<u>7.14</u>	<u>504</u>	<u>20.3</u>				<u>6.01</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MWT-9</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	<u>1</u> x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	<u>2</u> x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	<u>3</u> x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	<u>1</u> x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>1</u> x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 8

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Enclosed 8" no lid (See photo)

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: X



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265  
 Site Address: Powell @ Landregan  
 City: Emeryville, CA

Job Number: 385161  
 Event Date: 7/20/15 (inclusive)  
 Sampler: JH

Well ID MW-X-10AWell Diameter 2 in.Total Depth 12.85 ft.Depth to Water 5.11 ft.

7.74 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.65Date Monitored: 7/20/15

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 than 0.50 ft.

## Purge Equipment:

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

## Sampling Equipment:

Disposable Bailer         
 Pressure Bailer         
 Metal Filters         
 Peristaltic Pump X  
 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): 1150Sample Time/Date: 1245 17/20/15Approx. Flow Rate: 200 m lpm.Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 5.65

Weather Conditions:

CloudyWater Color: Cloudy Odor: Y/NSediment Description: 1.0 ft

Time (2400 hr.)	Volume (Liters)	pH	Conductivity ( $\mu$ S / mS umhos/cm)	Temperature ( C / F )	D.O. (mg/L)	ORP (mV)	TURBIDITY <u>470</u>	Gauge DTW as parameters are recorded
<u>Pre</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>1.2</u>	<u>94</u>	<u>306</u>	<u>—</u>
<u>1208</u>	<u>3.6</u>	<u>6.96</u>	<u>416</u>	<u>18.8</u>				<u>5.24</u>
<u>1211</u>	<u>4.2</u>	<u>6.91</u>	<u>482</u>	<u>18.7</u>				<u>5.41</u>
<u>1214</u>	<u>4.8</u>	<u>6.84</u>	<u>507</u>	<u>18.6</u>				<u>5.65</u>

## LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-X-10A</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	<u>3</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	<u>1</u> x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	<u>2</u> x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	<u>3</u> x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	<u>1</u> x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>4</u> x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	<u>1</u> x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 7.50

\*\*\*NOTE: DO, ORP &amp; TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: XAdd/Replaced Plug: X 2"



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #206265 Job Number: 385161  
 Site Address: Powell @ Landregan Event Date: 7/20/15 (inclusive)  
 City: Emeryville, CA Sampler: JR

Well ID	<u>MWx-11A</u>	Date Monitored:	<u>7/20/15</u>	
Well Diameter	<u>2</u> in.	Volume Factor (VF)		
Total Depth	<u>13.68</u> ft.	3/4"= 0.02	1"= 0.04	2"= 0.17
Depth to Water	<u>6.78</u> ft.	4"= 0.66	5"= 1.02	3"= 0.38
	<u>6.90</u>	x VF	=	6"= 1.50
			x3 case volume =	Estimated Purge Volume: _____ gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>8.16</u>				
Purge Equipment:		Sampling Equipment:		
Disposable Bailer	_____	Disposable Bailer	_____	Time Started: _____ (2400 hrs)
Stainless Steel Bailer	_____	Pressure Bailer	_____	Time Completed: _____ (2400 hrs)
Stack Pump	_____	Metal Filters	X	Depth to Product: _____ ft
Peristaltic Pump	X	Peristaltic Pump	X	Depth to Water: _____ ft
QED Bladder Pump	_____	QED Bladder Pump	_____	Hydrocarbon Thickness: _____ ft
Other: _____				
Visual Confirmation/Description:				
Skimmer / Absorbant Sock (circle one) Amt Removed from Skimmer: _____ ltr				
Amt Removed from Well: _____ ltr				
Water Removed: _____ ltr				

Start Time (purge): 0920 Weather Conditions: Clean  
 Sample Time/Date: 1010 / 7/20/15 Water Color: Cloudy Odor: Y / N \_\_\_\_\_  
 Approx. Flow Rate: 200 ml lpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ ltr. DTW @ Sampling: 7.20

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS mhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY ntu	Gauge DTW as parameters are recorded
—	—	—	—	—	1.3	104	129	—
0938	3.6	7.52	1056	18.4	/	/	/	6.92
0941	4.2	7.40	1051	18.3	/	/	/	7.06
0944	4.8	7.27	1043	18.2	/	/	/	2.20

### LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MWx-11A	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/FULL SCAN(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO(8015M)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc(8015)
	1 x 250ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE(SM20 4500 S2D)
	2 x amber voas	YES	H3PO4	LANCASTER	TOTAL ORGANIC CARBON TOC(SM20 5310C)
	3 x voa vial	YES	HCL	LANCASTER	METHANE/ETHANE/THENE(RSK-175)
	1 x 250ml polt	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	1 x 500ml poly	YES	HNO3	LANCASTER	DISSOLVED METALS(200.7)
	1 x 250ml poly	YES	NP	LANCASTER	ALKALINITY BICARBONATE(pH 4.5 & 8.3)(SM20 2320)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE/NITROGEN(EPA 300.0)

COMMENTS: DEPTH PUMP SET AT: 9.00

\*\*\*NOTE: DO, ORP & TURBIDITY READINGS ARE PRE PURGE READINGS\*\*\*

8" Miller

Add/Replaced Gasket: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

Add/Replaced Lock: X

Add/Replaced Plug: X

# Chevron California Region Analysis Request/Chain of Custody

eurofins

Lancaster  
Laboratories

Acct. #

072015-02

For Eurofins Lancaster Laboratories use only

Group # Sample #

Instructions on reverse side correspond with circled numbers.

500-1

1 Client Information				4 Matrix		5 Analyses Requested				
Facility # SS#206265-OML G-R#385161 Global ID#SLT2007076 Site Address 1520 POWELL ST @ LANDREGAN, EMERYVILLE, CA Chevron PM MHO ARCADISJS Lead Consultant Sobiera Consultant/Office Gitter-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 S. Herzen				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air		<input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface				
				<input type="checkbox"/> Grab <input type="checkbox"/> Composite		Total Number of Containers 2				
2 Sample Identification		Soil Depth	Collected Date	3 Soil	3 Water	3 Oil	3 TPH-GRO	3 TPH-DRO 8015 without Silica Gel Cleanup	3 Dissolved Solids Method 200.7	
GA MW-17 MW-18 MW-19A MWX-3 MWX-6 MWX-8 MWX-9 MWX-10A MWX-11A		7/20/15	1150	X	X	X	X	X	X	
			1255							
			1130							
			1358							
			1045							
			0900							
			0945							
			1245							
			1010							
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										
6 Remarks										
Metals to be reported are Iron and Manganese AMEND COC: ADD GRO(8015) TO ALL SAMPLES SUBMITTED. MW 07-21-15										
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date 7/20/15	Time	Received by	Date 7/20/15	Time 1520
<input checked="" type="radio"/> Standard 72 hour		5 day	4 day							
<input type="radio"/> Standard 48 hour		24 hour								
8 Data Package (circle if required)		EDD (circle if required)		Relinquished by Commercial Carrier:				Received by	Date	Time
Type I - Full Type VI (Raw Data)		EDD (circle if required) EDFFLAT (default)		UPS _____ FedEx _____ Other _____ Temperature Upon Receipt _____ °C						
								Custody Seals Intact?	Yes	No

**ARCADIS**

**Attachment 2**

Laboratory Analytical Report  
and Chain-of-Custody  
Documentation

**ANALYTICAL RESULTS**

Prepared by:

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

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Rd.  
San Ramon CA 94583

August 21, 2015

**Project: 206265**

Submittal Date: 07/21/2015  
Group Number: 1578324  
PO Number: 0015175580  
Release Number: HORNE  
State of Sample Origin: CA

Client Sample Description

QA-T-150720 NA Water  
MW-17-W-150720 Grab Groundwater  
MW-17-W-150720 Filtered Grab Groundwater  
MW-18-W-150720 Grab Groundwater  
MW-18-W-150720 Filtered Grab Groundwater  
MW-19A-W-150720 Grab Groundwater  
MW-19A-W-150720 Filtered Grab Groundwater  
MWX-3-W-150720 Grab Groundwater  
MWX-3-W-150720 Filtered Grab Groundwater  
MWX-6-W-150720 Grab Groundwater  
MWX-6-W-150720 Filtered Grab Groundwater  
MWX-8-W-150720 Grab Groundwater  
MWX-8-W-150720 Filtered Grab Groundwater  
MWX-9-W-150720 Grab Groundwater  
MWX-9-W-150720 Filtered Grab Groundwater  
MWX-10A-W-150720 Grab Groundwater  
MWX-10A-W-150720 Filtered Grab Groundwater  
MWX-11A-W-150720 Grab Groundwater  
MWX-11A-W-150720 Filtered Grab Groundwater

Lancaster Labs (LL) #

7973064  
7973065  
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7973082

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

ARCADIS U.S., Inc.

Attn: Justin Sobieraj

COPY TO Arcadis Attn: Kurt Schmiegel  
ELECTRONIC  
COPY TO ARCADIS U.S., Inc. Attn: Cameron McGovern  
ELECTRONIC  
COPY TO ARCADIS U.S., Inc. Attn: Kayleigh Lim  
COPY TO  
ELECTRONIC Gettler-Ryan Inc. Attn: Gettler Ryan  
COPY TO

Respectfully Submitted,



Amek Carter  
Specialist

(717) 556-7252



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

**Sample Description:** QA-T-150720 NA Water  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973064  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEQA

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	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	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
	<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	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	BTEX/MTBE	SW-846 8260B	1	Z152032AA	07/22/2015 11:51	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z152032AA	07/22/2015 11:51	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 19:40	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 19:40	Jeremy C Giffin	1

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

**Sample Description:** MW-17-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973065  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 11:50 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE17

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

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**Sample Description:** MW-17-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973065  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 11:50 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSE17

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	4	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	6	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	N.D.	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	3.6	3.0	1
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	N.D.	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	2,000	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	57,000	1,500	5



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**Sample Description:** MW-17-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973065  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 11:50 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE17

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	2,400	500	1
12150	SM 2320 B-1997 Total Alkalinity to pH 4.5	n.a.	129,000	700	1
12149	Bicarbonate Alkalinity	n.a.	129,000	700	1
00230	SM 4500-S2 D-2000 Sulfide	18496-25-8	ug/l N.D.	ug/l 54	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
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 14:27	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 14:27	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 21:02	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 21:02	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152040004A	07/23/2015 15:48	Kristen N Brandt	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 11:02	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 15:09	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 14:47	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 14:47	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 14:47	Drew M Gerhart	5
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 03:58	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014203B	07/24/2015 00:07	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014203B	07/24/2015 00:07	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MW-17-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973066  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 11:50 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Metals Dissolved</b>	EPA 200.7 rev 4.4		ug/l	ug/l	
01754 Iron		7439-89-6	N.D.	33.3	1
07058 Manganese		7439-96-5	151	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 01:57	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 01:57	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

**Sample Description:** MW-18-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973067  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 12:55 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE18

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

**Sample Description:** MW-18-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973067  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 12:55 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSE18

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	8	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	24	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	N.D.	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	81	3.0	1
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	N.D.	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	1,700	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	42,000	1,500	5



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**Sample Description:** MW-18-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973067  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 12:55 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE18

