



January 31, 2017

James P. Kiernan, P.E.
Project Manager

**Chevron Environmental
Management Company**
6001 Bollinger Canyon Road
Room C2102
San Ramon, CA 94583
Tel (925) 842-3220
jkiernan@chevron.com

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

By Alameda County Environmental Health 9:33 am, Feb 15, 2017

Re: 76 Station No. 0746 (351647)
Semi-Annual Status Report-Second Half 2016
3943 Broadway, Oakland, California
Fuel Leak Case No.: RO0000203
GeoTracker Global ID #T0600101471

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

The information in this report is accurate to the best of my knowledge. This report was prepared by Arcadis, upon whose assistance and advice I have relied.

Sincerely,

James P. Kiernan, P.E.
Project Manager

Attachment: Semi-Annual Status Report-Second Half 2016 by Arcadis

Mr. Keith Nowell
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Arcadis U.S., Inc.
2999 Oak Road
Suite 300
Walnut Creek
CA 94597
Tel 408-797-2013
Fax 925-274-1103
www.arcadis.com

Subject:
Second Semi-Annual Status Report, Second Half 2016

ENVIRONMENT

Dear Mr. Nowell,

On behalf of Chevron Environmental Management Company's (CEMC's) affiliate, Union Oil Company of California (Union Oil), Arcadis has prepared the attached *Semi-Annual Status Report - Second Half 2016* for the following facility:

Date:
January 30, 2017

<u>76 Station No.</u>	<u>Case No.</u>	<u>Location</u>
0746	RO0000203	3943 Broadway Oakland, CA 94611

Contact:
Tamera Rogers

Phone:
408.797.2013

Email:
tamera.rogers@arcadis.com
Our ref:
B0035135.1647

If you have any questions, please do not hesitate to contact me.

Sincerely,

Arcadis U.S., Inc.



Tamera Rogers
Project Manager



Katherine Brandt, P.G.
Senior Geologist



Copies:
Geotracker Database
Mr. James Kiernan, CEMC (electronic)
Mr. Ed Ralston, Phillips 66 (electronic)
Mr. Clement K. Leung, CJS Leung, LLC (electronic)

SEMI-ANNUAL STATUS REPORT
Second Half 2016
January 30, 2017

Facility No: 76 Station No. 0746

Address: 3943 Broadway, Oakland CA 94611

Arcadis Contact Person / Phone No.:

Tamera Rogers / (408) 797-2013

Arcadis Project No.:

B0035135.1647

Primary Agency/Regulatory ID No.:

Alameda County LOP Case # RO0000203: Keith Nowell /
San Francisco Bay RWQCB (Region 2) – Case # 01-1596

WORK CONDUCTED THIS PERIOD [Second Half 2016]:

1. Conducted semi-annual groundwater monitoring activities on December 22, 2016.
2. Completed monthly absorbent sock inspection and changeouts.
3. Prepared the *Semi-Annual Status Report, Second Half 2016*.

WORK CONDUCTED/PROPOSED NEXT PERIOD [First Half 2017]:

1. Conduct semi-annual groundwater monitoring activities.
2. Conduct monthly absorbent sock inspection and changeouts.
3. Prepare the *Semi-Annual Status Report, First Half 2017*.
4. Submitted *Soil Vapor Investigation Work Plan* dated January 13, 2017
5. Submitted *Well Search Results* dated January 24, 2017

Current Phase of Project:

Monitoring and monthly absorbent
sock changeout/assessment

Frequency of Monitoring / Sampling:

Semi-Annual

Are Phase Separate Hydrocarbons
(PSH) Present On-site:

Not observed in wells (absorbent
socks deployed)

Cumulative PSH Recovered to Date:

Approximately 6.00

(gallons)

Approximate Depth to Groundwater:

6.96 to 13.91

(feet below
top of casing)

Approximate Groundwater Elevation:

65.22 to 73.31

(feet above mean
sea level)

Groundwater Flow Direction	South-Southwest	
Groundwater Gradient	0.062	(foot per foot)
Current Remediation Techniques:	Absorbent socks deployed in wells MW-5 and RW-1	
Permits for Discharge:	None	
Summary of Unusual Activity:	Off-site wells MW-8 and MW-9 were not sampled due to inaccessibility of adjacent property.	
Agency Directive Requirements:	<i>Well Search Results</i> submitted January 24, 2017 and <i>Soil Vapor Investigation Work Plan</i> submitted January 13, 2017	

DISCUSSION

Gettler-Ryan, Inc. (GR) conducted semi-annual groundwater monitoring activities on December 22, 2016. Field data sheets and general procedures are included as Attachment A. Eleven (11) wells (MW-1 through MW-4, MW-5 through MW-7, MW-10 through MW-12, and RW-1) were gauged, purged and sampled by GR representatives. Monthly phase-separate hydrocarbon (PSH) gauging and absorbent sock changeout occurred in wells MW-5 and RW-1 between July and December 2016 in accordance with the *Response to Comments on Low Threat Closure Request, Data Gap Investigation Workplan, and Focused Site Conceptual Model* dated October 30, 2015. Only the sock in MW-5 was changed in November and no changeout occurred during December 2016 due to lack of a disposal drum onsite. A new disposal drum has since been placed onsite so sock changeout may continue. Sock evaluations conducted by GR indicated the possible presence of PSH in August, September, October and December 2016. GR photos displayed brown to black color staining ranging from 2 inches to 38 inches along the length of the socks. However, as shown in Table 1 no measurable thickness of PSH was observed in MW-5 or RW-1 during the reporting period. Due to this, no calculatable measurable volume of PSH was removed from the wells.

In November 2016, the absorbent sock from MW-5 was sent to Pace Analytical for C3-C10 PIANO and C8-C40 Full Scan analyses. The results of these analyses are included in Attachment C, and a presentation discussing the results is included as Attachment D. The chromatograms produced from these analyses most closely resemble those of weathered gasoline, not fresh gasoline or diesel.

Groundwater samples were submitted to BC Laboratories, Inc. of Bakersfield, California under standard chain-of-custody protocols. Gauging and analytical data obtained by GR during this period are summarized in Table 1. Historical gauging and analytical data for the site are summarized in Attachment B. The site location and layout are presented on Figures 1 and 2, respectively; the groundwater elevation contours for the site on December 22, 2016 are presented on Figure 3. Isoconcentration contours for total

petroleum hydrocarbons as gasoline (TPH-g), benzene, and methyl tert-butyl ether (MTBE) are presented on Figures 4 through 6, respectively. A copy of the laboratory analytical report and chain-of-custody documentation are included in Attachment C.

The direction of groundwater flow and calculated gradient were generally consistent with previous monitoring events. The groundwater analytical results were also consistent with previous events; although recent lows of TPHg and BTEX were observed in MW-5 during the current event. Residual dissolved-phase TPHg, benzene, and MTBE is limited to two or three on-site monitoring wells and the extent is adequately delineated by the current monitoring well network.

Arcadis recommends continued semi-annual monitoring activities to further evaluate groundwater quality and concentration trends. Continued monthly PSH gauging and absorbent sock changeout is recommended for wells MW-5 and RW-1, and will continue as requested by ACDEH. Attempts to regain access to monitoring wells MW-8 and MW-9 to further delineate the extent of the plumes downgradient on the adjacent property will also continue. We understand ACDEH is preparing a letter to the property owner.

LIMITATIONS

This report was prepared in accordance with the scope of work outlined in Arcadis' contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Chevron Environmental Management Company's affiliate, Union Oil Company of California ("Union Oil"), for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Arcadis. To the extent that this report is based on information provided to Arcadis by third parties, Arcadis may have made efforts to verify this third party information, but Arcadis cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by Arcadis.

Date: January 30, 2017

Katherine Brandt, P.G.
Senior Geologist

Date: January 30, 2017

Tamera Rogers, GIT, P.M.,
Project Manager

ATTACHMENTS:

- Table 1 Current Groundwater Gauging and Analytical Results
- Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Groundwater Elevation Contour Map, December 22, 2016
Figure 4 TPH-g Isoconcentration Map, December 22, 2016
Figure 5 Benzene Isoconcentration Map, December 22, 2016
Figure 6 MTBE Isoconcentration Map, December 22, 2016
- Attachment A Field Data Sheets and General Procedures
Attachment B Historical Groundwater Analytical Data
Attachment C Laboratory Reports and Chain-of-Custody Documentation
Attachment D MW-5 Sock Analysis PowerPoint

TABLES



Table 1. Current Groundwater Gauging and Analytical Results

Union Oil Company of California
 Former 76 Station No. 0746
 3943 Broadway, Oakland, California

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	PSH thickness (ft)	GW Elev (ft amsl)	TPH-g ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	EDB ($\mu\text{g/L}$)	EDC ($\mu\text{g/L}$)	Ethanol ($\mu\text{g/L}$)	Comments
MW-1	12/22/2016	5-20	80.54	7.26	0.00	73.28	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	12/22/2016	5-20	81.32	8.81	0.00	72.51	<50	<0.50	<0.50	<0.50	<1.0	1.2	<0.50	<0.50	<250	
MW-3	12/22/2016	5-22.5	81.41	8.59	0.00	72.82	8,600	0.71	<0.50	26	18	8.4	<0.50	<0.50	<250	
MW-4*	12/22/2016	5-20	81.48	8.01	0.00	73.47	3,700	0.87	<0.50	2.2	3.0	<0.50	<0.50	<0.50	<250	
MW-5	7/13/2016	5-20	81.38	9.66	0.00	71.72	--	--	--	--	--	--	--	--	--	monthly sock assessment
MW-5	8/24/2016	5-20	81.38	9.94	0.00	71.44	--	--	--	--	--	--	--	--	--	monthly sock assessment
MW-5	9/16/2016	5-20	81.38	9.34	0.00	72.04	--	--	--	--	--	--	--	--	--	monthly sock assessment
MW-5	10/4/2016	5-20	81.38	10.08	0.00	71.30	--	--	--	--	--	--	--	--	--	monthly sock assessment
MW-5	11/16/2016	5-20	81.38	9.43	0.00	71.95	--	--	--	--	--	--	--	--	--	monthly sock assessment
MW-5	12/22/2016	5-20	81.38	8.21	0.00	73.17	6,900	95	<0.50	69	22	<0.50	<0.50	<0.50	<250	monthly sock assessment
MW-6	12/22/2016	5-20	79.94	6.96	0.00	72.98	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-7*	12/22/2016	5-20	81.64	8.07	0.00	73.57	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	12/22/2016	5-22	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
MW-9	12/22/2016	5-22	80.53	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
MW-10	12/22/2016	6-22	81.61	13.91	0.00	67.70	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-11	12/22/2016	5-19	78.18	12.96	0.00	65.22	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-12	12/22/2016	5-17.5	79.61	7.91	0.00	71.70	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
RW-1	7/13/2016	5-15	80.63	8.83	0.00	71.80	--	--	--	--	--	--	--	--	--	monthly sock assessment
RW-1	8/24/2016	5-15	80.63	9.20	0.00	71.43	--	--	--	--	--	--	--	--	--	monthly sock assessment
RW-1	9/16/2016	5-15	80.63	9.34	0.00	71.29	--	--	--	--	--	--	--	--	--	monthly sock assessment
RW-1	10/4/2016	5-15	80.63	9.31	0.00	71.32	--	--	--	--	--	--	--	--	--	monthly sock assessment
RW-1	11/16/2016	5-15	80.63	8.30	0.00	72.33	--	--	--	--	--	--	--	--	--	monthly sock assessment
RW-1	12/22/2016	5-15	80.63	7.32	0.00	73.31	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	monthly sock assessment

Notes:

MW = Groundwater monitoring well
 RW = Recovery well
 TOC = Top of casing
 ft amsl = Feet above mean sea level
 DTW = Depth to groundwater
 ft bTOC = Feet below top of casing
 PSH = Phase separate hydrocarbons
 ft = Feet
 GW Elev = Groundwater elevation
 $\mu\text{g/L}$ = Micrograms per liter
Bold = Value exceeds laboratory reporting limits;

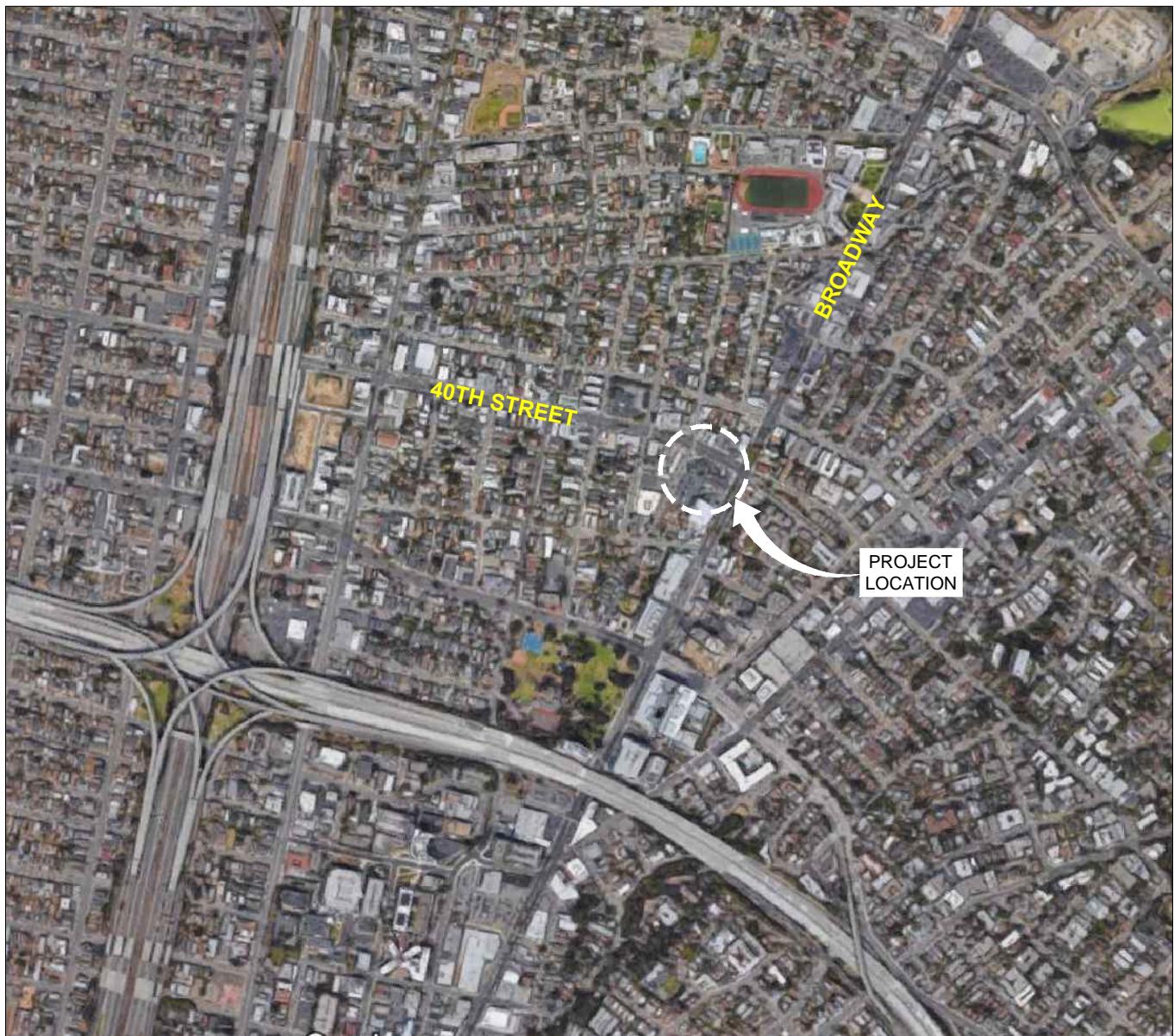
TPH-g = Total petroleum hydrocarbons, gasoline range by LUFT GC/MS according to Environmental Protection Agency (EPA) Method 8015B
 Samples analyzed by EPA Method 8260B:
 Benzene, toluene, ethylbenzene and total xylenes (collectively BTEX)
 MTBE = Methyl tert-butyl ether
 EDB = 1,2-Dibromoethane
 EDC = 1,2-Dichloroethane
 Ethanol
 J = Estimated value (between laboratory reporting limit and method detection limit)
 If PSH is present, GW Elevation is corrected according to the following formula
 $(\text{TOC elevation} - \text{DTGW}) + (0.8 \times \text{PSH thickness})$

PSH thickness is greater than 0.00 ft
<0.50 = Not detected at or above the stated limit
-- = Not sampled/not measured
* = TOC elevation last measured 6/14/2006

Data QA/QC by: CW 1/17/2017

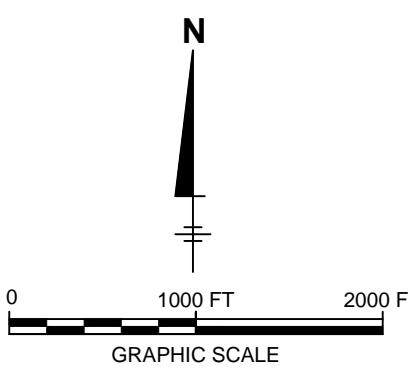
FIGURES





MAP SOURCE: Google Map Data © 2017, 37°49'38.9" N, 122°15'26.3" W

N



UNOCAL #0746 (351647)
3943 BROADWAY
OAKLAND, CALIFORNIA
SEMI-ANNUAL STATUS REPORT, SECOND HALF 2016

SITE LOCATION MAP



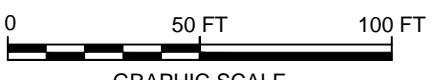
LEGEND:

- GROUNDWATER MONITORING WELL
- RECOVERY WELL
- PROPERTY BOUNDARY
- UST UNDERGROUND STORAGE TANK



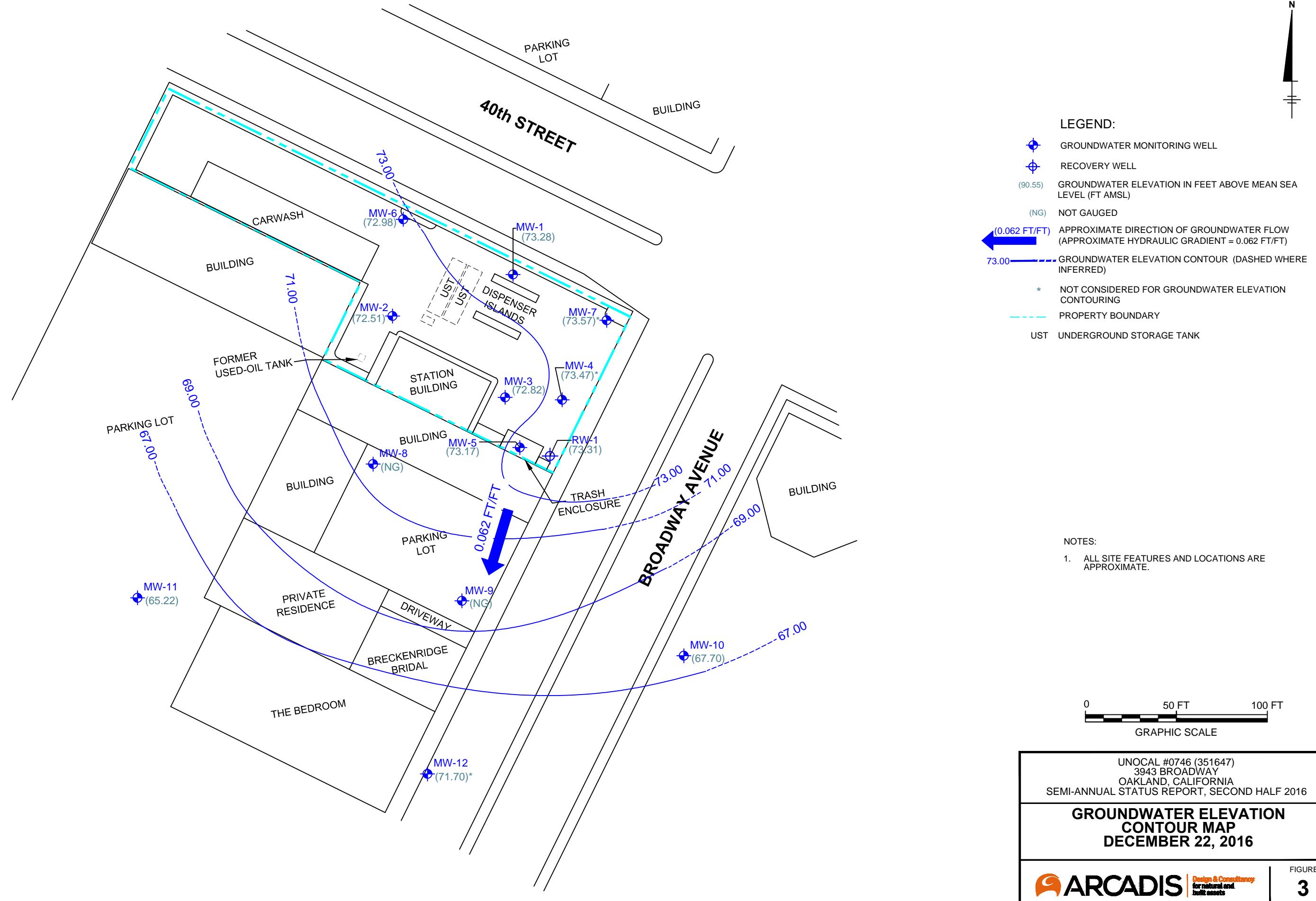
NOTES:

- ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



UNOCAL #0746 (351647)
3943 BROADWAY
OAKLAND, CALIFORNIA
SEMI-ANNUAL STATUS REPORT, SECOND HALF 2016

SITE PLAN



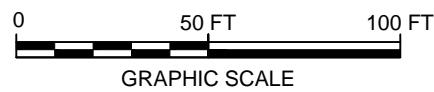


LEGEND:

- GROUNDWATER MONITORING WELL
- RECOVERY WELL
- 1,000 ----- TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPH-g) ISOCONCENTRATION CONTOURS (DASHED WHERE INFERRED)
- (3,700) TPH-g CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- (NS) NOT SAMPLED
- (<50) NOT DETECTED AT OR ABOVE LABORATORY DETECTION LIMIT
- PROPERTY BOUNDARY
- UST UNDERGROUND STORAGE TANK

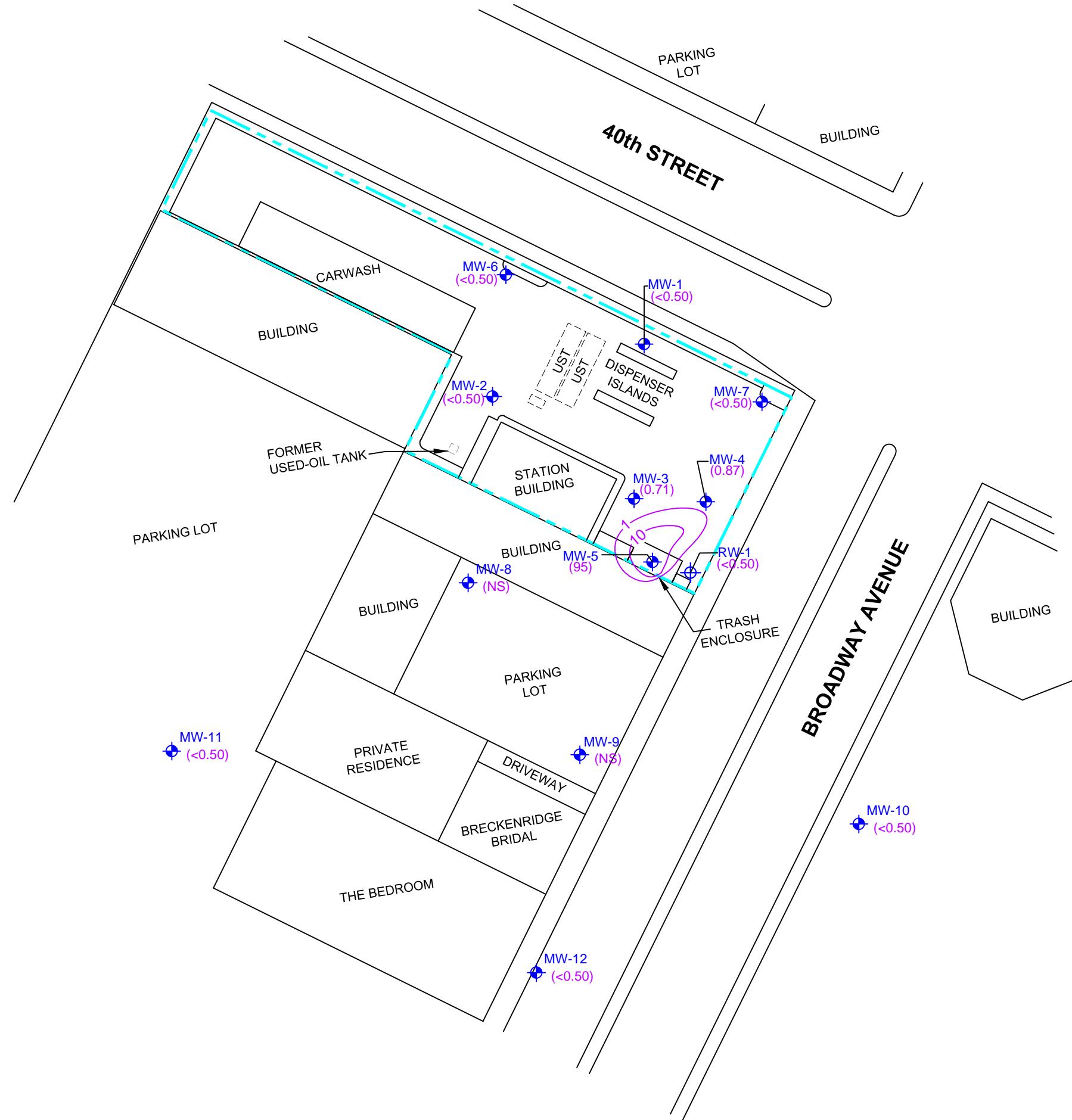
NOTES:

- ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
- ALL ISOCONCENTRATION LINES ARE AN INTERPRETATION BASED ON THE RESULTS OF THE WELL GAUGING DATA FOR THIS QUARTER.