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	960	500	1
12150	Total Alkalinity to pH 4.5	n.a.	171,000	700	1
12149	Bicarbonate Alkalinity	n.a.	171,000	700	1
00230	SM 4500-S2 D-2000	18496-25-8	ug/l	ug/l	
	Sulfide		N.D.	54	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

DRO bottles were received at the lab on 07/22/15 at 0925.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 14:51	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 14:51	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 21:29	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 21:29	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152040004A	07/23/2015 16:05	Kristen N Brandt	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 11:24	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 15:31	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 15:32	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 15:32	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 15:32	Drew M Gerhart	5
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 04:44	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014204A	07/24/2015 01:58	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014204A	07/24/2015 01:58	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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

**Sample Description:** MW-18-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973068  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 12:55 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	EPA 200.7 rev 4.4		ug/l	ug/l	
01754 Iron		7439-89-6	N.D.	33.3	1
07058 Manganese		7439-96-5	295	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754 Iron		EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:00	Tara L Snyder	1
07058 Manganese		EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:00	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

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**Sample Description:** MW-19A-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973069  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 11:30 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE19

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	0.7	0.5	1
10335	1,2-Dichloroethane	107-06-2	0.5	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	6	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1

**Sample Description:** MW-19A-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973069  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 11:30 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSE19

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	1	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	0.7	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	15	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	3.0	1.0	1
07105	Ethene	74-85-1	2.0	1.0	1
07105	Methane	74-82-8	1,500	30	10
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	120	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	21,400	1,500	5



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**Sample Description:** MW-19A-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973069  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 11:30 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE19

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	4,500	500	1
12150	Total Alkalinity to pH 4.5	n.a.	296,000	700	1
12149	Bicarbonate Alkalinity	n.a.	296,000	700	1
00230	SM 4500-S2 D-2000	18496-25-8	ug/l	ug/l	
	Sulfide		N.D.	54	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

DRO bottles were received at the lab on 07/22/15 at 0925.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 15:39	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 15:39	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 21:56	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 21:56	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152040004A	07/23/2015 16:38	Kristen N Brandt	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152040004A	07/24/2015 09:47	Kristen N Brandt	10
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 11:46	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 15:53	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 15:47	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 15:47	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 15:47	Drew M Gerhart	5
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 05:00	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014204A	07/24/2015 03:25	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014204A	07/24/2015 03:25	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MW-19A-W-150720 Filtered Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973070  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 11:30 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

Submitted: 07/21/2015 09:15

San Ramon CA 94583

Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Metals Dissolved</b>	<b>EPA 200.7 rev 4.4</b>		ug/l	ug/l	
01754 Iron		7439-89-6	2,550	33.3	1
07058 Manganese		7439-96-5	2,640	0.80	1

**General Sample Comments**

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:03	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:03	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

**Sample Description:** MWX-3-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973071  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 13:58 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	62	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1

**Sample Description:** MWX-3-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973071  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 13:58 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

PSEX3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	2	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	19	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	7.1	1.0	1
07105	Ethene	74-85-1	2.2	1.0	1
07105	Methane	74-82-8	15,000	300	100
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	390	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	120	50	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	87,500	3,000	10



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**Sample Description:** MWX-3-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973071  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 13:58 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	5,200	500	1
	SM 2320 B-1997		ug/l as CaCO3	ug/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	739,000	700	1
12149	Bicarbonate Alkalinity	n.a.	739,000	700	1
	SM 4500-S2 D-2000		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

One DRO bottle was received at the lab on 07/22/15 at 0925.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 15:15	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 15:15	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 22:51	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 22:51	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/24/2015 15:26	Kristen N Brandt	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/27/2015 10:20	Kristen N Brandt	100
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 12:08	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 16:15	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 16:47	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 16:47	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 17:02	Drew M Gerhart	10
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 05:15	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014204A	07/24/2015 03:17	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014204A	07/24/2015 03:17	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MWX-3-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973072  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 13:58 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Metals Dissolved</b>	<b>EPA 200.7 rev 4.4</b>		ug/l	ug/l	
01754 Iron		7439-89-6	2,790	33.3	1
07058 Manganese		7439-96-5	6,560	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:13	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:13	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

**Sample Description:** MWX-6-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973073  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 10:45 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX6

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	0.8	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1

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**Sample Description:** MWX-6-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973073  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 10:45 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSEX6

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	N.D.	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	240	3.0	1
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	65	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	19,400	1,500	5



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**Sample Description:** MWX-6-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973073  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 10:45 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX6

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	3,400	500	1
12150	SM 2320 B-1997 Total Alkalinity to pH 4.5	n.a.	238,000	700	1
12149	Bicarbonate Alkalinity	n.a.	238,000	700	1
00230	SM 4500-S2 D-2000 Sulfide	18496-25-8	ug/l N.D.	ug/l 54	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
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 16:03	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 16:03	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 23:18	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 23:18	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/24/2015 15:59	Kristen N Brandt	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 12:30	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 16:37	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 18:35	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 18:35	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 18:35	Drew M Gerhart	5
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 05:47	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014203A	07/24/2015 01:22	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014203A	07/24/2015 01:22	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MWX-6-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973074  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 10:45 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	EPA 200.7 rev 4.4		ug/l	ug/l	
01754 Iron		7439-89-6	336	33.3	1
07058 Manganese		7439-96-5	1,800	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:16	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:16	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

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**Sample Description:** MWX-8-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973075  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 09:00 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX8

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>	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	0.8	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	0.5	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1

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**Sample Description:** MWX-8-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973075  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 09:00 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSEX8

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	7.6	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	2,600	60	20
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	65	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	15,900	1,500	5



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

**Sample Description:** MWX-8-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973075  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 09:00 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX8

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	3,000	500	1
	SM 2320 B-1997		ug/l as CaCO3	ug/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	277,000	700	1
12149	Bicarbonate Alkalinity	n.a.	277,000	700	1
	SM 4500-S2 D-2000		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

One DRO bottle was received at the lab on 07/22/15 at 0925.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 16:27	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 16:27	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/23/2015 23:45	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/23/2015 23:45	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/24/2015 16:16	Kristen N Brandt	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/27/2015 10:37	Kristen N Brandt	20
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 12:51	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 17:00	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 19:35	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 19:35	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 19:35	Drew M Gerhart	5
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 06:02	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014204B	07/24/2015 03:01	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014204B	07/24/2015 03:01	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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

**Sample Description:** MWX-8-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973076  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 09:00 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	EPA 200.7 rev 4.4		ug/l	ug/l	
01754 Iron		7439-89-6	4,590	33.3	1
07058 Manganese		7439-96-5	4,780	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 01:41	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 01:41	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

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

**Sample Description:** MWX-9-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973077  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 09:45 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX9

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>	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	22	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	0.8	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1

**Sample Description:** MWX-9-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973077  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 09:45 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSEX9

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	5	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	14	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	N.D.	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	17	3.0	1
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	52	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	19,500	1,500	5



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**Sample Description:** MWX-9-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973077  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 09:45 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSEX9

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	2,600	500	1
12150	SM 2320 B-1997 Total Alkalinity to pH 4.5	n.a.	211,000	700	1
12149	Bicarbonate Alkalinity	n.a.	211,000	700	1
00230	SM 4500-S2 D-2000 Sulfide	18496-25-8	ug/l N.D.	ug/l 54	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
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 16:51	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 16:51	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/24/2015 00:13	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/24/2015 00:13	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/24/2015 16:33	Kristen N Brandt	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 13:13	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 17:22	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Brondor	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Brondor	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 20:05	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 20:05	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 20:05	Drew M Gerhart	5
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 06:17	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014203A	07/23/2015 23:50	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014203A	07/23/2015 23:50	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MWX-9-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973078  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 09:45 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	EPA 200.7 rev 4.4		ug/l	ug/l	
01754 Iron		7439-89-6	N.D.	33.3	1
07058 Manganese		7439-96-5	216	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754 Iron		EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:19	Tara L Snyder	1
07058 Manganese		EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:19	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

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**Sample Description:** MWX-10A-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973079  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 12:45 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE10

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>	
10335	Acetone	67-64-1	N.D.	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	5	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	0.5	1

**Sample Description:** MWX-10A-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973079  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 12:45 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSE10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	3	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	N.D.	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	N.D.	3.0	1
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	680	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	6,800	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	89,800	6,000	20



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**Sample Description:** MWX-10A-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973079  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 12:45 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	SM 5310 C-2000		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	7,100	500	1
12150	Total Alkalinity to pH 4.5	n.a.	147,000	700	1
12149	Bicarbonate Alkalinity	n.a.	147,000	700	1
00230	SM 4500-S2 D-2000	18496-25-8	ug/l	ug/l	
	Sulfide		N.D.	54	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

DRO bottles were received at the lab on 07/22/15 at 0925.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 17:15	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 17:15	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/24/2015 00:40	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/24/2015 00:40	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/24/2015 16:50	Kristen N Brandt	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 13:57	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 17:44	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 20:35	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 20:35	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 20:50	Drew M Gerhart	20
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501A	07/24/2015 06:32	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014204A	07/24/2015 04:22	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014204A	07/24/2015 04:22	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MWX-10A-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973080  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 12:45 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Metals Dissolved</b>	<b>EPA 200.7 rev 4.4</b>		ug/l	ug/l	
01754 Iron		7439-89-6	47.2	33.3	1
07058 Manganese		7439-96-5	48.4	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:22	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:22	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

**Sample Description:** MWX-11A-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973081  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 10:10 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE11

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

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**Sample Description:** MWX-11A-W-150720 Grab Groundwater  
**Facility#** 206265 **Job#** 385161 GRD  
**1520 Powell St-Emeryville** SLT2007076

**LL Sample #** WW 7973081  
**LL Group #** 1578324  
**Account #** 11928

**Project Name:** 206265

Collected: 07/20/2015 10:10 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15

Reported: 08/21/2015 16:14

PSE11

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	14	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Ethane	74-84-0	N.D.	1.0	1
07105	Ethene	74-85-1	N.D.	1.0	1
07105	Methane	74-82-8	4.1	3.0	1
<b>GC Petroleum Hydrocarbons SW-846 8015B</b>					
06609	TPH-DRO CA C10-C28	n.a.	290	50	1
<b>GC Petroleum Hydrocarbons w/Si SW-846 8015B</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	151,000	6,000	20



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**Sample Description:** MWX-11A-W-150720 Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973081  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 10:10 by JH

Chevron

L4310

Submitted: 07/21/2015 09:15

6001 Bollinger Canyon Rd.

Reported: 08/21/2015 16:14

San Ramon CA 94583

PSE11

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry	<b>SM 5310 C-2000</b>		ug/l	ug/l	
00273	Total Organic Carbon	n.a.	9,600	500	1
	<b>SM 2320 B-1997</b>		ug/l as CaCO3	ug/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	419,000	700	1
12149	Bicarbonate Alkalinity	n.a.	419,000	700	1
	<b>SM 4500-S2 D-2000</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