UNOCAL #0746 (351647)
3943 BROADWAY
OAKLAND, CALIFORNIA
SEMI-ANNUAL STATUS REPORT, SECOND HALF 2016

TPH-g ISOCONCENTRATION MAP DECEMBER 22, 2016



LEGEND:

- GROUNDWATER MONITORING WELL
- RECOVERY WELL
- 10 —— Benzene Isoconcentration Contours (Dashed Where Inferred)
- (1.2) BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- (NS) NOT SAMPLED
- (<0.50) NOT DETECTED AT OR ABOVE LABORATORY DETECTION LIMIT
- PROPERTY BOUNDARY
- UST UNDERGROUND STORAGE TANK

- NOTES:**
1. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
 2. ALL ISOCONCENTRATION LINES ARE AN INTERPRETATION BASED ON THE RESULTS OF THE WELL GAUGING DATA FOR THIS QUARTER



UNOCAL #0746 (351647)
3943 BROADWAY
OAKLAND, CALIFORNIA
SEMI-ANNUAL STATUS REPORT, SECOND HALF 2016

BENZENE ISOCONCENTRATION MAP DECEMBER 22, 2016



ATTACHMENT A

[Field Data Sheets and General Procedures]





GETTLER-RYAN INC.



TRANSMITTAL

July 22, 2016
G-R #385648

TO: Ms. Tamera Rogers
Arcadis
6296 San Ignacio Ave., Suite C & D
San Jose, California 95119

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

**RE: Former Unocal 0746
Chevron #351647
3943 Broadway
Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Monthly Event of July 13, 2016

COMMENTS:

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

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

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

trans/351647 0746

WELL CONDITION STATUS SHEET

Client/
Facility #:

Chevron #351647 / 0746

Job #:

385648

Site Address:

3943 Broadway

Event Date:

7.13.16

City:

Oakland, CA

Sampler:

FT

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK	REPLACE CAP	WELL VAULT Manufacture/Size/# of Bolts	Pictures Taken Y/N
								Y/ <input checked="" type="checkbox"/>	Y/ <input checked="" type="checkbox"/>		
MW-5	OK						→	N	N	Emco 12" 2	
RW-1	OK		→ S=2				→	N	N	Emco 16" 3	

Comments

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
Site Address: 3943 Broadway
City: Oakland, CA

Job Number: 385648
Event Date: 7.13.16 (inclusive)
Sampler: FT

Well ID: MW-5
Well Diameter: 2 1/2 in.
Total Depth: 50.16 ft.
Depth to Water: 9.66 ft.
40.50

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.

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
Other:

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

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

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

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{S} / \text{mS}$ $\mu\text{mhos/cm}$)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: MONTHLY PRODUCT GAUGING NO SPH DETECTED BY INTERFACE PROBE.

SOCK EVALUATED AND PLACED IN HOLDING DRUM. NEW SOCK INSTALLED

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



GETTLER-RYAN INC.

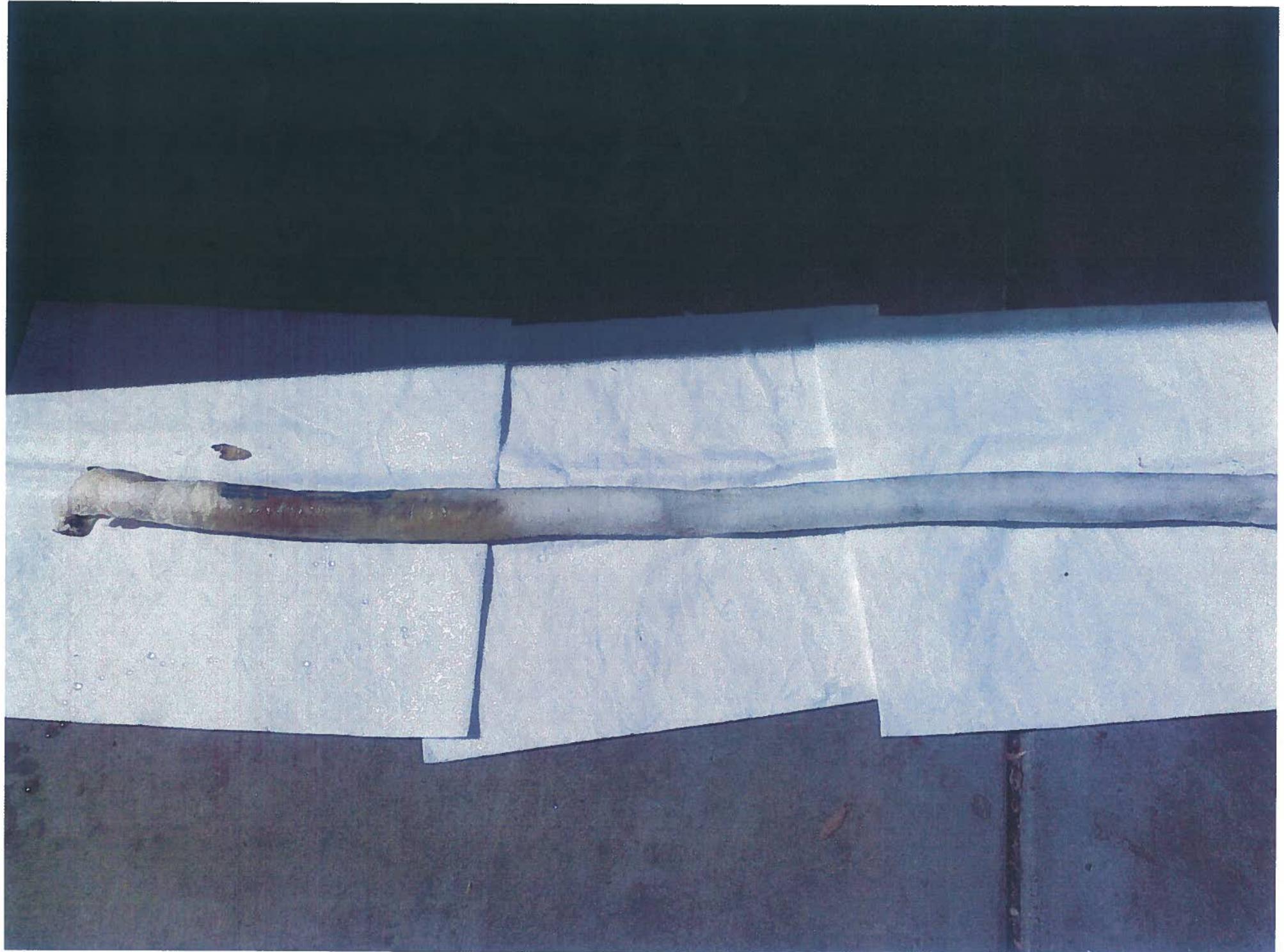
SORBENT SOCK EVALUATION FORM

Name: <i>Frank Tenuison</i>	Date: 7.13.16	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: MW-5	Weather: <i>Scattered</i>

1. Time absorbent sock removed from well for inspection: 1045
2. Condition of sock:
 - a. Length of sock showing product saturation: NONE
 - b. Length of sock showing dryness: NONE
 - c. Color of sock showing product saturation: NONE
 - d. Weight of the removed sock: 8 1/4 oz.
 - e. Weight of new/clean/dry sock: 3 1/4 oz.
 - f. Difference in weight [(d-e) to 0.01 ounces]: 5 oz.
3. Picture of sock removed from well taken:
4. Sock removed from well deposited into a waste drum:
- Confirm drum is labeled: ✓ How full is the drum (%): 25%
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:
 - a. Depth to product: 0
 - b. Depth to water: 9.64
 - c. Thickness of product (b-a): 0
6. Size and type of sock installed: SOAKAGE 2" x 36"

7. Comments: SOCK EVALUATED AND PLACED IN HOLDING DRUM. NEW SOCK INSTALLED

351641, OAKLAND MW-5 STOCK





GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 7.13.16 (inclusive)
 Sampler: FT

Well ID: RW-1
 Well Diameter: 2 1/2 in.
 Total Depth: 16.34 ft.
 Depth to Water: 8.83 ft.

Date Monitored: 7.13.16

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.

7.51 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
 Other:

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

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

Start Time (purge): _____

Weather Conditions:

Sample Time/Date: _____ / _____

Water Color: _____ Odor: Y / N _____

Approx. Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S / mS μ mhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: MONTHLY PRODUCT GAUGING NO SPH DETECTED BY INTERFACE PROBE.

SOCK EVALUATED AND PLACED IN HOLDING DRUM. NEW SOCK INSTALLED.

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



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <u>Frank Termini</u>	Date: <u>7-13-16</u>	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: <u>RW-1</u>	Weather: <u>Sunny</u>

1. Time absorbent sock removed from well for inspection: 1030

2. Condition of sock:

a. Length of sock showing product saturation: NONE

b. Length of sock showing dryness: NONE

c. Color of sock showing product saturation: NONE

d. Weight of the removed sock: 11b 4oz.

e. Weight of new/clean/dry sock: 8 5/8 oz.

f. Difference in weight [(d-e) to 0.01 ounces]: 12 5/8 oz.