DRO bottles were received at the lab on 07/22/15 at 0925.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Full List w/ Sep. Xylenes	SW-846 8260B	1	W152041AA	07/23/2015 17:39	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W152041AA	07/23/2015 17:39	Linda C Pape	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	15204A20A	07/24/2015 01:08	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	15204A20A	07/24/2015 01:08	Jeremy C Giffin	1
07105	Volatile Headspace Hydrocarbon modified	RSKSOP-175	1	152050002A	07/24/2015 17:07	Kristen N Brandt	1
06609	TPH-DRO CA C10-C28	SW-846 8015B	1	152030014A	07/23/2015 13:35	Christine E Dolman	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	152030015A	07/24/2015 18:06	Christine E Dolman	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	152030014A	07/22/2015 20:00	Samantha L Bronder	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	152030015A	07/22/2015 20:00	Samantha L Bronder	1
00368	Nitrate Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 21:05	Drew M Gerhart	5
01506	Nitrite Nitrogen	EPA 300.0	1	15202667121A	07/21/2015 21:05	Drew M Gerhart	5
00228	Sulfate	EPA 300.0	1	15202667121A	07/21/2015 21:21	Drew M Gerhart	20
00273	Total Organic Carbon	SM 5310 C-2000	1	15205049501B	07/24/2015 06:47	James S Mathiot	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	15204014204A	07/24/2015 04:38	Michele L Graham	1
12149	Bicarbonate Alkalinity	SM 2320 B-1997	1	15204014204A	07/24/2015 04:38	Michele L Graham	1
00230	Sulfide	SM 4500-S2 D-2000	1	15205023001A	07/24/2015 07:55	Susan E Hibner	1



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**Sample Description:** MWX-11A-W-150720 Filtered Grab Groundwater  
Facility# 206265 Job# 385161 GRD  
1520 Powell St-Emeryville SLT2007076

LL Sample # WW 7973082  
LL Group # 1578324  
Account # 11928

**Project Name:** 206265

Collected: 07/20/2015 10:10 by JH

Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Submitted: 07/21/2015 09:15  
Reported: 08/21/2015 16:14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Metals Dissolved</b>	EPA 200.7 rev 4.4		ug/l	ug/l	
01754 Iron		7439-89-6	863	33.3	1
07058 Manganese		7439-96-5	2,470	0.80	1

#### General Sample Comments

CA ELAP Lab Certification No. 2792

This sample was field filtered for dissolved metals.

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
01754	Iron	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:25	Tara L Snyder	1
07058	Manganese	EPA 200.7 rev 4.4	1	152045716004	07/27/2015 02:25	Tara L Snyder	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	152045716004	07/26/2015 09:50	James L Mertz	1

## Quality Control Summary

Client Name: Chevron  
Reported: 08/21/2015 16:14

Group Number: 1578324

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>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD RPD	RPD Max
Batch number: W152041AA								
			Sample number(s):					
			7973065, 7973067, 7973069, 7973071, 7973073, 7973075, 7973077, 7973079, 7973081					
Acetone	N.D.	6.	ug/l	103	90	55-129	14	30
t-Amyl methyl ether	N.D.	0.5	ug/l	89	89	75-120	0	30
Benzene	N.D.	0.5	ug/l	105	103	78-120	1	30
Bromobenzene	N.D.	1.	ug/l	100	99	80-120	1	30
Bromo(chloromethane)	N.D.	1.	ug/l	99	97	80-120	2	30
Bromodichloromethane	N.D.	0.5	ug/l	88	88	73-120	0	30
Bromoform	N.D.	0.5	ug/l	90	88	52-123	2	30
Bromomethane	N.D.	0.5	ug/l	88	88	53-130	1	30
2-Butanone	N.D.	3.	ug/l	91	93	54-133	2	30
t-Butyl alcohol	N.D.	5.	ug/l	102	89	78-121	13	30
n-Butylbenzene	N.D.	1.	ug/l	100	99	68-120	1	30
sec-Butylbenzene	N.D.	1.	ug/l	103	100	75-120	3	30
tert-Butylbenzene	N.D.	1.	ug/l	100	100	80-120	0	30
Carbon Disulfide	N.D.	1.	ug/l	84	83	58-126	1	30
Carbon Tetrachloride	N.D.	0.5	ug/l	95	92	74-130	3	30
Chlorobenzene	N.D.	0.5	ug/l	105	102	80-120	3	30
Chloroethane	N.D.	0.5	ug/l	87	89	56-120	2	30
2-Chloroethyl Vinyl Ether	N.D.	2.	ug/l	80	81	44-143	2	30
Chloroform	N.D.	0.5	ug/l	99	98	80-120	0	30
Chloromethane	N.D.	0.5	ug/l	90	90	63-120	0	30
2-Chlorotoluene	N.D.	1.	ug/l	101	99	80-120	3	30
4-Chlorotoluene	N.D.	1.	ug/l	99	98	80-120	1	30
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	78	78	56-120	0	30
Dibromochloromethane	N.D.	0.5	ug/l	92	90	72-120	2	30
1,2-Dibromoethane	N.D.	0.5	ug/l	101	99	80-120	2	30
Dibromomethane	N.D.	0.5	ug/l	98	98	80-120	0	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	103	101	80-120	2	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	102	101	80-120	1	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	103	102	80-120	1	30
Dichlorodifluoromethane	N.D.	0.5	ug/l	87	88	55-127	0	30
1,1-Dichloroethane	N.D.	0.5	ug/l	96	98	80-120	2	30
1,2-Dichloroethane	N.D.	0.5	ug/l	94	95	72-127	1	30
1,1-Dichloroethene	N.D.	0.5	ug/l	104	101	76-124	4	30
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	102	100	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	106	105	80-120	1	30
1,2-Dichloropropane	N.D.	0.5	ug/l	100	101	80-120	0	30
1,3-Dichloropropane	N.D.	0.5	ug/l	99	97	80-120	2	30
2,2-Dichloropropane	N.D.	0.5	ug/l	90	90	63-131	0	30
1,1-Dichloropropene	N.D.	1.	ug/l	99	97	80-126	2	30
cis-1,3-Dichloropropene	N.D.	0.5	ug/l	89	89	80-120	0	30
trans-1,3-Dichloropropene	N.D.	0.5	ug/l	86	84	76-120	2	30
Ethanol		50.	ug/l	125	108	49-144	14	30

\*- Outside of specification

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

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

## Quality Control Summary

Client Name: Chevron

Group Number: 1578324

Reported: 08/21/2015 16:14

<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 RPD</u>	<u>RPD Max</u>
Ethyl t-butyl ether	N.D.	0.5	ug/l	91	90	69-120	0	30
Ethylbenzene	N.D.	0.5	ug/l	104	101	80-120	3	30
Freon 113	N.D.	2.	ug/l	91	87	67-127	5	30
Hexachlorobutadiene	N.D.	2.	ug/l	97	94	60-120	3	30
2-Hexanone	N.D.	3.	ug/l	88	87	50-131	1	30
di-Isopropyl ether	N.D.	0.5	ug/l	98	99	70-124	0	30
Isopropylbenzene	N.D.	1.	ug/l	103	102	80-120	1	30
p-Isopropyltoluene	N.D.	1.	ug/l	98	98	76-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	96	97	75-120	1	30
4-Methyl-2-pentanone	N.D.	3.	ug/l	89	90	51-124	1	30
Methylene Chloride	N.D.	2.	ug/l	100	100	80-120	1	30
Naphthalene	N.D.	1.	ug/l	93	93	59-120	1	30
n-Propylbenzene	N.D.	1.	ug/l	103	102	80-120	2	30
Styrene	N.D.	1.	ug/l	96	93	80-120	3	30
1,1,1,2-Tetrachloroethane	N.D.	0.5	ug/l	95	94	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	ug/l	95	94	70-120	1	30
Tetrachloroethene	N.D.	0.5	ug/l	107	105	80-120	2	30
Toluene	N.D.	0.5	ug/l	104	102	80-120	2	30
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	98	99	69-120	1	30
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	98	99	73-120	1	30
1,1,1-Trichloroethane	N.D.	0.5	ug/l	92	92	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.5	ug/l	100	97	80-120	3	30
Trichloroethene	N.D.	0.5	ug/l	104	102	80-120	2	30
Trichlorofluoromethane	N.D.	0.5	ug/l	95	94	58-135	0	30
1,2,3-Trichloropropane	N.D.	1.	ug/l	99	98	76-120	2	30
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	100	97	80-120	2	30
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	99	98	80-120	1	30
Vinyl Chloride	N.D.	0.5	ug/l	89	89	69-120	0	30
m+p-Xylene	N.D.	0.5	ug/l	103	101	80-120	2	30
o-Xylene	N.D.	0.5	ug/l	99	97	80-120	2	30

Batch number: Z152032AA

	Sample number(s):	7973064				
Benzene	N.D.	0.5	ug/l	96	78-120	
Ethylbenzene	N.D.	0.5	ug/l	96	80-120	
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	95	75-120	
Toluene	N.D.	0.5	ug/l	97	80-120	
Xylene (Total)	N.D.	0.5	ug/l	100	80-120	

Batch number: 15204A20A

	Sample number(s):	7973064-				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	91	90	80-139
					1	30

Batch number: 152040004A

	Sample number(s):	7973065, 7973067, 7973069				
Ethane	N.D.	1.0	ug/l	102	85-115	
Ethene	N.D.	1.0	ug/l	100	83-115	
Methane	N.D.	3.0	ug/l	103	85-115	

Batch number: 152050002A

	Sample number(s):	7973071, 7973073, 7973075, 7973077, 7973079, 7973081				
Ethane	N.D.	1.0	ug/l	96	85-115	
Ethene	N.D.	1.0	ug/l	95	83-115	
Methane	N.D.	3.0	ug/l	97	85-115	

Batch number: 152030014A

	Sample number(s):	7973065, 7973067, 7973069, 7973071, 7973073, 7973075, 7973077, 7973079, 7973081				
TPH-DRO CA C10-C28	N.D.	50.	ug/l	79	65	56-114

\*- Outside of specification

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

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

## Quality Control Summary

Client Name: Chevron

Group Number: 1578324

Reported: 08/21/2015 16:14

<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 RPD</u>	<u>RPD Max</u>
Batch number: 152030015A								
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	50.	ug/l	81	55	40-105	37*	20
Batch number: 152045716004								
Iron	N.D.	33.3	ug/l	97		85-115		
Manganese	N.D.	0.80	ug/l	93		85-115		
Batch number: 15202667121A								
Nitrate Nitrogen	N.D.	50.	ug/l	99	99	90-111	1	20
Nitrite Nitrogen	N.D.	50.	ug/l	96	95	90-111	0	20
Sulfate	N.D.	300.	ug/l	97	97	90-110	0	20
Batch number: 15205049501A								
Total Organic Carbon	N.D.	500.	ug/l	96		91-113		
Batch number: 15205049501B								
Total Organic Carbon	N.D.	500.	ug/l	96		91-113		
Batch number: 15204014203A								
Total Alkalinity to pH 4.5	N.D.	700.	ug/l as CaCO <sub>3</sub>	98		90-110		
Batch number: 15204014203B								
Total Alkalinity to pH 4.5	N.D.	700.	ug/l as CaCO <sub>3</sub>	98		90-110		
Batch number: 15204014204A								
Total Alkalinity to pH 4.5	N.D.	700.	ug/l as CaCO <sub>3</sub>	98		90-110		
Batch number: 15204014204B								
Total Alkalinity to pH 4.5	N.D.	700.	ug/l as CaCO <sub>3</sub>	98		90-110		
Batch number: 15205023001A								
Sulfide	N.D.	54.	ug/l	99		90-110		

## 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 RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: Z152032AA								
Benzene	100	105	72-134	4	30			
Ethylbenzene	103	105	71-134	2	30			
Methyl Tertiary Butyl Ether	96	100	72-126	4	30			

\*- 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: 08/21/2015 16:14

Group Number: 1578324

### 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>MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Toluene	103	107	80-125	4	30				
Xylene (Total)	107	110	79-125	3	30				
Batch number: 152040004A			Sample number(s): 7973065, 7973067, 7973069 UNSPK: P972889						
Ethane	92	94	53-122	3	20				
Ethene	91	94	35-162	3	20				
Methane	92	96	46-129	4	20				
Batch number: 152050002A			Sample number(s): 7973071, 7973073, 7973075, 7973077, 7973079, 7973081 UNSPK: P970722						
Ethane	94	95	53-122	2	20				
Ethene	161	164*	35-162	2	20				
Methane	-6147	-5643	46-129	4	20				
	(2)	(2)							
Batch number: 152045716004			Sample number(s): 7973066, 7973068, 7973070, 7973072, 7973074, 7973076, 7973078, 7973080, 7973082 UNSPK: 7973076 BKG: 7973076						
Iron	98	(2)	70-130			4,590	4,290	7	20
Manganese	82	(2)	70-130			4,780	4,470	7	20
Batch number: 15202667121A			Sample number(s): 7973065, 7973067, 7973069, 7973071, 7973073, 7973075, 7973077, 7973079, 7973081 UNSPK: 7973065 BKG: 7973065						
Nitrate Nitrogen	95		90-110			2,000	2,000	1 (1)	15
Nitrite Nitrogen	93		90-110			N.D.	N.D.	0 (1)	15
Sulfate	95		90-110			57,000	56,900	0	15
Batch number: 15205049501A			Sample number(s): 7973065, 7973067, 7973069, 7973071, 7973073, 7973075, 7973077, 7973079, 7973081 UNSPK: 7973065 BKG: 7973065						
Total Organic Carbon	95		91-113			2,400	1,900	24* (1)	3
Batch number: 15205049501B			Sample number(s): 7973081 UNSPK: P977529 BKG: P977529						
Total Organic Carbon	98		91-113			10,600	10,700	1	3
Batch number: 15204014203A			Sample number(s): 7973073, 7973077 UNSPK: P973846 BKG: P973846						
Total Alkalinity to pH 4.5	81*		90-110			35,300	35,600	1	5
Batch number: 15204014203B			Sample number(s): 7973065 UNSPK: P973846 BKG: 7973065						
Total Alkalinity to pH 4.5	81*		90-110			129,000	130,000	0	5
Batch number: 15204014204A			Sample number(s): 7973067, 7973069, 7973071, 7973079, 7973081 UNSPK: 7973067 BKG: 7973067						
Total Alkalinity to pH 4.5	94		90-110			171,000	173,000	1	5
Batch number: 15204014204B			Sample number(s): 7973075 UNSPK: 7973067 BKG: 7973075						
Total Alkalinity to pH 4.5	94		90-110			277,000	279,000	0	5
Batch number: 15205023001A			Sample number(s): 7973065, 7973067, 7973069, 7973071, 7973073, 7973075, 7973077, 7973079, 7973081 UNSPK: 7973073 BKG: 7973073						
Sulfide	79*	82*	90-110	4	16	N.D.	N.D.	0 (1)	5

\*- 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: 08/21/2015 16:14

Group Number: 1578324

### 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 RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP Conc</u>	<u>Dup RPD Max</u>
----------------------	----------------	-----------------	----------------------	----------------	----------------	-----------------	-----------------	--------------------

### 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 Full List w/ Sep. Xylenes  
Batch number: W152041AA

Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7973065	98	101	98
7973067	100	103	97
7973069	97	103	98
7973071	98	104	98
7973073	98	102	98
7973075	98	102	98
7973077	98	103	98
7973079	98	103	98
7973081	98	104	97
Blank	98	104	98
LCS	98	99	100
LCSD	99	99	99
Limits:	80-116	77-113	78-113

Analysis Name: BTEX/MTBE  
Batch number: Z152032AA

Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7973064	102	101	100
Blank	102	98	100
LCS	101	100	100
MS	101	100	100
MSD	102	100	100
Limits:	80-116	77-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 15204A20A

Trifluorotoluene-F
7973064
7973065
7973067
7973069
7973071
7973073
7973075
7973077
7973079
7973081
Blank
LCS

\*- 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: 08/21/2015 16:14

Group Number: 1578324

**Surrogate Quality Control**

---

LCSD	103
Limits:	63-135

Analysis Name: TPH-DRO CA C10-C28  
Batch number: 152030014A  
Orthoterphenyl

---

7973065	81
7973067	82
7973069	85
7973071	89
7973073	86
7973075	85
7973077	76
7973079	92
7973081	83
Blank	79
LCS	78
LCSD	63
Limits:	58-137

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel  
Batch number: 152030015A  
Orthoterphenyl

---

7973065	72
7973067	83
7973069	75
7973071	71
7973073	74
7973075	69
7973077	62
7973079	59
7973081	70
Blank	66
LCS	81
LCSD	59
Limits:	42-126

Analysis Name: Volatile Headspace Hydrocarbon  
Batch number: 152040004A  
Propene

---

7973065	80
7973067	77
7973069	61
Blank	96
LCS	100
MS	90
MSD	92
Limits:	47-116

Analysis Name: Volatile Headspace Hydrocarbon  
Batch number: 152050002A  
Propene

---

7973071	66
7973073	80
7973075	77

\*- 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: 08/21/2015 16:14

Group Number: 1578324

**Surrogate Quality Control**

7973077	78
7973079	80
7973081	73
Blank	97
LCS	96
MS	64
MSD	64
Limits:	47-116

\*- 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



Lancaster  
Laboratories

Acct. # 11928

For Eurofins Lancaster Laboratories use only  
Group # 1578324 Sample # 7973064-82  
Instructions on reverse side correspond with circled numbers.

07/20/15 03 500m

## 1 Client Information

Facility # SS#206265-OML G-R#385161 Global WPS ID#SLT2007076

Site Address 1520 POWELL ST @ LANDREGAN, EMERYVILLE, CA

Chevron PM MHO ARCADIS JS Lead Consultant Soboleff

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

S. Herren

## 2 Sample Identification

QA  
MW-17  
MW-18  
MW-19A  
MWX-3  
MWX-6  
MWX-8  
MWX-9  
MWX-10A  
MWX-11A

Sample Identification	Soil Depth	Collected		Grab Composite	Soil	Sediment	Water	NPDES	Surface	Oil	Air	Total Number of Containers	BTEX + MTBE	8021	8260	TPH-GRO	8015	8260	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	TOC (5m 20 5310c)	Sulfide Method 80120 4320 52D	Dissolved Metals Method 200.7	Metals Method 200.7	Methane/ethane RSK-175	Alkalinity/Bicarbonate 80232013	Nitrate/nitrogen (300.0)	Remarks
		Date	Time																										
QA	7/20/15	X		X			X						20	X	X		X	X	X	X	X	X	X	X	X	X	X		
MW-17		1150																											
MW-18		1255																											
MW-19A		1130																											
MWX-3		1358																											
MWX-6		1045																											
MWX-8		0900																											
MWX-9		0945																											
MWX-10A		1245																											
MWX-11A		1010																											

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

Standard

5 day

4 day

72 hour

48 hour

24 hour

EDF/EDD

Relinquished by \_\_\_\_\_ Date 7/20/15 Time \_\_\_\_\_ Received by \_\_\_\_\_ Date 7/20/15 Time 1520

Relinquished by \_\_\_\_\_ Date 7/20/15 Time 1600 Received by \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ FE

## 8 Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default)

Other: \_\_\_\_\_

Relinquished by Commercial Carrier:

UPS \_\_\_\_\_ FedEx  Other \_\_\_\_\_

Temperature Upon Receipt 0.7-4.1 °C

Received by \_\_\_\_\_

CCSMR

Date 7/21/15 Time 0915

Custody Seals Intact? Yes \_\_\_\_\_ No \_\_\_\_\_

*Chevron California Region Analysis Request/Chain of Custody*

eurofins

Lancaster  
Laboratories

Acta

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

**Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300**

The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management  
7050.03

# Explanation of Symbols and Abbreviations

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

<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>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<	less than		
>	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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**ARCADIS**

**Attachment 3**

Historical Groundwater  
Monitoring Data and Analytical  
Results

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds										Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--
<b>ACTIVELY MONITORED/SAMPLED WELLS</b>																		
<b>MWX-2</b>																		
6/24/2009	--	--	--	--	--	--	--	<0.8	--	3	38	<1	<0.8	69	20	0.9	6	--
10/27/09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/19/2010	200	<0.5	<0.5	<0.5	<0.5	<0.5	240	0.9	--	5	230	<1	<0.8	43	130	<0.8	62	--
10/27/10	420	<0.5	<0.5	<0.5	<0.5	<0.5	110	<0.8	--	2	150	<1	<0.8	48	760	<0.8	<1	--
06/09/11	180	<0.5	<0.5	<0.5	<0.5	<0.5	330	<0.8	--	2	130	<1	<0.8	30	310	<0.8	8	--
12/2/2011	340 [330]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<50 [<49]	<0.8 [<0.8]	--	2 [3]	130 [140]	<1 [<1]	<0.8 [<0.8]	45 [44]	480 [510]	<0.8 [<0.8]	3 [3]	--
6/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible
12/27/2012	300	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.8	3	100	<1	<0.8	--	34	420	<0.8	4	--
7/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible
<b>MWX-3</b>																		
6/24/2009	--	--	--	--	--	--	--	2	--	22	670	3	<2	2,100	<2	<2	24	--
10/27/09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/19/2010	470	<0.5	<0.5	<0.5	<0.5	<0.5	93	<0.8	--	10	480	<1	<0.8	490	<0.8	<0.8	12	--
10/27/10	440	<0.5	<0.5	<0.5	<0.5	<0.5	68	<0.8	--	8	500	<1	<0.8	330	<0.8	1	5	--
06/07/11	590	<0.5	<0.5	<0.5	<0.5	<0.5	65	<0.8	--	14	630	<1	<0.8	430	<0.8	<0.8	8	--
12/2/2011	900	<0.5	<0.5	<0.5	<0.5	<0.5	<51	1	--	12	430	1	<0.8	630	<0.8	<0.8	13	--
06/27/2012	92	0.6	<0.5	<0.5	<0.5	<0.5	<53	<0.8	--	10	130	3	<0.8	3	<0.8	3	6	--
12/27/2012	<50	0.6	<0.5	<0.5	<0.5	<0.5	<50	<0.8	2	4	<1	<0.8	--	<1	<0.8	<0.8	2	--
7/20/2015	<50	<0.5	<0.5	<0.5	<0.5	<0.5	390	<0.5	--	1	62	<0.5	<0.5	2	<0.5	<0.5	19	--
<b>MWX-6</b>																		
6/24/2009	--	--	--	--	--	--	--	<0.8	--	<0.8	1	<1	<0.8	<1	<0.8	<1	--	--
10/27/09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/20/2010	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	85	<0.8	--	<0.8	2	<1	<0.8	<1	<0.8	<1	--
10/26/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<51	<0.8	--	<0.8	2	<1	<0.8	<1	<0.8	<0.8	<1	--
06/08/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	53	<0.8	--	<0.8	1	<1	<0.8	<1	<0.8	<0.8	<1	--
11/30/2011	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<49	<0.8	--	<0.8	1	<1	<0.8	<1	<0.8	<0.8	<1	--
06/27/2012	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<49	<0.8	--	<0.8	1	<1	<0.8	<1	<0.8	<0.8	<1	--
12/26/2012	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<49	<0.8	<0.8	1	<1	<0.8	--	<1	<0.8	<0.8	<1	--
7/20/2015	<50	<0.5	<0.5	<0.5	<0.5	<0.5	65	<0.5	--	0.5	0.8	<0.5	<0.5	14	5	<0.5	<0.5	--
<b>MWX-8</b>																		
6/24/2009	--	--	--	--	--	--	--	<0.8	--	3	84	<1	<0.8	64	260	<0.8	6	--
10/27/09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/18/2010	170	<0.5	<0.5	0.5	<0.5	<0.5	67	<0.8	--	3	91	<1	<0.8	67	260	<0.8	6	--
10/27/10	270	<0.5	<0.5	<0.5	<0.5	<0.5	<49	<0.8	--	5	230	<1	<0.8	170	290	<0.8	19	--
06/08/11	160	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.8	--	4	100	<1	<0.8	49	280	<0.8		