3. Picture of sock removed from well taken:

4. Sock removed from well deposited into a waste drum:

Confirm drum is labeled: / How full is the drum (%): 25%

5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:

a. Depth to product: 0

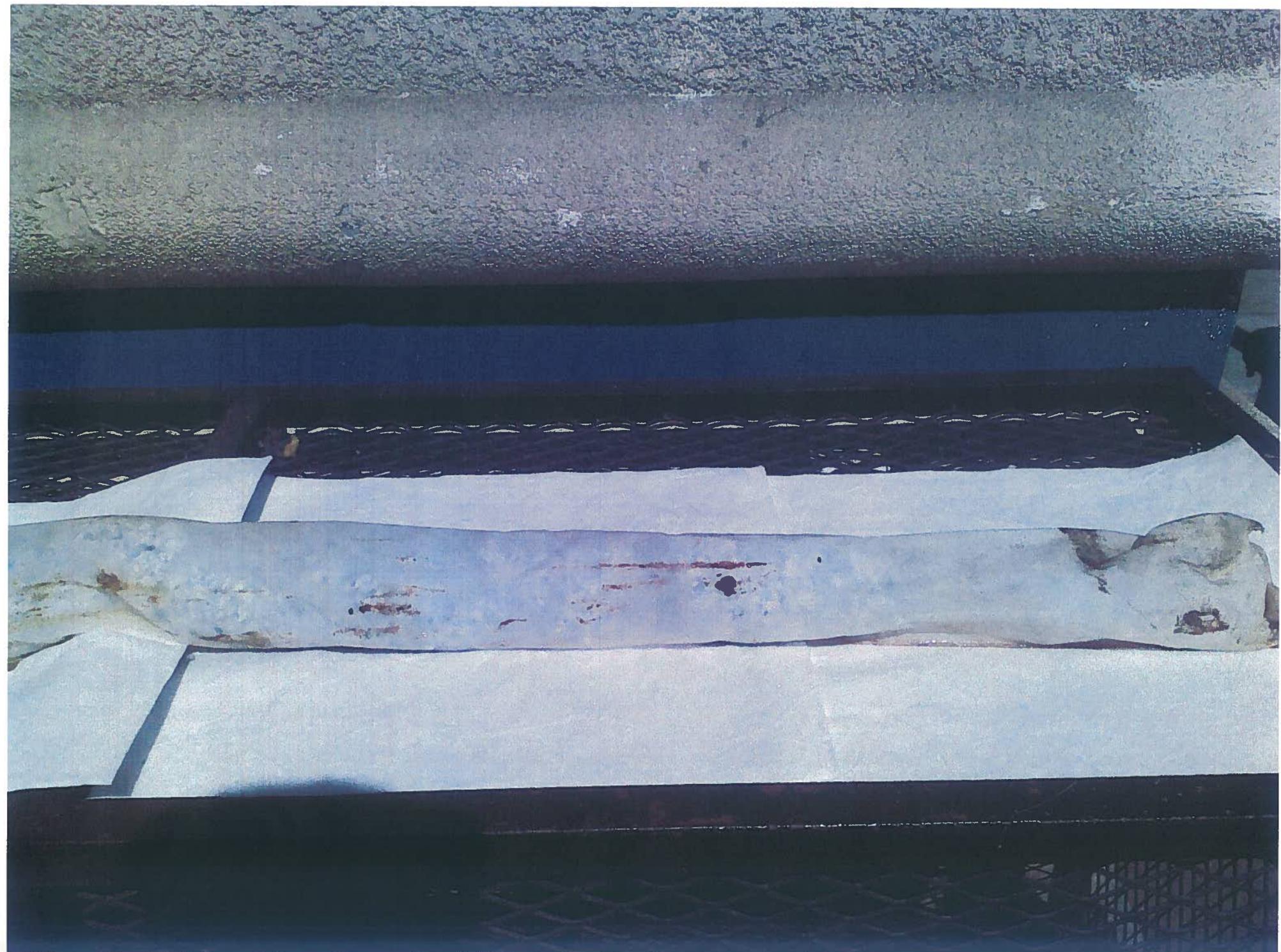
b. Depth to water: 8.83

c. Thickness of product (b-a): 0

6. Size and type of sock installed: 3" x 30" PIG

7. Comments: SOCK EVALUATED AND PLACED IN HOLDING DRUM. NEW SOCK INSTALLED

351647, Oakland RW-1 Sock





GETTLER - RYAN INC.



TRANSMITTAL

September 2, 2016
G-R #385648

TO: Ms. Tamera Rogers
Arcadis
6296 San Ignacio Ave., Suite C & D
San Jose, California 95119

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

RE: Former Unocal 0746
Chevron #351647
3943 Broadway
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Monthly Event of August 24, 2016

COMMENTS:

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

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

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

trans/351647 0746

WELL CONDITION STATUS SHEET

Client/
Facility #: _____
Site Address: _____
City: _____

Chevron #351647 / 0746
3943 Broadway
Oakland, CA

Job #: 385648

Event Date: 8/24/14
Sampler: GMI

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE	REPLACE	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken <input checked="" type="checkbox"/> Y/N
								LOCK Y/N	CAP Y/N		
MW-5	OK					→ →	no no			Emco 1/2 1/2	
RW-1	OK					→ →	L L			1/8/3	

Comments _____

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 8/24/16 (inclusive)
 Sampler: GM

Well ID: MW-5
 Well Diameter: 24 in.
 Total Depth: 50.16 ft.
 Depth to Water: 9.94 ft.
40.22

Date Monitored: 8/24/16

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.

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
 Other:

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

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

Start Time (purge): _____

Weather Conditions:

Sample Time/Date: _____ / _____

Water Color: _____ Odor: Y / N _____

Approx. Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S / mS μ mhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: MONTHLY PRODUCT GAUGING

OLD SACK REMOVED, EVALUATED AND PLACED IN HOLDING DRUM. NEW SACK INSTALLED

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: G. MEDINA	Date: 8/24/16	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: MW-5	Weather: SUNNY

1. Time absorbent sock removed from well for inspection:

1920

2. Condition of sock:

a. Length of sock showing product saturation:

37"

b. Length of sock showing dryness:

0

c. Color of sock showing product saturation:

Brown

d. Weight of the removed sock:

1LBS 7 3/4 OZ

e. Weight of new/clean/dry sock:

3 1/8

f. Difference in weight [(d-e) to 0.01 ounces]:

1LBS 4 5/8 OZ

3. Picture of sock removed from well taken:

4. Sock removed from well deposited into a waste drum:

Confirm drum is labeled:

YES

How full is the drum (%):

20%

5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:

a. Depth to product:

NA

b. Depth to water:

9.94

c. Thickness of product (b-a):

0

6. Size and type of sock installed:

2" SOAKOTE

7. Comments: OLD SOCK REMOVED, EVALUATED AND PLACED IN HOLDING DRUM.

NEW SOCK INSTALLED

351647. OAKLAND MW-5 SOCK

SS# 351647
OAKLAND, CA

8/24/16

MW-5





GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351647 / 0746**
 Site Address: **3943 Broadway**
 City: **Oakland, CA**

Job Number: **385648**
 Event Date: **8/24/14** (inclusive)
 Sampler: **CM**

Well ID: **RW-1**
 Well Diameter: **2 1/2** in.
 Total Depth: **16.34** ft.
 Depth to Water: **9.20** ft.
7.14

Date Monitored: **8/24/14**

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.

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
 Other: **—**

Sampling Equipment:

Disposable Bailer
 Pressure Bailer
 Metal Filters
 Peristaltic Pump
 QED Bladder Pump
 Other: **—**

Time Started: **—** (2400 hrs)

Time Completed: **—** (2400 hrs)

Depth to Product: **—** ft

Depth to Water: **—** ft

Hydrocarbon Thickness: **—** ft

Visual Confirmation/Description: **—**

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: **—** ltr

Amt Removed from Well: **—** ltr

Water Removed: **—** ltr

Start Time (purge): **—**

Sample Time/Date: **— / —**

Approx. Flow Rate: **— gpm.**

Did well de-water? If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **—**

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

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: **MONTHLY PRODUCT GAUGING**

OLD SOIL REMOVED, EVALUATED AND PLACED IN HOLDING DRUM. NEW SOIL INSTALLED

Add/Replaced Gasket: **—**

Add/Replaced Bolt: **—**

Add/Replaced Lock: **—**

Add/Replaced Plug: **—**



GETTLER - RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: G. Medina	Date: 8/24/14	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: RW - 1	Weather: Sunny

1. Time absorbent sock removed from well for inspection: 1914
2. Condition of sock:
 - a. Length of sock showing product saturation: 35"
 - b. Length of sock showing dryness: 0
 - c. Color of sock showing product saturation: Brown
 - d. Weight of the removed sock: 3 LBS 4 1/2 oz
 - e. Weight of new/clean/dry sock: 7 1/4 oz
 - f. Difference in weight [(d-e) to 0.01 ounces]: 2 LBS 13 1/4 oz
3. Picture of sock removed from well taken:
4. Sock removed from well deposited into a waste drum:
- Confirm drum is labeled: Yes How full is the drum (%): 20%
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:
 - a. Depth to product: N/A
 - b. Depth to water: 9.20
 - c. Thickness of product (b-a): 0
6. Size and type of sock installed: 4" SOAKET

7. Comments: OLD SOCK REMOVED AND EVALUATED, PLACED IN HOLDING DRUM
NEW SOCK INSTALLED

351647. OAKLAND RW-1 SOCK

SS# 351647
OAKLAND, CA

8/24/16

RW-1

ESVEDTOM





GETTLER-RYAN INC.



TRANSMITTAL

September 27, 2016
G-R #385648

TO: Ms. Tamara Rogers
Arcadis
6296 San Ignacio Ave., Suite C & D
San Jose, California 95119

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

**RE: Former Unocal 0746
Chevron #351647
3943 Broadway
Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Monthly Event of September 16, 2016

COMMENTS:

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

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

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

trans/351647 0746

WELL CONDITION STATUS SHEET

Client/
 Facility #: **Chevron #351647 / 0746**
 Site Address: **3943 Broadway**
 City: **Oakland, CA**

Job #: **385648**
 Event Date: **8/16/16**
 Sampler: **G-MEDINA**

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK	REPLACE CAP	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
								Y/N	Y/N		
MW-5	OK	—					>	no	no	Emco/12/2	
RW-1	OK	—					=	L	L	J/18/3	

Comments _____

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 9/16/16 (inclusive)
 Sampler: GTM

Well ID: MW-5
 Well Diameter: 216 in.
 Total Depth: 50.6 ft.
 Depth to Water: 9.74 ft.
40.82 xVF _____

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
 Other: _____

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

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

Start Time (purge): _____
 Sample Time/Date: /
 Approx. Flow Rate: _____ gpm.
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S / mS μ mhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: MONTHLY PRODUCT GAUGING REPLACED SOCK & EVALUATED
PLACED SOCKS IN HOLDING DRUM
NEW SOCK INSTALLED

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



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: G. MEDINA	Date: 9/16/16	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: MW-5	Weather: Sunny

1. Time absorbent sock removed from well for inspection: 0915
2. Condition of sock:
 - a. Length of sock showing product saturation: 26"
 - b. Length of sock showing dryness: 11"
 - c. Color of sock showing product saturation: Brown
 - d. Weight of the removed sock: 1 LBS 4 OZ
 - e. Weight of new/clean/dry sock: 3 OZ
 - f. Difference in weight [(d-e) to 0.01 ounces]: 1 LBS 1 OZ
3. Picture of sock removed from well taken:
4. Sock removed from well deposited into a waste drum:
Confirm drum is labeled: Yes How full is the drum (%): 30%
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:
 - a. Depth to product: NA
 - b. Depth to water: 9.34
 - c. Thickness of product (b-a): 0
6. Size and type of sock installed: 2" SPAKES

7. Comments: SOCK REMOVED, EVALUATED AND PLACED IN HOLDING DRUM
NEW SOCK INSTALLED

SS#351647 / 0746
OAKLAND, CA

9/16/16

MW-5





GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
Site Address: 3943 Broadway
City: Oakland, CA

Job Number: 385648
Event Date: 9/16/16 (inclusive)
Sampler: Gm

Well ID: RW-1
Well Diameter: 216 in.
Total Depth: 16.34 ft.
Depth to Water: 9.34 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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.
7.00 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
Other:

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

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: 6 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: _____ gpm.
Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos/cm}$)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: MONTHLY PRODUCT GAUGING

REPLACED SOCK & EVALUATED

PLACED SOCK IN HOLDING DRUM
NEW SOCK INSTALLED

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: G-MEDINA	Date: 9/16/16	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: RW-1	Weather: Sunny

1. Time absorbent sock removed from well for inspection: 0930

2. Condition of sock:

a. Length of sock showing product saturation:

~~200~~ 29"

b. Length of sock showing dryness:

~~0~~"

c. Color of sock showing product saturation:

Brown

d. Weight of the removed sock:

4LBS 2½ oz

e. Weight of new/clean/dry sock:

5 oz

f. Difference in weight [(d-e) to 0.01 ounces]:

3LBS 13½ oz

3. Picture of sock removed from well taken:

4. Sock removed from well deposited into a waste drum:

Confirm drum is labeled:

Yes

How full is the drum (%):

30%

5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:

a. Depth to product:

~~NA~~

b. Depth to water:

9.34

c. Thickness of product (b-a):

~~0~~

6. Size and type of sock installed:

4" SOAKET

7. Comments: SOCK REMOVED, EVALUATED AND PLACED IN HOLDING DRUM
NEW SOCK INSTALLED

SS# 351647/0746
OAKLAND, CA

9/16/16

RW-1





GETTLER - RYAN INC.