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds										Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--
<b>MWX-11A</b>																		
6/24/2009	--	--	--	--	--	--	<0.8	--	<0.8	2	<1	<0.8	3	<0.8	<0.8	<1	--	
10/27/09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
5/20/2010	<50	<0.5	<0.5	<0.5	<0.5	<0.5	110	<0.8	--	0.9	2	<1	<0.8	3	<0.8	<0.8	<1	--
10/28/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	66	<0.8	--	<0.8	2	<1	1	4	<0.8	<0.8	<1	--
06/10/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	250	<0.8	--	4	8	<1	<0.8	11	<0.8	<0.8	<1	--
11/30/2011	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<48	<0.8	--	1	5	<1	<0.8	4	<0.8	<0.8	<1	--
6/26/2012	<50 [<50]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<49 [<49]	<0.8 [<0.8]	--	0.8 [0.8]	2 [2]	<1 [<1]	0.8 [0.9]	5 [5]	<0.8 [<0.8]	<0.8 [<0.8]	<1 [<1]	--
12/27/2012	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.8	1	3	<1	<0.8	--	8	<0.8	<0.8	<1	--
7/20/2015	<50	<0.5	<0.5	<0.5	<0.5	<0.5	290	<0.5	--	2	7	1	<0.5	14	<0.5	<0.5	<0.5	--
<b>MW-17</b>																		
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	5.2	--	--	0.7	1.3	32	11	1.1	<1.0	--
06/19/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	3.1	--	--	<0.5	1.0	38	13	1.2	<1.0	--
09/20/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	2.4	--	--	<0.5	1.4	44	16	2.8	<1.0	--
12/28/90	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	2.0	<0.5	0.6	34	15	2.0	<1.0	--
05/10/91	<50	<0.5	<0.5	<0.5	0.8	--	--	<0.5	--	<0.5	3.0	<0.5	0.6	37	14	1.0	<1.0	ND
08/08/91	82	1.9	2.5	0.9	5.4	--	--	<0.5	--	<0.5	2.5	<0.5	69	15	0.9	<1.0	ND	
11/27/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	13	<0.5	<0.5	59	14	2.4	<1.0	ND
01/29/92	<50	<0.5	0.9	<0.5	0.5	--	--	<0.5	--	<0.5	2.9	<0.5	0.8	35	15	1.1	<1.0	ND
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	1.5	<0.5	0.7	41	12	0.6	<1.0	ND
07/23/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	1.1	<0.5	<0.5	31	14	0.8	<0.5	<0.5
10/28/92	78	1.0	7.1	1.4	6.5	--	--	<0.5	--	<0.5	1.6	<0.5	<0.5	42	11	0.8	<1.0	ND
05/04/93	60	0.8	1.7	1.1	3.0	--	--	<0.5	--	<0.5	1.1	<0.5	<0.5	26	12	0.6	<1.0	<0.5
01/05/94	<50	<0.5	0.7	<0.5	<0.5	--	--	<0.5	--	<0.5	1.1	<0.5	<0.5	25	13	0.8	<1.0	<0.5
05/13/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	1.0	<0.5	0.6	23	13	<0.5	<0.5	<0.5-<1.0
10/24/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	1.4	<0.5	<0.5	26	13	<0.5	<0.5	<0.5-<1.0
04/19/95	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	0.9	<0.5	1.1	21	12	1.2	<0.5	<0.5
11/06/95	<50	<0.5	<0.5	<0.5	<5.0	--	--	<1.0	--	<1.0	1.1	<1.0	<1.0	29	13	<1.0	<1.0	ND
04/26/96	<50	<0.5	<0.5	<0.5	<5.0	--	--	<0.5	--	<0.5	0.8	<0.5	1.2	24	11	0.6	<0.8	<0.5-<5.0
10/10/96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	1.5	<0.5	0.9	31	15	0.6	<0.8	ND
04/22/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	1.2	<0.5	1.7	21	11	<0.5	<0.8	ND
10/16/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	1.1	<1.0	<1.0	21	7.9	<1.0	<0.5	ND
05/04/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	1.4	<0.5	2.1	20	11	0.58	<1.0	ND
11/04/99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	15.4	7.75	<0.5	<0.5	ND
04/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	14	8.7	&		

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds										Comment(s)	
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--	
<b>MW-18</b>																			
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	1.7	--	--	<0.5	2.4	33	20	0.9	<1.0	--	
06/19/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	2.7	--	--	<0.5	0.9	63	20	0.73	<1.0	--	
09/20/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	3.3	--	--	<0.5	1.6	76	25	1.7	<1.0	--	
12/28/90	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	2.0	<0.5	0.8	44	21	1.0	<1.0	--	
05/10/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	2.0	<0.5	0.7	47	20	2.0	<1.0	ND	
08/08/91	52	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	2.0	<0.5	0.7	32	25	1.0	<1.0	ND	
11/27/91	<50	0.6	1.5	0.6	2.1	--	--	<0.5	--	<0.5	3.6	<0.5	0.5	60	18	1.5	<1.0	ND	
01/29/92	67	3.7	5.2	1.5	5.0	--	--	<5.0	--	<5.0	<5.0	<5.0	67	17	<5.0	<10	ND		
03/26/92	80	<0.5	<0.5	<0.5	0.8	--	--	<1.2	6.4	<1.2	<1.2	<1.2	130	19	1.7	<2.5	ND		
07/23/92	50	1.3	2.1	0.5	3.0	--	--	<0.5	--	<0.5	3.0	<0.5	0.5	67	19	0.8	<0.5	<0.5	
10/28/92	54	<0.5	1.3	<0.5	1.1	--	--	<0.5	--	<0.5	1.1	<0.5	<0.5	52	14	0.8	<1.0	ND	
05/04/93	<50	<0.5	<0.5	<0.5	<1.5	--	--	<0.5	--	<0.5	1.9	<0.5	0.7	48	18	2.5	<1.0	ND <sup>14</sup>	
01/05/94	<50	<0.5	0.5	<0.5	0.6	--	--	<0.5	--	<0.5	4.0	<0.5	0.8	94	17	1.0	<1.0	<0.5	
05/13/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	0.8	<0.5	0.8	16	15	0.8	<0.5	<0.5-<1.0	
10/24/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	22	15	1.2	<0.5	<0.5-<1.0	
04/19/95	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	2.2	<0.5	1.3	46	14	1.1	<0.5	ND <sup>15</sup>	
11/06/95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	1.8	<1.0	1.2	45	18	<1.0	<1.0	ND	
04/26/96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	2.8	<0.5	3.0	31	17	0.6	<0.8	<0.5-<5.0	
10/10/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - paved over		
04/22/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	1.7	<0.5	3.2	26	15	<0.5	<0.8	ND	
10/16/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	1.0	<1.0	2.2	25	11	<1.0	<0.5	ND	
05/04/98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.1	--	1.7	4.5	2.5	3.1	40	<1.0	<1.0	<2.0	ND	
10/27/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	0.77	<0.5	1.7	19	14	<0.5	<1.0	ND	
04/15/99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.625	--	<0.625	1.78	3.45	<0.625	2.29	27.4	14.5	0.908	<1.25	ND
11/04/99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	1.51	18.5	10.2	<0.5	<0.5	ND	
04/13/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
04/23/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	<1.0	--	<1.0	<1.0	<1.0	10	9.3	<1.0	<1.0	-- <sup>21</sup>		
10/04/01	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1	--	<1	<1	<1	13	11	<1	<1	-- <sup>21</sup>		
04/01/02	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1	--	<1	<1	<1	10	9	<1	<1	-- <sup>21</sup>		
10/19/02	<50	<0.50	<0.50	<0.50	1.6	<2.5	--	<1	--	<1	<1	<1	15	10	<1	<1	<1-<2.0		
04/16/03	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--	<0.8	--	<0.8	<0.8	<1	<0.8	9	9	<0.8	<1	<0.8-<2	
10/29/03	<50	<0.5	1	<0.5	0.7	1	--	<0.8	--	<0.8	1	<1	<0.8	20	9	<0.8	<1	<0.5-<2	BTEX and MTBE by EPA Method 8260.
04/01/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible, vehicle parked over well		
10/01/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible, vehicle parked over well		
04/08/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	<0.8	2	<1	<0.8	13	8	3	<1	<0.5-&	