TRANSMITTAL

October 7, 2016
G-R #385648

TO: Ms. Tamera Rogers
Arcadis
6296 San Ignacio Ave., Suite C & D
San Jose, California 95119

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

RE: Former Unocal 0746
Chevron #351647
3943 Broadway
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

Copies	Description
VIA PDF	Groundwater Monitoring and Sampling Data Package Monthly Event of October 4, 2016

COMMENTS:

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

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

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

trans/351647 0746

WELL CONDITION STATUS SHEET

Client/
Facility #:

Chevron #351647 / 0746

Site Address:

3943 Broadway

City:

Oakland, CA

Job #: 385648

Event Date: 10.4.16

Sampler: FT

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y <input checked="" type="checkbox"/>	REPLACE CAP Y <input checked="" type="checkbox"/>	WELL VAULT Manufacture/Size/# of Bolts	Pictures Taken Y <input checked="" type="checkbox"/>
MW-5	OK	—	—	—	—	—	→	—	—	Emco 12" 2	—
RW-1	OIL	→	S21	OK	—	—	→	—	—	Emco 18" 3	—

Comments _____

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 10.4.1L (inclusive)
 Sampler: FT

Well ID: MW-5
 Well Diameter: 2 1/2 in.
 Total Depth: 50.1L ft.
 Depth to Water: 10.08 ft.
40.08

Date Monitored: 10.4.1L

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.
 $xVF = \text{case volume} = \text{Estimated Purge Volume}$: _____ 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 _____
 Other: _____

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

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

Start Time (purge): _____
 Sample Time/Date: _____ / _____
 Approx. Flow Rate: _____ gpm.
 Did well de-water? _____ If yes, Time: _____

Weather Conditions:
 Water Color: _____ Odor: Y / N _____
 Sediment Description: _____
 Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{s}/\text{mS}$ $\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: MONTHLY PRODUCT GAUGING NO SPH DETECTED BY INTERFACE
NEW SOCK INSTALLED
SOCK REMOVED, EVALUATED AND PLACED IN DRUM

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



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <i>Fraser Terminal</i>	Date: 10-4-16	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: MW-5	Weather: <i>Sunny</i>

1. Time absorbent sock removed from well for inspection: 10:30

2. Condition of sock:

- a. Length of sock showing product saturation: 2"
- b. Length of sock showing dryness: 8"
- c. Color of sock showing product saturation: Brownish color
- d. Weight of the removed sock: 116 2 oz.
- e. Weight of new/clean/dry sock: 3 1/4 oz.
- f. Difference in weight [(d-e) to 0.01 ounces]: 116 1 1/4 oz.

3. Picture of sock removed from well taken:

4. Sock removed from well deposited into a waste drum:

Confirm drum is labeled: Yes

How full is the drum (%): 30%

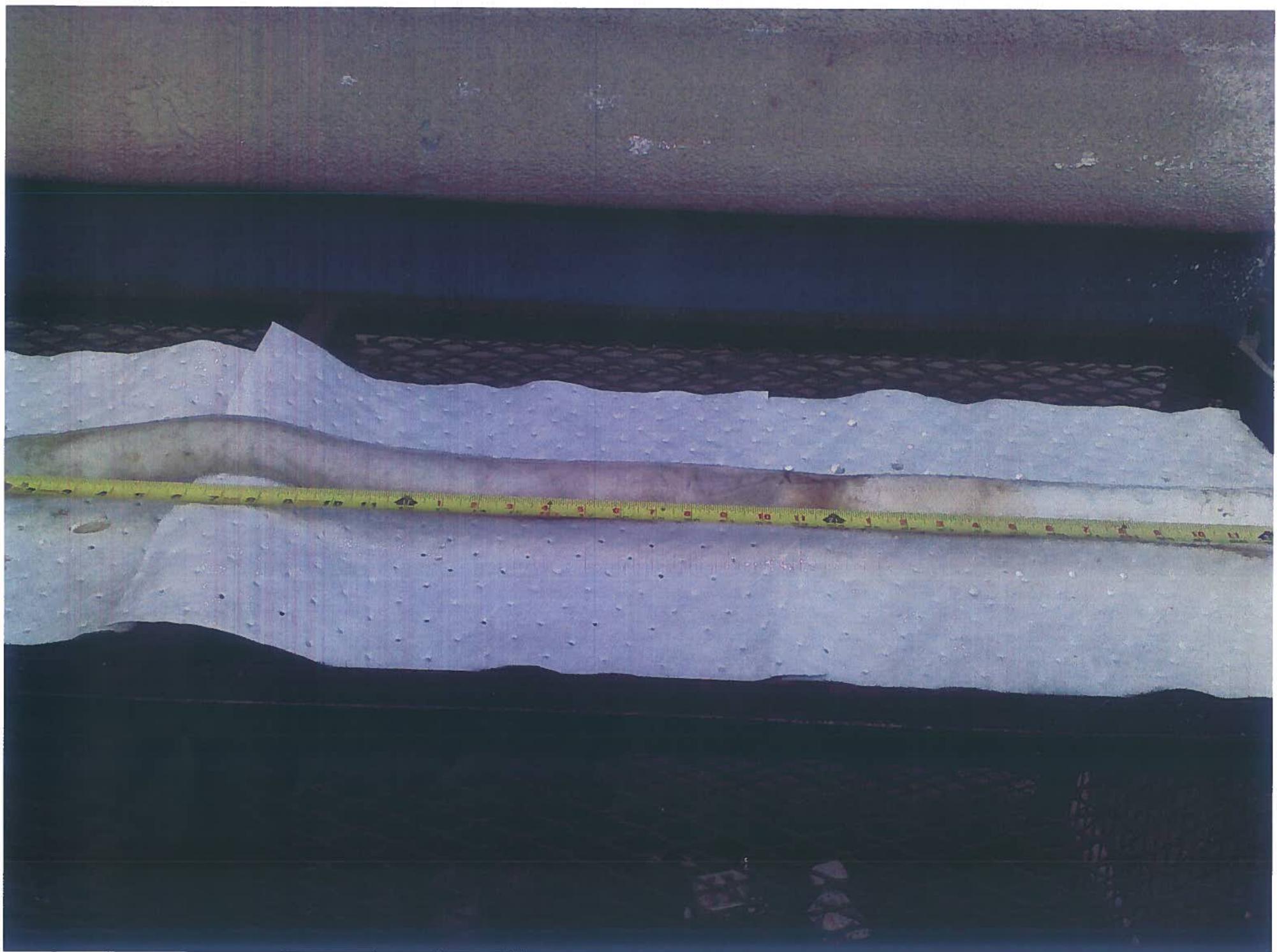
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:

- a. Depth to product: 0
- b. Depth to water: 10.08
- c. Thickness of product (b-a): 0

6. Size and type of sock installed: SOAKRASE 2" x 37"

7. Comments: SOCK REMOVED, EVALUATED AND PLACED IN #1 HOLDING DRUM
NEW SOCK INSTALLED

351647, Oakland MW-5 Sock





GETTLER - RYAN INC.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 10.4.16 (inclusive)
 Sampler: FT

Well ID: RW-1
 Well Diameter: 2 1/2 in.
 Total Depth: 16.34 ft.
 Depth to Water: 9.31 ft.
7.03 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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 _____
 Other: _____

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

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

Start Time (purge): —
 Sample Time/Date: — / —
 Approx. Flow Rate: — gpm.
 Did well de-water? — If yes, Time: — Volume: — gal. DTW @ Sampling: —

Weather Conditions:

Water Color: — Odor: Y / N —

Sediment Description: —

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S / μ S μ mhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: MONTHLY PRODUCT GAUGING NO SPH DETECTED BY INTERFACE
NEW SOCK INSTALLED.

SOCK REMOVED, EVALUATED AND PLACED IN DRUM.

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



GETTLER - RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <i>Frank Teninori</i>	Date: 10.4.16	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: Rw-1	Weather: Sunny

1. Time absorbent sock removed from well for inspection: 1 000
2. Condition of sock:
- Length of sock showing product saturation: 0
 - Length of sock showing dryness: 2"
 - Color of sock showing product saturation: NA
 - Weight of the removed sock: 3 lb 2 oz.
 - Weight of new/clean/dry sock: 8 3/4 oz.
 - Difference in weight [(d-e) to 0.01 ounces]: 3 lb 6 3/4 oz.
3. Picture of sock removed from well taken:
4. Sock removed from well deposited into a waste drum:
- Confirm drum is labeled: yes How full is the drum (%): 30%
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:
- Depth to product: 0
 - Depth to water: 9.31
 - Thickness of product (b-a): 0
6. Size and type of sock installed: P16" 30"
7. Comments: SOCK REMOVED, EVALUATED AND PLACED IN HOLDING DRUM
NEW SOCK INSTALLED.

551647, OAKLAND KW-T STOCK





GETTLER - RYAN INC.



TRANSMITTAL

November 23, 2016
G-R #385648

TO: Ms. Tamera Rogers
Arcadis
6296 San Ignacio Ave., Suite C & D
San Jose, California 95119

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

RE: **Former Unocal 0746**
Chevron #351647
3943 Broadway
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Monthly Event of November 16, 2016

COMMENTS:

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

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

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

trans/351647 0746

WELL CONDITION STATUS SHEET

Client/
 Facility #: **Chevron #351647 / 0746**
 Site Address: **3943 Broadway**
 City: **Oakland, CA**

Job #: **385648**
 Event Date: **11.16.16**
 Sampler: **FT**

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges <i>B=Broken S=Stripped R=Refaped</i>	Apron Condition <i>C=Cracked B=Broken G=Gone</i>	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE	REPLACE	WELL VAULT <i>Manufacture/Size/# of Bolts</i>	Pictures Taken <i>Y/N</i>
								LOCK <i>Y/○</i>	CAP <i>Y/○</i>		
MW-5	OK	—					→	N	N	Emco(12" 1/2	
RW-1	OK	→ S=1	OK				→	N	N	~ 18" 3	

Comments _____

STANDARD OPERATING PROCEDURE GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells. Total well depths are measured annually.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351647 / 0746**

Site Address: **3943 Broadway**

City: **Oakland, CA**

Job Number: **385648**

Event Date: **11-16-16** (inclusive)

Sampler: **FT**

Well ID **MW-5**

Date Monitored: **11-16-16**

Well Diameter **2 1/6** in.

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
--------------------	------------------------	----------------------	----------------------	-----------------------

Total Depth **50.16** ft.

Depth to Water **9.43** ft.

Check if water column is less than 0.50 ft.

40.73 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 **—**
Other: **—**

Sampling Equipment:

Disposable Bailer **—**
Pressure Bailer **—**
Metal Filters **—**
Peristaltic Pump **—**
QED Bladder Pump **—**
Other: **—**

Time Started: **—** (2400 hrs)

Time Completed: **—** (2400 hrs)

Depth to Product: **—** ft

Depth to Water: **—** ft

Hydrocarbon Thickness: **—** ft

Visual Confirmation/Description: **—**

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: **—** ltr

Amt Removed from Well: **—** ltr

Water Removed: **—** ltr

Start Time (purge): **—**

Weather Conditions: **—**

Sample Time/Date **(1015) 11/16/16 (sock)**

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

Approx. Flow Rate: **—** gpm.

Sediment Description: **—**

Did well de-water? **—** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **—**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{S} / \text{mS}$ $\mu\text{hos/cm}$)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5 Sock	1	N/A	NP	Pace Analytical	C3-C10 PIANO ANALYSIS/GC/ MC FULL SCAN ANALYSIS

COMMENTS: **MONTHLY PRODUCT GAUGING**

Sock was removed from the well, evaluated then shipped to Pace Analytical for analysis. New sock installed in the well.

Add/Replaced Gasket: **—**

Add/Replaced Bolt: **—**

Add/Replaced Lock: **—**

Add/Replaced Plug: **—**



GETTLER - RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <i>Frank Tenuinoni</i>	Date: 11-16.1L	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: MW-5	Weather: Sunny

1. Time absorbent sock removed from well for inspection: 1000

2. Condition of sock:

a. Length of sock showing product saturation: None

b. Length of sock showing dryness: None

c. Color of sock showing product saturation: None

d. Weight of the removed sock: 116 1148 oz.

e. Weight of new/clean/dry sock: 3 18 oz.

f. Difference in weight [(d-e) to 0.01 ounces]: 116 11 oz.