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds											Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--	Comment(s)
04/22/97	43	<0.5	<0.5	<0.5	<0.5	<5.0	--	<5.0	--	7.1	85	9.1	<5.0	150	830	<5.0	<8.0	ND	TPH-G chromatogram pattern indicates an unidentified hydrocarbon.
10/16/97	380	<0.5	<0.5	<0.5	<0.5	22	--	1.6	--	6.9	100	5.5	<1.0	130	660	<1.0	4.2	ND <sup>17</sup>	
05/04/98	200	<0.5	<0.5	<0.5	<0.5	<2.0	--	<10	--	13	80	<10	<10	230	500	<10	<20	ND	TPH-G chromatogram pattern indicates an unidentified hydrocarbon.
10/27/98	170	<0.5	<0.5	<0.5	<0.5	12<2.0	--	<25	--	<25	70	<25	<25	80	910	<25	<50	ND	TPH-G chromatogram pattern indicates an unidentified hydrocarbon, confirmation run was conducted for MTBE.
11/04/99	290	<0.5	<0.5	<0.5	<0.5	26.8<0.5	--	<50	--	<50	<50	<50	<50	209	<50	<50	ND	MTBE was analyzed outside the EPA recommended holding time, confirmation run was conducted for MTBE.	
04/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	<25	--	25	68	<25	<25	140	1,100	<25	<25	-- <sup>21</sup>	Laboratory report indicates discrete peaks for TPH-G sample, MTBE by EPA Method 8260.
10/05/00	130	<0.50	<0.50	<0.50	<0.50	26<2.0	--	2.5	--	9.5	50	5.5	1	82	940	<1.0	5	-- <sup>22</sup>	Laboratory report indicates discrete peaks for TPH-G sample, MTBE was analyzed outside the EPA recommended holding time
04/23/01	100	<0.50	<0.50	<0.50	<0.50	3.4<2.0	--	1.6	--	9.9	100	5.2	<1.0	180	690	<1.0	1.6	-- <sup>21</sup>	
10/04/01	380	<0.50	<0.50	<0.50	<1.5	<2.5	--	2	--	11	61	4	<1	130	720	<1	3	-- <sup>23</sup>	
04/01/02	310	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1	--	7	71	2	<1	100	530	<1	2	-- <sup>24</sup>	
10/19/02	300	<0.50	<0.50	<0.50	<1.5	<2.5	--	<1	--	8	44	1	<1	130	600	<1	2	<1-<3.0 <sup>25</sup>	
04/16/03	280	<0.5	<0.5	<0.5	<1.5	<2.5	--	<0.8	--	6	69	<1	<0.8	82	570	<0.8	1	<0.8-2 <sup>10</sup>	
10/29/03	330	<0.5	<0.5	<0.5	<1	<0.5	--	<0.8	--	8	47	1	<0.8	98	630	<0.8	2	<0.5-<2 <sup>26</sup>	BTEX and MTBE by EPA Method 8260.
04/01/04	260	<0.5	<0.5	<0.5	<1	<0.5	--	<0.8	--	5	54	<1	<0.8	78	660	<0.8	<1	<0.5-<2	BTEX and MTBE by EPA Method 8260.
10/01/04	260	<0.5	<0.7	<0.8	<1.6	<0.5	--	<0.8	--	8	46	<1	<0.8	95	540	<0.8	1	<0.5-<2 <sup>27</sup>	BTEX and MTBE by EPA Method 8260.
04/08/05	190	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	4	48	<1	<0.8	51	370	<0.8	<1	<0.5-<2 <sup>28</sup>	BTEX and MTBE by EPA Method 8260.
10/20/05	180	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	5	26	<1	<0.8	77	350	2	<1	<0.5-<2 <sup>29</sup>	BTEX and MTBE by EPA Method 8260.
04/20/06	180	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	3	39	<1	<0.8	57	330	<0.8	2	<0.5-<2 <sup>29</sup>	BTEX and MTBE by EPA Method 8260.
10/25/06	210	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	4	24	<1	<0.8	54	370	2	<1	<0.5-<2 <sup>30</sup>	BTEX and MTBE by EPA Method 8260.
04/13/07	290	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	4	55	<1	<0.8	51	610	<0.8	<1	<0.5-<2 <sup>31</sup>	BTEX and MTBE by EPA Method 8260.
10/19/07	200	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	3	42	<1	<0.8	40	420	<0.8	<1	<0.8-<2 <sup>32</sup>	BTEX and MTBE by EPA Method 8260.
04/11/08	300	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	3	37	<1	<0.8	41	540	<0.8	<1	<0.5-<2 <sup>31</sup>	BTEX and MTBE by EPA Method 8260.
10/17/08	240	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	5	22	<1	<0.8	71	440	1	<1	<0.5-<2 <sup>28</sup>	BTEX and MTBE by EPA Method 8260.
04/30/09	200	<0.5	<0.5	<0.5	<1.0	<0.5	--	<0.8	--	2	17	<1	<0.8	43	390	<0.8	<1	ND	
06/24/09	--	--	--	--	--	--	--	<0.8	--	2	13	<1	<0.8	42	310	<0.8	<1	--	
10/27/09	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.8	--	4	42	<1	<0.8	57	490	<0.8	<1	ND	
05/19/10	200	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.8	--	4	100	<1	<0.8	54	400	<0.8	2	--	
10/27/10	220	<0.5	<0.5	<0.5	<0.5	<0.5	56	<0.8	--	4	110	<1	<0.8	45	360	<0.8	2	--	
06/08/11	130	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.8	--	3	54	<1	<0.8	26	290	<0.8	<1	--	
11/30/2011	240	<0.5	<0.5	<0.5	<0.5	<0.5	<49	<0.8	--	4	89	<1	<0.8	56	340	<0.8	1	--	
06/27/2012	120	<0.5	<0.5	<0.5	<0.5	<0.5	<49	<0.8	--	2	73	<1	<0.8	<1	<0.8	<0.8	3	--	
12/26/2012	<50	<0.5	0.6	<0.5	<0.5	<0.5	<49	<0.8	<0.8	22	<1	<0.8	--	2	10	<0.8			

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds											Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MW-1 (cont.)																			
07/23/92	4,000	50	82	40	160	--	--	<50	--	<50	2,300	<50	<50	<50	<50	<50	170	<50	TPH-G chromatogram pattern indicates an unidentified hydrocarbon.
10/28/92	980	36	6.7	3.0	10	--	--	4.2	--	30	1,600	3.6	<0.5	16	<0.5	<0.5	810	ND	
05/04/93	650	9.4	2.4	1.2	4.5	--	--	1.0	--	16	670	0.5	<0.5	9.2	<0.5	<0.5	110	<0.5	
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
05/13/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - paved over	
MW-2																			
04/26/85	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/11/87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/07/88	<100	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/13/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/14/89	<100	<0.2	<0.2	<0.2	<0.4	--	--	<0.2	<0.2	--	--	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	--	
07/31/89	<100	<0.2	<1.0	<0.2	<0.4	--	--	<0.2	<0.2	--	--	<0.4	0.5	<0.2	<0.2	<1.0	<0.2	--	
12/08/89	--	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<1.0	--		
06/19/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<1.0	--		
09/20/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
09/21/90	<50	<1.5	<1.5	<1.5	<4.5	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	--	
12/28/90	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--		
05/10/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND		
08/08/91	--	--	--	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND		
11/27/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND		
01/29/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND		
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND		
07/23/92	<50	<0.5	<0.5	<0.5	0.8	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
10/28/92	55	1.3	6.9	1.1	5.1	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
05/04/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
05/13/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
10/24/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
04/19/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
MW-2A																			
11/06/95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	
04/26/96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5-<5.0	
10/10/96	60	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND	TPH-G chromatogram pattern indicates an unidentified hydrocarbon.
04/22/97	<50	0.8	<0.5	<0.5	<0.5	<5.0	--	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<4.0	ND	
10/16/97	80	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	ND	
05/04/98	96	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	TPH-G chromatogram pattern indicates an unidentified hydrocarbon.
10/27/98	170	<0.5	<0.5	<0.5	9.6	44/<2.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5</td						

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds											Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MW-3 (cont.)																			
01/29/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
07/23/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
10/28/92	92	1.8	12	2.0	10	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
05/04/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/13/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4																			
04/26/85	3,100	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/11/87	--	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/07/88	<100	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/13/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/14/89	380	<0.5	<1.0	<1.0	<1.0	--	<3,000,000	<1.0	<1.0	--	--	2	<1.0	<1.0	<1.0	<2.0	<1.0	--	TPH was reported as Diesel #2.
MW-5																			
04/26/85	1,600	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/11/87	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/07/88	<100	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/13/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/14/89	4,300	<0.5	<1.0	<1.0	<1.0	--	<3,000,000	<1.0	<1.0	--	--	2	<1.0	<1.0	<1.0	<2.0	<1.0	--	
MW-6																			
04/26/85	580	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/11/87	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/07/88	8,000	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/13/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/14/89	3,300	<0.5	<1.0	<1.0	<1.0	--	<3,000,000	<1.0	<1.0	--	--	2	<1.0	<1.0	<1.0	<2.0	<1.0	--	TPH was reported as Diesel #2.
MW-7																			
04/26/85	700	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/11/87	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/07/88	17,000	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/13/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/14/89	<50	<0.5	<1.0	<1.0	<1.0	--	<3,000,000	<1.0	<1.0	--	--	1	1	<1.0	<1.0	<2.0	<1.0	--	
07/31/89	160	<0.1	<0.5	<0.1	<0.2	--	--	<0.1	0.3	--	--	0.3	4.5	<0.1	<0.1	<0.5	<0.1	ND <sup>7</sup>	TPH was reported as Diesel #2.
07/31/89	100	<0.1	<0.5	<0.1	<0.2	--	--	<0.1	0.4	--	--	0.2	2.6	<0.1	<0.1	<0.5	<0.1	ND <sup>7</sup>	TPH was reported as Diesel #2.
12/08/89	--	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	<0.5	--	--	<0.5	0.67	<0.5	<0.5	<0.5	<1.0	--	
03/21/90	<50	<0.3	<0.3	<0.3	0.6	--	--	<0.2	<0.5	--	--	<0.5	1.4	<0.5	<0.5	<0.5	<1.0	--	
06/19/90	<50	<0.3	<0.3	<0.3	0.6	--	--	<0.2	<0.5	--	--	<0.5	0.67	<0.5	<0.5	<0.5	<1.0	--	
09/20/90	--	--	--	--	--	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
09/21/90	<50	1.5	<0.3	<0.3	<0.6	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/28/90	<50	0.7	<0.5	<0.5	0.7	--	--	<0.5	--	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<1.0	--	
05/10/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
08/08/91	&																		

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds						Chlorinated Volatile Organic Compounds										Comment(s)		
	TPH-G (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLEMES (µg/L)	MTBE (µg/L)	TPH-D (µg/L)	1,1-DCE (µg/L)	1,2-DCE (µg/L)	t-1,2-DCE (µg/L)	c-1,2-DCE (µg/L)	1,1-DCA (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	PCE (µg/L)	CF (µg/L)	VC (µg/L)	HVOCS (µg/L)	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--	
<b>MW-7 (cont.)</b>																			
04/13/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
10/05/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
04/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
10/04/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
10/19/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
04/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
10/29/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	construction	
<b>MW-8</b>																			
04/26/85	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
09/11/87	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/07/88	<b>20,000</b>	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/13/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/14/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	<3,000,000	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	--	
07/31/89	<50	<0.1	<0.5	<0.1	<0.2	--	--	<0.1	--	0.6	1.9	1.7	1.7	0.4	<0.1	<0.5	<b>1.2</b>	ND	
12/08/89	--	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	0.53	--	--	<0.5	0.84	<0.5	<0.5	<0.5	<1.0	--	
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	0.96	--	--	<0.5	0.72	<0.5	<0.5	<0.5	<1.0	--	
06/19/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	0.59	--	--	<0.5	0.67	<0.5	<0.5	<0.5	<1.0	--	
09/20/90	--	--	--	--	--	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
09/21/90	<50	<b>6.0</b>	<0.3	<0.3	<0.6	--	--	<0.5	--	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5	<1.0	--	
12/28/90	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
05/10/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
08/08/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
11/27/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	0.7	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
07/23/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
10/28/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
05/04/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
05/13/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0		
10/24/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
04/19/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	excavation in 1989.		
11/06/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
04/26/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
10/10/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
04/22/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND	
10/16/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<0.5	ND	
05/04/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
10/27/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
04/15/99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
11/04/99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND	
<b>MW-9</b>																			
04/26/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
09/11/87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
07/07/88	<b>400</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
05/10/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - unable to locate		
<b>MW-10</b>																			
07/07/88	--	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
04/14/89	<50	<0.5	<1.0	<1.0	<1.0	<1.0	--	<3,000,000	<1.0	<b>15</b>	--	--	2.0	<1.0	<b>5.0</b>	<1.0	<2.0	<1.0	--
07/31/89	<50	<0.1	<0.5	<0.1	<0.2	--	--	0.7	--	<b>6.3</b>	<b>27</b>	2.9	<0.1	<b>5.3</b>	<0.1	<0.5	<0.1	ND	
12/08/89	--	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	<b>24</b>	--	--	3.1	<0.5	4.9	<0.5	0.6	<1.0	--	
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	0.7	<b>30</b>	--	--	2.							