3. Picture of sock removed from well taken:

4. Sock removed from well deposited into a waste drum:

Confirm drum is labeled: N/A How full is the drum (%): N/A

5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:

a. Depth to product: 0

b. Depth to water: 9.43

c. Thickness of product (b-a): 0

6. Size and type of sock installed: 37" SOAKEASE

7. Comments: Sock was removed from the well, evaluated and placed in holding drum. SENT TO PACZ.
New sock was installed in the well

SS# 351647
OAKLAND
MW-5

COOLWEASE™





GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351647 / 0746**

Job Number: **385648**

Site Address: **3943 Broadway**

Event Date: **11-16-16** (inclusive)

City: **Oakland, CA**

Sampler: **FT**

Well ID

RW-1

Date Monitored:

11-16-16

Well Diameter

2 1/2 in.

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

Total Depth

16.34 ft.

Depth to Water

8.30 ft.

8.04

xVF

Check if water column is less than 0.50 ft.

= _____ 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 _____
Other: _____

Sampling Equipment:

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

Time Started: _____ (2400 hrs)

Time Completed: _____ (2400 hrs)

Depth to Product: _____ ft

Depth to Water: _____ ft

Hydrocarbon Thickness: _____ ft

Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: _____ ltr

Amt Removed from Well: _____ ltr

Water Removed: _____ ltr

Start Time (purge): _____

Weather Conditions:

Sample Time/Date: _____ / _____

Water Color: _____ Odor: Y / N _____

Approx. Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water?

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S / mS μ mhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: **MONTHLY PRODUCT GAUGING**

Sock was removed from the well, evaluated and placed in the holding drum. New sock installed in the well.

NEW SOCK NOT INSTALLED DUE TO NO HOLDING DRUM ON THE SITE.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <i>Frank Tenuinori</i>	Date: <i>11-16-16</i>	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: <i>RW-1</i>	Weather: <i>Sunny</i>

1. Time absorbent sock removed from well for inspection: 0945

2. Condition of sock:

- a. Length of sock showing product saturation: NONE
- b. Length of sock showing dryness: NONE
- c. Color of sock showing product saturation: NONE
- d. Weight of the removed sock: 31b 542 oz
- e. Weight of new/clean/dry sock: N/A
- f. Difference in weight [(d-e) to 0.01 ounces]: N/A

3. Picture of sock removed from well taken:

4. Sock removed from well deposited into a waste drum:

Confirm drum is labeled: N/A How full is the drum (%): N/A

5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:

- a. Depth to product: 0
- b. Depth to water: 8.30
- c. Thickness of product (b-a): 0

6. Size and type of sock installed: N/A

7. Comments: Sock was removed from the well, evaluated and placed in holding drum. Put Back in well.
New sock was installed in the well NO HOLDING DRUM ON THE SITE.

SS# 351647
OAKLAND
RW-5

FOOD-HOGS! www.food-hogs.com
FOOD-HOGS! www.food-hogs.com
FOOD-HOGS! www.food-hogs.com
FOOD-HOGS! www.food-hogs.com

Admirable CH
Nat. Water



ZymaX Forensics Division

220 William Pitt Way
Pittsburgh, PA 15238Phone: 412-826-5245
Fax: 412-826-3433

Chain of Custody

*Samples will be disposed of
after 30 days unless requested otherwise

Report To:	Tamera Rogers	Email To:	Tamera.Rogers@arcadis.com				Analysis Requested				# of containers			
Company:	Arcadis	Phone:	408-797-2013				C3-C36 Whole Oil	Oxygenates	Organic Lead/Scavengers	Long List PAH		C3-C10 PIANO	GC/MC Full Scan	Simulated Distillation
Address:	6296 San Ignacia Ave. Ste C & D San Jose, CA 95119	Project:	Chevron #351647, Oakland											
Zymax use only	Sample Description	Date Sampled	Time	Matrix	Preserve									
	MW-5 Sock			Sock	NP					X	X		1	
Bill To: Same as Above <input checked="" type="checkbox"/> Yes	Company:	Address:	PO Number:	Sample Comments:										
			Invoice Email: Tamera.Rogers@arcadis.com					Laboratory Remarks: Temperature: _____ °C	Courier Method: _____					
sample integrity upon receipt:		Turnaround Time		Print Name of Sampler:										
samples received intact		<input type="checkbox"/> Yes	ASAP	<input type="checkbox"/> 1wk	<input type="checkbox"/>	Signature of Sampler:				Date:				
samples received cold/on ice		<input type="checkbox"/> Yes	48 hr	<input type="checkbox"/> STD	<input checked="" type="checkbox"/>	Relinquished By:				Gettler-Ryan Inc.		Date:	Time:	
custody seals		<input type="checkbox"/> Yes	72 hr	<input type="checkbox"/> (2wks)	<input type="checkbox"/>	Relinquished By:						Date:	Time:	
correct container types		<input type="checkbox"/> Yes	*quicker TAT may result in additional surcharges			Relinquished By:						Date:	Time:	
						Received by Lab:						Date:	Time:	



GETTLER-RYAN INC.

TRANSMITTAL

December 30, 2016
G-R #385648

TO: Ms. Tamera Rogers
Arcadis
6296 San Ignacio Ave., Suite C & D
San Jose, California 95119

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

RE: Former Unocal 0746
Chevron #351647
3943 Broadway
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Fourth Quarter Event of December 22, 2016

COMMENTS:

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

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

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

trans/351647 0746

WELL CONDITION STATUS SHEET

Client/
Facility #:

Chevron #351647 / 0746

Job #:

385648

Site Address:
City:

**3943 Broadway
Oakland, CA**

Event Date:

**12/22/16
GM**

Sampler:

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/# of Bolts	Pictures Taken Y/N
MW-1	OK						→			DIVERSIFIED/12/2	
MW-2	OK						→			EMCO ↓	
MW-3	OK						→			DIVERSIFIED/10/1	
MW-4	OK						→			EMCO /12/1	
MW-5	OK						→				
MW-6	OK						→				
MW-7	OK						→				
MW-10	OK	→	B(2)	OK			→			UNIVERSAL/8/2	
MW-11	OK						→			↓ ↓ ↓	
MW-12	OK						→			BRAINARD KILMAN/8/3	
RW-1	OK						→	↓	✓	EMCO 18/3	

Comments

STANDARD OPERATING PROCEDURE GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells. Total well depths are measured annually.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/16 (inclusive)
 Sampler: GM

Well ID: MW-1
 Well Diameter: 2 1/2 in.
 Total Depth: 54.03 ft.
 Depth to Water: 7.26 ft.
40.77 xVF 0.17 = 7.95

Date Monitored: 12/22/16

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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.
 $x \times V F = \text{Estimated Purge Volume}$: 24 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.61

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

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

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 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): 0925
 Sample Time/Date: 1005/12/22/16
 Approx. Flow Rate: 2 → 1 gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 15.21

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{s}/\text{mS}$) $\mu\text{mhos/cm}$)	Temperature ($^{\circ}\text{C}$) ($^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
<u>0929</u>	<u>8</u>	<u>6.92</u>	<u>615</u>	<u>18.9</u>		
<u>0935</u>	<u>16</u>	<u>6.90</u>	<u>610</u>	<u>18.7</u>		
<u>0943</u>	<u>24</u>	<u>6.89</u>	<u>602</u>	<u>18.8</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>10 x voa vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)</u>

COMMENTS: _____

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



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/14 (inclusive)
 Sampler: GM

Well ID: MW-2
 Well Diameter: 3 1/2 in.
 Total Depth: 19.82 ft.
 Depth to Water: 8.81 ft.

Date Monitored: 12/22/14

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.

11.01 xVF 0.17 = 1.87 x3 case volume = Estimated Purge Volume: 6 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.01

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

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

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

Start Time (purge): 0525 Weather Conditions: COLD
 Sample Time/Date: 0555 12/22/14 Water Color: CLEAR Odor: Y / N
 Approx. Flow Rate: 1 gpm. Sediment Description: SL SILT
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 10.56

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS mS $\mu\text{mhos/cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
<u>0529</u>	<u>2</u>	<u>6.98</u>	<u>569</u>	<u>18.1</u>		
<u>0534</u>	<u>4</u>	<u>6.95</u>	<u>571</u>	<u>18.0</u>		
<u>0540</u>	<u>6</u>	<u>6.93</u>	<u>574</u>	<u>18.0</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>10 x voa vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/EDB/EDC(8260)/ETHANOL(8260B)</u>

COMMENTS: _____

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/16 (inclusive)
 Sampler: GM

Well ID MW-3Date Monitored: 12/22/16Well Diameter 27.6 in.

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

Total Depth 51.59 ft.Depth to Water 8.59 ft. Check if water column is less then 0.50 ft.43.00 xVF 0.17 = 7.31 x3 case volume = Estimated Purge Volume: 22 gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 17.19

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 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): 0740Weather Conditions: COLDSample Time/Date: 0825/12/22/16Water Color: TANOdor: NSTRONGApprox. Flow Rate: 2 → 1 gpm.Sediment Description: SILTDid well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 10.33

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>165</u> mS μmhos/cm)	Temperature (<u>60</u> F)	D.O. (mg/L)	ORP (mV)
<u>0744</u>	<u>8</u>	<u>6.84</u>	<u>884</u>	<u>18.4</u>		
<u>0750</u>	<u>16</u>	<u>6.81</u>	<u>890</u>	<u>18.4</u>		
<u>0756</u>	<u>22</u>	<u>6.79</u>	<u>892</u>	<u>18.2</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>0</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS: SHEEN ON WATER

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/16 (inclusive)
 Sampler: GM

Well ID MW - 4Date Monitored: 12/22/16Well Diameter (2) 6 in.Total Depth 49.40 ft.Depth to Water 8.01 ft.Water Column 41.39 ft.xVF 0.17 = 7.03Check if water column is less than 0.50 ft.
x3 case volume = Estimated Purge Volume: 22 gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.28

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____ (2400 hrs)

Time Completed: _____ (2400 hrs)

Depth to Product: _____ ft

Depth to Water: _____ ft

Hydrocarbon Thickness: 0 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): 0610Weather Conditions: COLDSample Time/Date: 0650 / 12/22/16Water Color: CLEAR Odor: N ModerateApprox. Flow Rate: 2 → 1 gpm.Sediment Description: SILTDid well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 16.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>15</u> mS μmhos/cm)	Temperature (<u>6</u> F)	D.O. (mg/L)	ORP (mV)
<u>0614</u>	<u>8</u>	<u>6.92</u>	<u>886</u>	<u>18.2</u>		
<u>0619</u>	<u>16</u>	<u>6.89</u>	<u>890</u>	<u>18.2</u>		
<u>0625</u>	<u>22</u>	<u>6.88</u>	<u>893</u>	<u>18.1</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/EDB/EDC(8260)/ETHANOL(8260B)</u>

COMMENTS:

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/14 (inclusive)
 Sampler: GM

Well ID: MW-5
 Well Diameter: 2 1/2 in.
 Total Depth: 50.16 ft.
 Depth to Water: 8.21 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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

41.95 xVF 0.17 = 7.13 x3 case volume = Estimated Purge Volume: 22 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.60

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

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

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 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): 1125 Weather Conditions: COLD
 Sample Time/Date: 1205/12/22/14 Water Color: BLACK Odor: N STRONG
 Approx. Flow Rate: 2 → 1 gpm. Sediment Description: SILT
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 16.49

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (<u>116</u> mS μmhos/cm)	Temperature (<u>19.6</u> F)	D.O. (mg/L)	ORP (mV)
<u>1129</u>	<u>8</u>	<u>7.05</u>	<u>1147</u>	<u>19.6</u>		
<u>1130</u>	<u>16</u>	<u>7.02</u>	<u>1155</u>	<u>19.4</u>		
<u>1142</u>	<u>22</u>	<u>7.00</u>	<u>1162</u>	<u>19.4</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>10 x voa vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)</u>

COMMENTS: EVALUATED SOCK AND PUT SOCK BACK IN WELL
BECAUSE NO DRUM WAS ON-SITE.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <u>GILBERT MEDINA</u>	Date: <u>12/22/16</u>	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: <u>MW-5</u>	Weather: <u>COLD</u>

1. Time absorbent sock removed from well for inspection: 0135
2. Condition of sock:
- Length of sock showing product saturation: 3.15FT.
 - Length of sock showing dryness: Ø
 - Color of sock showing product saturation: BLACK
 - Weight of the removed sock: 1 LBS 3 1/4 oz
 - Weight of new/clean/dry sock: 2 oz
 - Difference in weight [(d-e) to 0.01 ounces]: 1 LBS 1 1/4 oz
3. Picture of sock removed from well taken:
4. Sock removed from well deposited into a waste drum:
- Confirm drum is labeled: NO DRUM How full is the drum (%): NO DRUM
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:
- Depth to product: 0'NA
 - Depth to water: 8.21
 - Thickness of product (b-a): Ø
6. Size and type of sock installed: 2" SOAKEE
7. Comments: Sock was removed from the well, evaluated and placed in holding drum.
New sock was installed in the well NO DRUM ON SITE RE INSTALLED
OLD SOCK



GETTLER - RYAN INC.

SORBENT SOCK EVALUATION FORM

Name:

GILBERT MEDINA

Date:

12/22/16

Project Number:

Chevron #351647

Site Address: 3943 Broadway
Oakland, CA

Well ID:

MW-5

Weather:

COLD





GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351647 / 0746**
 Site Address: **3943 Broadway**
 City: **Oakland, CA**

Job Number: **385648**
 Event Date: **12/22/16** (inclusive)
 Sampler: **GM**

Well ID: **MW-6**
 Well Diameter: **(2) 6** in.
 Total Depth: **51.22** ft.
 Depth to Water: **46.96** ft.

Date Monitored: **12/22/16**

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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

44.26 xVF **0.17** = **7.52** x3 case volume = Estimated Purge Volume: **23** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **15.81**

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: **X** 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): **0435** Weather Conditions: **COLD**
 Sample Time/Date: **0510 / 12/22/16** Water Color: **TAN** Odor: **Y/N** **SLIGHT**
 Approx. Flow Rate: **2 → 1** gpm. Sediment Description: **SILT**
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **15.42**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S) mS μ mhos/cm)	Temperature (C F)	D.O. (mg/L)	ORP (mV)
0439	8	6.90	620	18.2		
0445	16	6.86	624	18.0		
0452	23	6.83	626	18.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS:

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



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/14 (inclusive)
 Sampler: GM

Well ID: MW-7
 Well Diameter: 2 1/2 in.
 Total Depth: 49.20 ft.
 Depth to Water: 8.07 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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

41.19 xVF 0.17 = 7.00 x3 case volume = Estimated Purge Volume: 21 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.30

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

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

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

Start Time (purge): 0345
 Sample Time/Date: 0420 12/22/14
 Approx. Flow Rate: 2 → 1 gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 16.04

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
<u>0349</u>	<u>8</u>	<u>6.80</u>	<u>902</u>	<u>18.1</u>		
<u>0355</u>	<u>16</u>	<u>6.82</u>	<u>908</u>	<u>18.0</u>		
<u>0400</u>	<u>21</u>	<u>6.84</u>	<u>911</u>	<u>17.9</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS: _____

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351647 / 0746**
 Site Address: **3943 Broadway**
 City: **Oakland, CA**

Job Number: **385648**
 Event Date: **12/22/10** (inclusive)
 Sampler: **GM**

Well ID: **MW-10**
 Well Diameter: **(2) 6** in.
 Total Depth: **21.74** ft.
 Depth to Water: **13.91** ft.

Date Monitored: **12/22/10**

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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

7.83 xVF **0.17** = **1.33** x3 case volume = Estimated Purge Volume: **4** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **15.47**

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: 0 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): **0215**

Weather Conditions:

Sample Time/Date: **0245/12/22/10**

Approx. Flow Rate: **—** gpm.

Did well de-water? **NO** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **14.96**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ S/mS mmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0218	1.5	6.77	591	17.7		
0222	3	6.73	597	17.7		
0226	4	6.71	602	17.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	(0 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS: _____

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/16 (inclusive)
 Sampler: GM

Well ID: MW-11
 Well Diameter: 3/4 in.
 Total Depth: 19.10 ft.
 Depth to Water: 12.96 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
--------------------	------------------------	----------------------	----------------------	-----------------------

Check if water column is less than 0.50 ft.

$$(0.14 \text{ ft}) \times \text{VF } 0.17 = 1.04 \text{ ft} \quad \text{x3 case volume} = \text{Estimated Purge Volume: } 3.5 \text{ gal.}$$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.18

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 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): 0840

Weather Conditions:

COLD

Sample Time/Date: 09/01/16

Water Color: CLEAR

Odor: Y/N

Approx. Flow Rate: — gpm.

Sediment Description:

SL SILT

Did well de-water?

NO

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 13.94

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{s}/\text{mS}$ $\mu\text{mhos/cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
<u>0843</u>	<u>1.25</u>	<u>6.61</u>	<u>379</u>	<u>19.3</u>		
<u>0846</u>	<u>2.5</u>	<u>6.64</u>	<u>387</u>	<u>19.1</u>		
<u>0850</u>	<u>3.5</u>	<u>6.67</u>	<u>392</u>	<u>19.0</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-11</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS: _____

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER-RYAN INC.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/16 (inclusive)
 Sampler: GM

Well ID: MW-12

Date Monitored: 12/22/16

Well Diameter: 3 1/2 in.

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
--------------------	------------------------	----------------------	----------------------	-----------------------

Total Depth: 13.65 ft.

Depth to Water: 7.91 ft.

$$9.74 \times VF \underline{0.17} = \underline{1.65} \quad x3 \text{ case volume} = \text{Estimated Purge Volume: } \underline{5} \text{ gal.}$$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.85

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____	(2400 hrs)
Time Completed: _____	(2400 hrs)
Depth to Product: _____	ft
Depth to Water: _____	ft
Hydrocarbon Thickness: <u>0</u>	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): 0300

Weather Conditions:

Sample Time/Date: 0330 /12/22/16

Approx. Flow Rate: — gpm.

Water Color: TAN

COLD

Did well de-water? NO

Sediment Description:

SILT

Odor: Y / N

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 9.70

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>μS</u> mS <u>μmhos/cm</u>	Temperature <u>°C</u> <u>F</u>)	D.O. (mg/L)	ORP (mV)
<u>0303</u>	<u>1.5</u>	<u>6.90</u>	<u>720</u>	<u>18.1</u>		
<u>0304</u>	<u>3</u>	<u>6.89</u>	<u>724</u>	<u>17.9</u>		
<u>0311</u>	<u>5</u>	<u>6.89</u>	<u>726</u>	<u>17.9</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-12</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS: _____

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351647 / 0746
 Site Address: 3943 Broadway
 City: Oakland, CA

Job Number: 385648
 Event Date: 12/22/16 (inclusive)
 Sampler: GM

Well ID: RW-1
 Well Diameter: 2 1/2 in.
 Total Depth: 16.34 ft.
 Depth to Water: 7.32 ft.
9.02 xVF 1.50 = 13.53

Date Monitored: 12/22/16

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.
 $xVF \cdot 1.50 = 13.53$ x3 case volume = Estimated Purge Volume: 41 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.12

Purge Equipment:

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

Sampling Equipment:

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

Time Started: _____ (2400 hrs)
 Time Completed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 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): 1020
 Sample Time/Date: 110 /12/22/16
 Approx. Flow Rate: 2 → 1 gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 9.10

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <small>µS/cm</small>	Temperature <small>°C F</small>	D.O. (mg/L)	ORP (mV)
<u>1027</u>	<u>14</u>	<u>6.48</u>	<u>353</u>	<u>18.6</u>		
<u>1038</u>	<u>28</u>	<u>6.44</u>	<u>354</u>	<u>18.4</u>		
<u>1051</u>	<u>41</u>	<u>6.43</u>	<u>356</u>	<u>18.2</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>RW-1</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)/ EDB/EDC(8260)/ETHANOL(8260B)

COMMENTS: EVALUATED SOCK AND PUT SOCK BACK IN WELL
BECAUSE NO DRUM WAS ON SITE.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name: <u>GILBERT MEDINA</u>	Date: <u>12/22/16</u>	Project Number: Chevron #351647
Site Address: 3943 Broadway Oakland, CA	Well ID: <u>RW - 1</u>	Weather: <u>COLD</u>

1. Time absorbent sock removed from well for inspection: 0140
2. Condition of sock:
 - a. Length of sock showing product saturation: 2.4 ft.
 - b. Length of sock showing dryness: Ø
 - c. Color of sock showing product saturation: BROWN
 - d. Weight of the removed sock: 2 LBS 4 3/8 oz
 - e. Weight of new/clean/dry sock: 5oz
 - f. Difference in weight [(d-e) to 0.01 ounces]: 1 LBS 15 5/8 oz
3. Picture of sock removed from well taken:
4. Sock removed from well deposited into a waste drum:
- Confirm drum is labeled: NO DRUM How full is the drum (%): NO DRUM
5. At least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing:
 - a. Depth to product: NA
 - b. Depth to water: 7.32
 - c. Thickness of product (b-a): Ø
6. Size and type of sock installed: 4" SOAKEE
7. Comments: Sock was removed from the well, evaluated and placed in holding drum.
New sock was installed in the well NO DRUM ON SITE
REINSTALLED OLD SOCK



GETTLER-RYAN INC.

SORBENT SOCK EVALUATION FORM

Name:

GILBERT MEDINA

Date:

12/22/16

Project Number:

Chevron #351647

Site Address: 3943 Broadway
Oakland, CA

Well ID:

RW - 1

Weather:

COLD



CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC of

Union Oil Site ID: <u>0746</u>				Union Oil Consultant: <u>ARRADIS</u>				ANALYSES REQUIRED				Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>				
Site Global ID: <u>T0600101471</u>				Consultant Contact: <u>TAMEZA RUGERS</u>												
Site Address: <u>3943 BROADWAY</u> <u>OAKLAND, CA</u>				Consultant Phone No. <u>(408) 797-2013</u>												
Union Oil PM: <u>JAMES P. KIERNAN</u>				Sampling Company: <u>GITTIER-RYAN INC</u>												
Union Oil PM Phone No.: <u>(925) 842 32020</u>				Sampled By (PRINT): <u>GILBERT MEDINA</u>												
Charge Code: NWRTB-0 <u>351647-0-LAB</u>				Sampler Signature: <u>Gilbert Medina</u>												
<i>This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.</i>				BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911												
SAMPLE ID				Sample Time				# of Containers				Notes / Comments				
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time		# of Containers		TPH - Diesel by EPA 8015	TPH - G by <u>8015</u> (6-12) (3015B)	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS				
QA	W-S-A		161222	—		2		X	X							
MW-1	W-S-A			1005		6					X					
MW-2	W-S-A			0555												
MW-3	W-S-A			0825												
MW-4	W-S-A			0650												
MW-5	W-S-A			1205												
MW-6	W-S-A			0510												
MW-7	W-S-A			0420												
MW-10	W-S-A			0245												
MW-11	W-S-A			0910												
MW-12	W-S-A			0330												
RW-1	W-S-A		↓	1110		↓		↓	↓	↓	↓	↓				
Relinquished By:	Company	Date / Time:		Relinquished By		Company	Date / Time :		Relinquished By		Company	Date / Time:				
<u>Gilbert Medina</u>	GRInt	17/22/16 1300														
Received By	Company	Date / Time:		Received By		Company	Date / Time :		Received By		Company	Date / Time:				
<u>Gray Boggs</u>	Re (A)	12/27/16 1320														

ATTACHMENT B

[Historical Groundwater Analytical Data]