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds											Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
<b>MW-10 (cont.)</b>																			
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.7	--	9.2	29	2.5	<0.5	6.8	<0.5	<0.5	<1.0	ND	
07/23/92	<50	<0.5	1.8	0.5	1.9	--	--	<0.5	--	6.1	21	1.5	<0.5	4.7	<0.5	<0.5	<0.5	<0.5	
10/28/92	<50	0.6	0.7	<0.5	1.2	--	--	<0.5	--	4.3	16	2.1	<0.5	4.1	<0.5	<0.5	<1.0	ND	
05/04/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
01/05/94	<50	<0.5	<0.5	<0.5	0.6	--	--	<0.5	--	1.3	5.2	0.5	1.0	0.8	<0.5	<0.5	<1.0	<0.5	
05/13/94	140	<0.5	<0.5	<0.5	1.3	--	--	<0.5	--	12	31	2.7	<0.5	4.8	<0.5	<0.5	<0.5	<0.5-<1.0	
10/24/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<10	--	13	44	<10	<10	<10	<10	<10	<10	<10-<20	
04/19/95	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.7	--	14	36	<0.5	<0.5	9.2	<0.5	<0.5	<0.5	<0.5	
11/06/95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	1.0	--	19	41	1.4	<1.0	14	<1.0	<1.0	<1.0	ND	
04/26/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
10/10/96	<50	<0.5	<0.5	<0.5	0.6	34/<5.0	--	0.7	--	17	38	0.8	<0.5	14	<0.5	<0.5	<0.8	ND	MTBE by EPA Method 8240.
04/22/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	12	27	0.5	<0.5	13	<0.5	<0.5	<0.8	ND	
10/16/97	<50	<0.5	<0.5	<0.5	<0.5	34	--	<1.0	--	11	23	<1.0	<1.0	<10	<1.0	<1.0	0.7	ND	
05/04/98	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	6.5	16	<0.5	<0.5	7.6	<0.5	<0.5	<1.0	ND	Sample has chlorinated hydrocarbon pattern, needs GCMS confirmation of MTBE.
10/27/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	7.7	18	0.54	<0.5	9.6	<0.5	<0.5	<1.0	ND	
04/15/99	<50	<0.5	<0.5	<0.5	<0.5	9.45	--	<0.5	--	8.32	19.1	0.603	<0.5	11.3	<0.5	<0.5	<1.0	ND	
11/04/99	<50	<0.5	<0.5	<0.5	<0.5	21	--	<0.5	--	5.17	13.8	<0.5	<0.5	8.23	<0.5	<0.5	<0.5	ND	
<b>MW-11</b>																			
07/07/88	--	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/14/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	--	<1.0	120	--	--	<1.0	<1.0	4.0	<1.0	<2.0	10	--	
07/31/89	<100	<0.2	<0.2	<0.2	<0.2	--	--	0.9	--	40	110	2.2	1.4	2.9	<0.2	<0.2	<0.2	ND	
12/08/89	--	<0.3	<0.3	<0.3	<0.6	--	--	0.5	120	--	--	2.1	1.2	4.1	<0.5	<0.5	2.4	--	
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	1.3	150	--	--	1.2	1.7	3.5	<0.5	<0.5	4.3	ND <sup>8</sup>	
06/19/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	0.068	140	--	--	1.3	<0.5	5.0	<0.5	<0.5	1.0	--	
09/20/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
09/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	100	--	--	1.1	<0.5	3.8	<0.5	<0.5	<1.0	--	
12/28/90	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	23	43	0.9	0.7	3.0	<0.5	<0.5	<1.0	--	
08/08/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	29	77	0.9	<0.5	2.4	<0.5	<0.5	<1.0	ND	
11/27/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	34	240	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
01/29/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5.0	--	33	91	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND	
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	21	51	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	ND	
07/23/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	18	46	0.6	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	
10/28/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	0.5	--	36	80	<0.5	<0.5	4.6	<0.5	<0.5	<1.0	ND	
05/04/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
05/13/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	6									

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds										Comment(s)	
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--	
<b>MW-12 (cont.)</b>																			
08/08/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<1.0	ND
11/27/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
01/29/92	<50	<0.5	<0.5	<0.5	1.0	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
07/23/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - unable to locate	
<b>MW-13</b>																			
03/21/90	480	<0.3	<0.3	1.0	5.0	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
06/19/90	180	<0.3	<0.3	0.8	3.0	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
09/20/90	150	<0.3	<0.3	<0.3	0.54	--	--	<0.2	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
12/28/90	160	<0.5	<0.5	<0.5	1.0	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
05/10/91	110	<0.5	<0.5	<0.5	2.0	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND <sup>10</sup>	
08/08/91	220	<0.5	<0.5	<0.5	1.8	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
11/27/91	70	<0.5	<0.5	<0.5	1.2	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
01/29/92	150	<0.5	<0.5	3.1	7.1	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
03/26/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
07/23/92	190	<0.5	<0.5	<0.5	2.1	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
10/28/92	190	<0.5	<0.5	<0.5	2.0	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
05/04/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
05/13/94	220	<0.5	1.2	<0.5	1.7	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0	
10/24/94	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0	
04/19/95	140	<0.5	<0.5	<0.5	1.2	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	TPH-G chromatogram pattern indicates an unidentified hydrocarbon.	
11/06/95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	
04/26/96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5-<5.0	
10/10/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible		
04/22/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND	
10/16/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	
05/04/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
10/27/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
04/15/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
11/04/99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND	
<b>MW-14</b>																			
03/21/90	170	<0.3	<0.3	<0.4	2.0	--	--	<2.0	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
06/19/90	--	--	--	--	--	--	--	<2.0	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	
09/20/90	<50	<0.3</td																	

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**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

WELL ID/ DATE	Fuel Related Hydrocarbon Compounds							Chlorinated Volatile Organic Compounds											Comment(s)
	TPH-G ( $\mu\text{g/L}$ )	BENZENE ( $\mu\text{g/L}$ )	TOLUENE ( $\mu\text{g/L}$ )	ETHYL BENZENE ( $\mu\text{g/L}$ )	TOTAL XYLEMES ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	1,2-DCE ( $\mu\text{g/L}$ )	t-1,2-DCE ( $\mu\text{g/L}$ )	c-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCA ( $\mu\text{g/L}$ )	1,1,1-TCA ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	PCE ( $\mu\text{g/L}$ )	CF ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	HVOCS ( $\mu\text{g/L}$ )	
	ESL	100	1	40	30	20	5	100	6	10	6	5	62	--	5	5	70	0.5	--
MCL	NA	1	150	300	1,800	13	NA	6	10	6	5	200	--	5	5	70	0.5	--	
<b>MW-15 (cont.)</b>																			
04/19/95	--	--	--	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
04/26/96	--	--	--	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5-<5.0
11/06/95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
04/26/96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	
10/10/96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND
04/22/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND
10/16/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
05/04/98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
10/27/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/15/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11/04/99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
04/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-- <sup>21</sup>
10/06/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/04/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/19/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/29/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>MW-16</b>																			
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	0.8	--	--	<0.5	<0.5	27	8.0	2.0	<1.0	--	
06/19/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	<0.5	--	--	<0.5	<0.5	35	7.0	2.0	<1.0	--	
09/20/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	0.9	--	--	<0.5	<0.5	49	15	4.1	<1.0	--	
12/28/90	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	29	18	4.0	<1.0	ND <sup>12</sup>	
05/10/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	0.5	<0.5	<0.5	32	10	4.0	<1.0	ND	
08/08/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	35	13	1.9	<1.0	ND	
11/27/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	--	<0.5	1.3	<0.5	<0.5	47	12	1.8	<1.0	ND <sup>13</sup>	
01/29/92	65	3.6	6.2	1.9	6.6	--	--	<0.5	--	<0.5	0.9	<0.5	<0.5	31	11	1.8	<1.0	ND	
03/26/92	270	21	27	9.5	41	--	--	<0.8	--	<0.8	<0.8	<0.8	<0.8	24	8.5	1.7	<1.7	<0.8-<1.7	
07/23/92	<50	<0.5	<0.5	<0.5	0.7	--	--	<0.5	--	<0.5	0.9	<0.5	<0.5	37	12	1.0	<0.5	<0.5	
10/28/92	<50	0.9	1.4	<0.5	1.1	--	--	<0.5	--	<0.5	1.7	<0.5	<0.5	39	14	1.1	<1.0	ND	
05/04/93	51	<0.5	1.0	0.6	1.7	--	--	<0.5	--	<0.5	<0.5	<0.5	<0.5	32	10	1.1	<1.0	<0.5	
01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible	
05/13/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled - inaccessible, paved over	
<b>MW-19</b>																			
03/21/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	<0.2	10	--	--	<0.5	2.5	41	53	3.2	<1.0	--	
06/19/90	<50	<0.3	<0																

**ATTACHMENT 3**  
**CURRENT AND HISTORICAL GROUNDWATER ANALYTICAL RESULTS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
**1520 Powell Street**  
**Emeryville, California**

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**EXPLANATIONS:**

**General:**

Bolded results indicate a detection above the ESL.

Groundwater laboratory analytical results prior to April 13, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

Historical results reported below the detection limit and that did not have a reporting limit provided in the available documents are listed as ND.

1,1-DCE = 1,1-dichloroethene

ESL = Environmental Screening Limit

TCE = trichloroethene

1,2-DCE = 1,2-dichloroethene

HVOCS = halogenated volatile organic compounds

TPH-D = total petroleum hydrocarbons as diesel

t-1,2-DCE = trans-1,2-dichloroethene

MCL = Maximum Contaminant Limit

TPH-G = total petroleum hydrocarbons as gasoline

c-1,2-DCE = cis-1,2-dichloroethene

MTBE = methyl tertiary butyl ether

VC = vinyl chloride

1,1-DCA = 1,1-dichloroethane

ND = not detected

-- = not measured/not analyzed

1,1,1-TCA = 1,1,1-trichloroethane

PCE = tetrachloroethene

( $\mu$ g/L) = microgram(s) per liter

CF = chloroform

ppb = parts per billion

< = not detected at or above the indicated reporting limit

**HVOC Footnotes:**

<sup>1</sup> 6 ppb 1,2-dichloropropane detected; other HVOCS not detected.

<sup>2</sup> 0.6 ppb 1,2-dichloroethane detected; other HVOCS not detected.

<sup>3</sup> 63 ppb chloromethane and 0.6 ppb methylene chloride detected; other HVOCS not detected; sample contained 1,250 ppb total dissolved solids.

<sup>4</sup> 0.9 ppb trans-1,3-dichloropropane detected; other HVOCS not detected; sample contained 810 ppb total dissolved solids.

<sup>5</sup> 0.9 ppb trichlorofluoromethane and 1 ppb trans-1,3-dichloropropane detected; other HVOCS not detected.

<sup>6</sup> 11 ppb trans-1,3-dichloropropane detected; other HVOCS not detected.

<sup>7</sup> 0.1 ppb 1,2-dichlorobenzene detected; other HVOCS not detected.

<sup>8</sup> 1.8 ppb 1,2-dichloroethane detected; other HVOCS not detected

<sup>9</sup> Chloromethane was detected at 2.4 ppb. Other HVOCS not detected at detection limits of 0.5 ppb.

<sup>10</sup> 3 ppb 1,1,2,2-tetrachloroethane detected; other HVOCS not detected.

<sup>11</sup> 0.9 ppb 1,2-dichlorobenzene detected; other HVOCS not detected.

<sup>12</sup> 0.5 ppb 1,2-dichloroethane detected; other HVOCS not detected.

<sup>13</sup> 0.9 ppb 1,2-dichloroethane detected; other HVOCS not detected.

<sup>14</sup> Dichloromethane detected at 6.2 ppb. Other HVOCS not detected at detection limits of 0.5 ppb.

<sup>15</sup> Chloromethane was detected at 0.6 ppb. Other HVOCS not detected at detection limits of 0.5 ppb.

<sup>16</sup> 1,1,2,2-Tetrachloroethane detected at 1.8 ppb; other HVOCS not detected at detection limits of 1.2 to 2.5 ppb.

<sup>17</sup> Laboratory report indicates 1,1,2,2-Tetrachloroethane was detected at 3.8 ppb. Reported values for cis-1,2-dichloroethene; trichloroethene, and tetrachloroethene are from 50X dilution sample re-analysis.

<sup>18</sup> Trace concentrations of trihalomethane compounds detected in bailer blank.

<sup>19</sup> 3.1 ppb 1,2-dichlorobenzene detected; other HVOCS not detected.

<sup>20</sup> Trace concentrations of trihalomethane compounds detected in bailer blank.

<sup>21</sup> Laboratory report indicates all other HVOCS were ND; See specific laboratory analytical report.

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**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
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**EXPLANATIONS:**

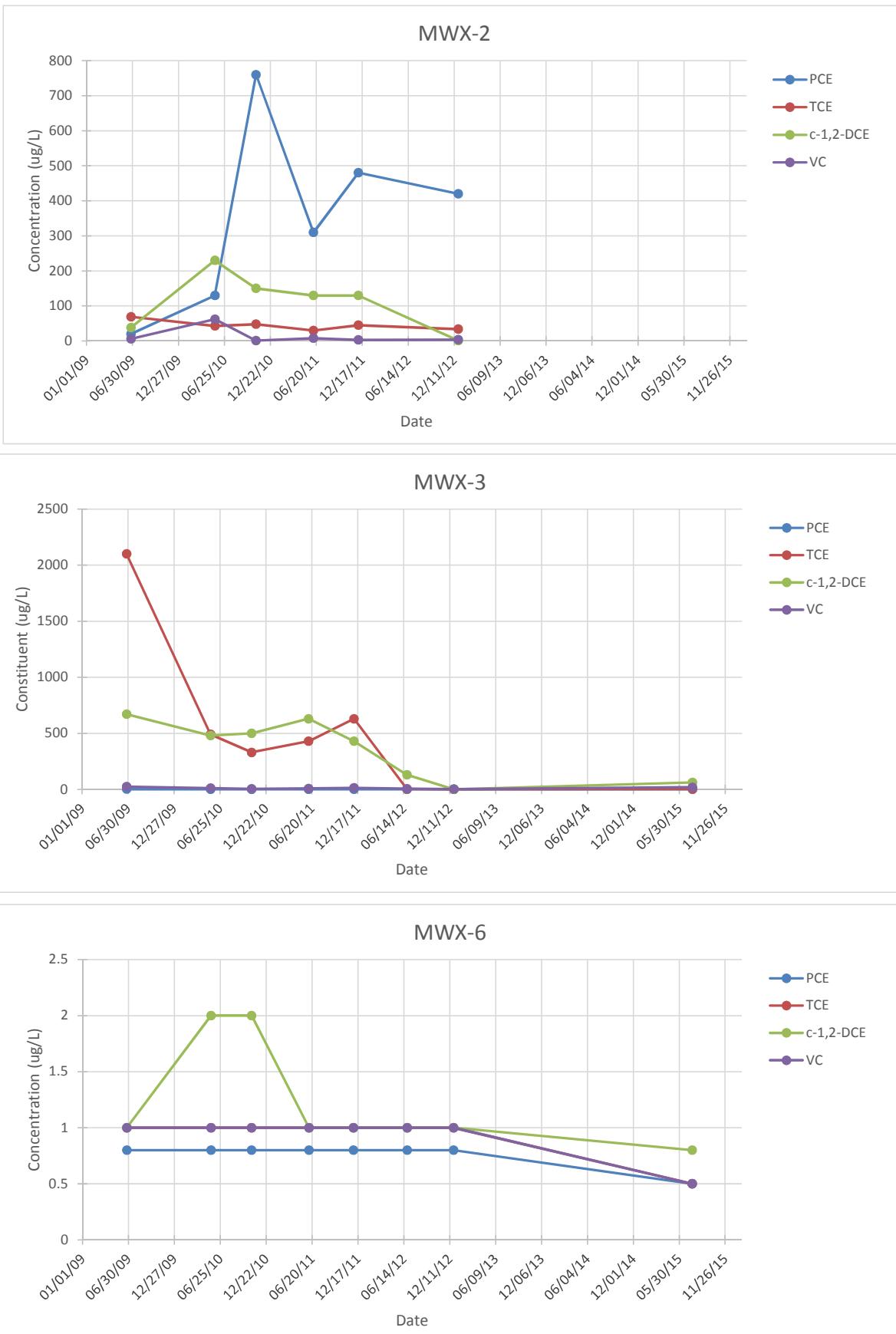
- <sup>22</sup> Laboratory report indicates all other HVOCS were ND, except for Freon 113 was detected at 2.3 ppb and 1,1,2,2-Tetrachloroethane was 3.9 ppb.
- <sup>23</sup> Laboratory report indicates all other HVOCS were ND, except for Freon 113 detected at 5 ppb and 1,1,2,2,-Tetrachloroethane at 3 ppb; See specific laboratory analytical report.
- <sup>24</sup> Laboratory report indicates all other HVOCS were ND, except for 1,1,2,2,-Tetrachloroethane detected at 4 ppb; See specific laboratory analytical report.
- <sup>25</sup> Laboratory report indicates all other HVOCS were less than the reporting limit, except for 1,1,2,2-Tetrachloroethane was detected at 2 ppb, and Freon 113 was detected at 4 ppb.
- <sup>26</sup> Laboratory report indicates all other HVOCS were ND, except for Freon 113 was detected at 3 ppb and 1,1,2,2-Tetrachloroethane was 3 ppb.
- <sup>27</sup> Laboratory report indicates all other HVOCS were ND, except for Freon 113 was detected at 5 ppb and 1,1,2,2-Tetrachloroethane was 2 ppb.
- <sup>28</sup> Laboratory report indicates all other HVOCS were ND, except 1,1,2,2-Tetrachloroethane was 2 ug/L.
- <sup>29</sup> Laboratory report indicates all other HVOCS were ND, except 1,1,2,2-Tetrachloroethane was 1 ppb.
- <sup>30</sup> Laboratory report indicates all other HVOCS were ND, except for Freon 113 was detected at 3 ppb.
- <sup>31</sup> Laboratory report indicates all other HVOCS were ND, except 1,1,2,2-Tetrachloroethane was 3 ppb.
- <sup>32</sup> Laboratory report indicates all other HVOCS were ND, except 1,1,2,2-Tetrachloroethane was 4 ppb.

**ARCADIS**

**Attachment 4**

**Chlorinated Volatile Organic  
Compounds Concentration  
Trends**

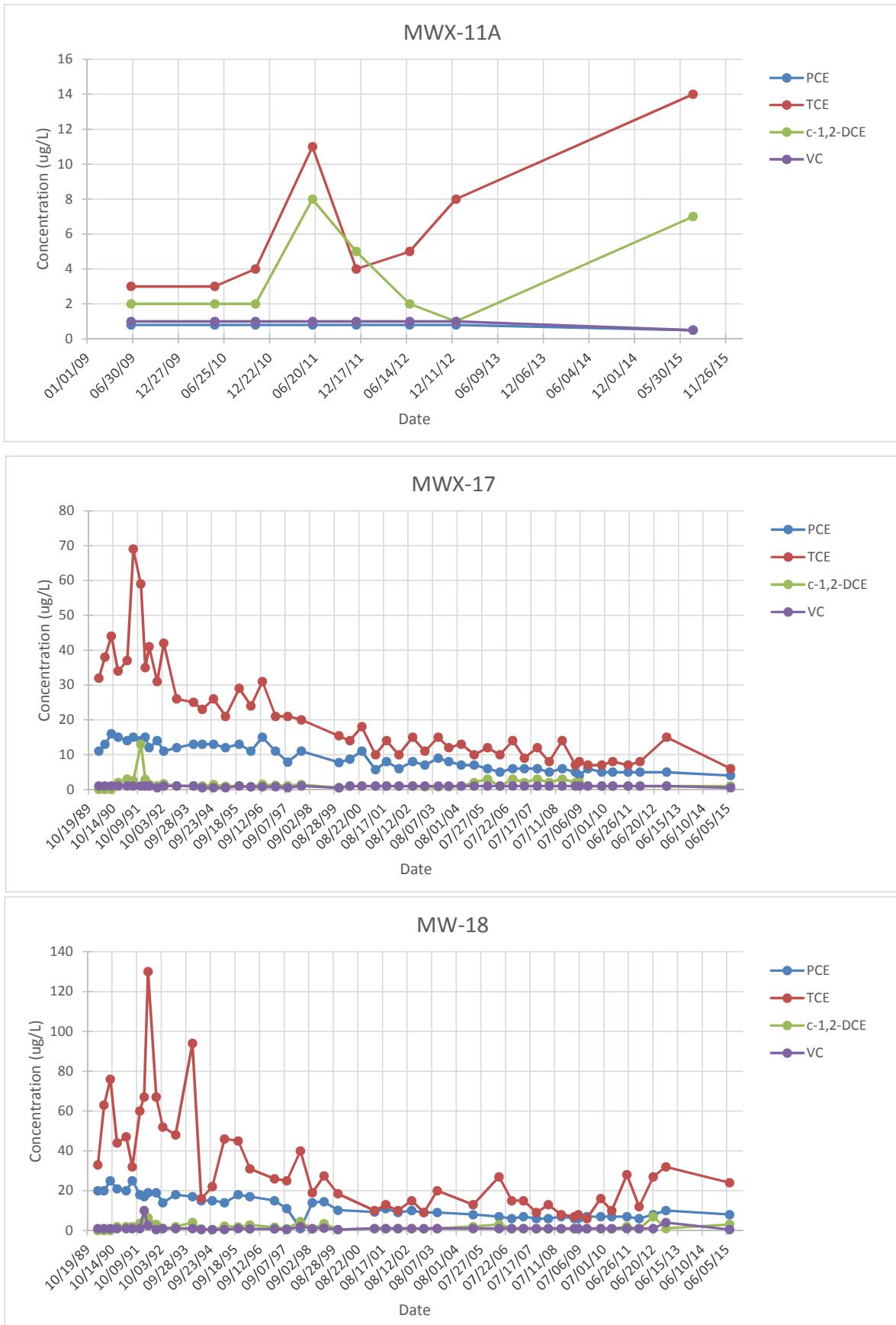
**ATTACHMENT 4**  
**CHLORINATED VOLATILE ORGANIC COMPOUNDS CONCENTRATION TRENDS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
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**ATTACHMENT 4**  
**CHLORINATED VOLATILE ORGANIC COMPOUNDS CONCENTRATION TRENDS**  
**Former Chevron Asphalt Plant and Bulk Terminal #206265**  
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**ATTACHMENT 4**  
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