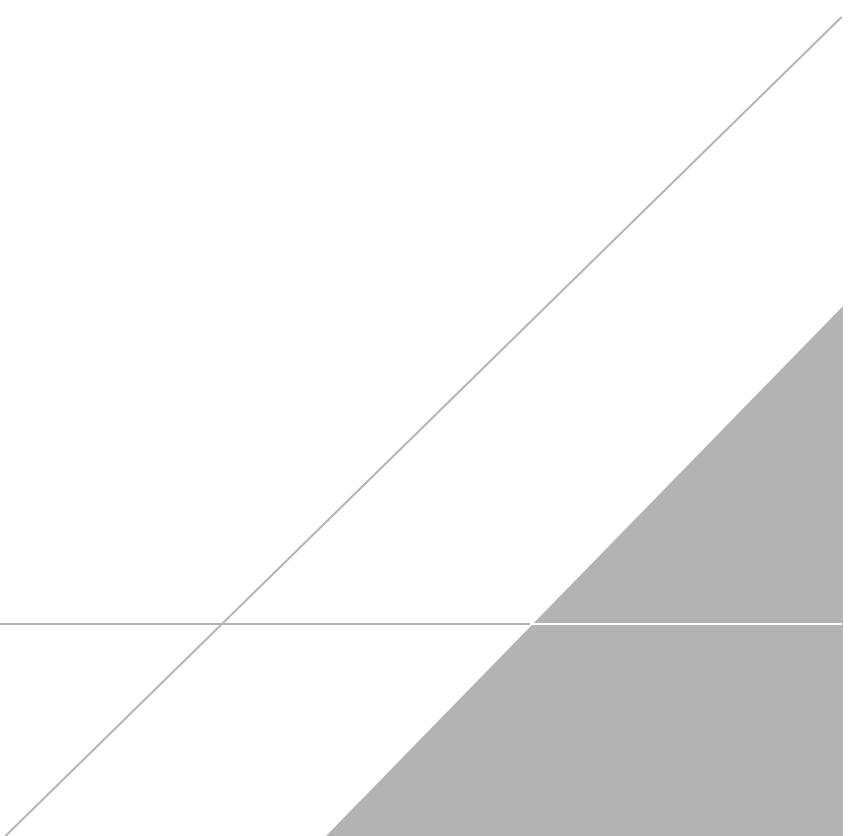


Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	COMMENTS
	(ft)		(ft)	(ft)	(ft)							
MW-1	--	11/1/1989	--	--	--	--	ND	ND	ND	ND	0.3	
	--	2/15/1990	--	--	--	--	170	7.9	ND	2.2	2.8	
	--	8/16/1990	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/7/1990	--	--	--	--	45	ND	ND	ND	ND	
	--	2/25/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	5/28/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/28/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/19/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	2/6/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/26/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/20/1992	--	--	--	--	ND	0.75	ND	ND	ND	
81.07	12/21/1992	8.12	72.95	0	--	--	--	--	--	--	--	
81.07	1/30/1993	7.63	73.44	0	--	--	--	--	--	--	--	
81.07	2/24/1993	7.16	73.91	0	--	1,100	280	4.9	120	140		
81.07	3/22/1993	6.26	74.81	0	--	--	--	--	--	--	--	
81.07	4/28/1993	7.91	73.16	0	--	--	--	--	--	--	--	
81.07	5/25/1993	7.87	73.20	0	--	260	27	4.9	2.6	54		
80.54	6/23/1993	7.66	72.88	0	--	--	--	--	--	--	--	
80.54	7/22/1993	7.87	72.67	0	--	--	--	--	--	--	--	
80.54	8/25/1993	8.00	72.54	0	--	ND	ND	ND	ND	ND	ND	
80.54	9/22/1993	8.10	72.44	0	--	--	--	--	--	--	--	
80.54	10/28/1993	8.15	72.39	0	--	--	--	--	--	--	--	
80.54	11/30/1993	7.65	72.89	0	--	--	--	--	--	--	--	
80.54	2/16/1994	7.46	73.08	0	--	ND	0.84	ND	ND	ND	0.59	
80.54	5/31/1994	7.80	72.74	0	--	--	--	--	--	--	--	
80.54	8/31/1994	8.27	72.27	0	--	ND	ND	0.98	ND	ND	0.84	
80.54	9/27/1994	8.37	72.17	0	--	--	--	--	--	--	--	
80.54	10/11/1994	8.36	72.18	0	--	--	--	--	--	--	--	
80.54	11/10/1994	6.43	74.11	0	--	--	--	--	--	--	--	
80.54	2/7/1995	7.06	73.48	0	--	6,100	670	ND	120	60		
80.54	5/3/1995	6.85	73.69	0	--	260	21	39	17	24		
80.54	8/3/1995	7.69	72.85	0	--	--	--	--	--	--	--	
80.54	11/7/1995	8.15	72.39	0	--	ND	ND	ND	ND	ND	ND	
80.54	5/6/1996	7.40	73.14	0	--	170	1.0	20	2.3	17		
80.54	11/5/1996	7.90	72.64	0	--	ND	ND	ND	ND	ND	ND	
80.54	5/15/1997	7.77	72.77	0	--	ND	ND	ND	ND	ND	ND	
80.54	11/12/1997	7.48	73.06	0	--	ND	ND	ND	ND	ND	ND	
80.54	5/4/1998	7.39	73.15	0	--	ND	ND	ND	ND	ND	ND	
80.54	11/11/1998	7.37	73.17	0	--	ND	ND	ND	ND	ND	ND	
80.54	5/20/1999	7.41	73.13	0	--	ND	ND	ND	ND	ND	ND	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	COMMENTS
	(ft)		(ft)	(ft)	(ft)							
80.54		11/15/1999	7.84	72.70	0	--	ND	ND	ND	ND	ND	
80.54		5/22/2000	7.53	73.01	0	--	ND	0.89	ND	ND	ND	
80.54		11/22/2000	7.35	73.19	0	--	ND	ND	ND	ND	ND	
80.54		5/15/2001	7.48	73.06	0	--	345	ND	3.41	2.77	25.2	
80.54		11/23/2001	7.57	72.97	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
80.54		5/24/2002	7.10	73.44	0	--	70	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
80.54		11/29/2002	7.96	72.58	0	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	
80.54		5/15/2003	7.22	73.32	0	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	
80.54		11/4/2003	7.94	72.60	0	120	--	ND<1.0	ND<1.0	ND<1.0	ND<2.0	
80.54		5/24/2004	7.54	73.00	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		11/29/2004	7.27	73.27	0	58	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/24/2005	7.06	73.48	0	87	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/15/2005	7.35	73.19	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/14/2006	7.06	73.48	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/21/2006	7.12	73.42	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
80.54		6/28/2007	7.79	72.75	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
80.54		12/13/2007	7.94	72.60	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/9/2008	8.00	72.54	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/30/2008	7.51	73.03	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		9/28/2009	8.10	72.44	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/15/2009	7.32	73.22	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/28/2010	7.80	72.74	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/29/2010	6.22	74.32	0	99	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/7/2011	6.25	74.29	0	140	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/9/2011	7.97	72.57	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/1/2012	7.63	72.91	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/6/2013	7.88	72.66	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/13/2013	8.34	72.20	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		6/23/2014	8.27	72.27	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/17/2014	5.82	74.72	0	1,100	1,200	50	8.2	14	230	
80.54		6/9/2015	8.06	72.48	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54		12/30/2015	7.72	72.82	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.54	6/22/2016	8.06	72.48	0		--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
MW-2	--	11/1/1989	--	--	--	--	200	ND	ND	3.0	1.2	
	--	2/15/1990	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/16/1990	--	--	--	--	ND	ND	6.7	ND	ND	
	--	11/7/1990	--	--	--	--	ND	ND	ND	ND	ND	
	--	2/25/1991	--	--	--	--	ND	0.68	0.42	ND	0.86	

Table 4
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3943 Broadway
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g ($\mu\text{g/L}$)	B ($\mu\text{g/L}$)	T ($\mu\text{g/L}$)	E ($\mu\text{g/L}$)	X ($\mu\text{g/L}$)	COMMENTS
	(ft)		(ft)	(ft)	(ft)							
	--	5/28/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/28/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/19/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	2/6/1992	--	--	--	--	ND	0.36	0.66	ND	0.62	
	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/26/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/20/1992	--	--	--	--	510	ND	ND	ND	ND	
81.62	12/21/1992	9.14	72.48	0	--	--	--	--	--	--	--	
81.62	1/30/1993	8.99	72.63	0	--	--	--	--	--	--	--	
81.62	2/24/1993	8.03	73.59	0	--	11,000 J	ND	ND	ND	ND	ND	
81.62	3/22/1993	9.50	72.12	0	--	--	--	--	--	--	--	
81.62	4/28/1993	8.87	72.75	0	--	--	--	--	--	--	--	
81.62	5/25/1993	9.04	72.58	0	--	1,300 J	ND	ND	ND	ND	ND	
81.32	6/23/1993	9.17	72.15	0	--	--	--	--	--	--	--	
81.32	7/22/1993	9.42	71.90	0	--	--	--	--	--	--	--	
81.32	8/25/1993	9.53	71.79	0	--	190 J	ND	ND	ND	ND	ND	
81.32	9/22/1993	9.67	71.65	0	--	--	--	--	--	--	--	
81.32	10/28/1993	9.65	71.67	0	--	--	--	--	--	--	--	
81.32	11/30/1993	9.18	72.14	0	--	480 J	ND	ND	ND	ND	ND	
81.32	2/16/1994	8.91	72.41	0	--	3,200 J	ND	ND	ND	ND	ND	
81.32	5/31/1994	9.36	71.96	0	--	1,100 J	ND	ND	ND	ND	ND	
81.32	8/31/1994	9.85	71.47	0	--	310 J	ND	ND	ND	ND	ND	
81.32	9/27/1994	9.95	71.37	0	--	--	--	--	--	--	--	
81.32	11/10/1994	7.47	73.85	0	--	95 J	ND	ND	ND	ND	ND	
81.32	2/7/1995	8.29	73.03	0	--	1,600 J	ND	ND	ND	ND	ND	
81.32	5/3/1995	8.12	73.20	0	--	ND	ND	ND	ND	ND	ND	
81.32	8/3/1995	9.35	71.97	0	--	ND	ND	ND	ND	ND	ND	
81.32	8/19/1995	--	--	0	--	--	--	--	--	--	--	
81.32	10/11/1995	9.95	71.37	0	--	--	--	--	--	--	--	
81.32	11/7/1995	9.65	71.67	0	--	ND	ND	ND	ND	ND	ND	
81.32	5/6/1996	8.90	72.42	0	--	--	--	--	--	--	--	
81.32	11/5/1996	10.98	70.34	0	--	--	--	--	--	--	--	
81.32	5/15/1997	9.13	72.19	0	--	--	--	--	--	--	--	
81.32	11/12/1997	9.84	71.48	0	--	--	--	--	--	--	--	
81.32	5/4/1998	9.26	72.06	0	--	--	--	--	--	--	--	
81.32	11/11/1998	8.88	72.44	0	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
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WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.32	5/20/1999	8.68	72.64	0	--	--	--	--	--	--	--	
81.32	11/15/1999	8.91	72.41	0	--	--	--	--	--	--	--	
81.32	5/22/2000	8.61	72.71	0	--	--	--	--	--	--	--	
81.32	11/22/2000	8.64	72.68	0	--	--	--	--	--	--	--	
81.32	5/15/2001	8.73	72.59	0	--	--	--	--	--	--	--	
81.32	11/23/2001	8.61	72.71	0	--	--	--	--	--	--	--	
81.32	5/24/2002	8.03	73.29	0	--	--	--	--	--	--	--	
81.32	11/29/2002	8.79	72.53	0	--	--	--	--	--	--	--	
81.32	5/15/2003	8.21	73.11	0	--	--	--	--	--	--	--	
81.32	11/4/2003	--	--	--	--	--	--	--	--	--	--	Unable to open due to stripped bolts
81.32	5/24/2004	--	--	--	--	--	--	--	--	--	--	Unable to open due to stripped bolts
81.32	11/29/2004	--	--	--	--	--	--	--	--	--	--	Unable to open due to stripped bolts
81.32	6/24/2005	--	--	--	--	--	--	--	--	--	--	Unable to open due to stripped bolts
81.32	12/15/2005	--	--	--	--	--	--	--	--	--	--	Unable to open due to stripped bolts
81.32	6/14/2006	8.56	72.76	0	140	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	12/21/2006	8.38	72.94	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
81.32	6/28/2007	9.23	72.09	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
81.32	12/13/2007	9.10	72.22	0	ND<50	--	ND<0.50	1.1	ND<0.50	1.4		
81.32	6/9/2008	10.01	71.31	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	12/30/2008	--	--	--	--	--	--	--	--	--	--	Unable to locate due to debris
81.32	9/28/2009	--	--	--	--	--	--	--	--	--	--	Unable to open due to stripped bolts
81.32	12/15/2009	8.93	72.39	0	69	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	6/28/2010	9.65	71.67	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	12/29/2010	7.91	73.41	0	67	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	6/7/2011	7.75	73.57	0	73	--	0.97	ND<0.50	ND<0.50	ND<1.0		
81.32	12/9/2011	8.95	72.37	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	6/1/2012	9.18	72.14	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	6/6/2013	9.40	71.92	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	12/13/2013	9.68	71.64	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	3.1		
81.32	6/23/2014	9.69	71.63	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	12/17/2014	6.88	74.44	0	--	ND<50	0.8	ND<0.50	ND<0.50	ND<1.0		
81.32	6/9/2015	9.01	72.31	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	12/30/2015	8.89	72.43	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
81.32	6/22/2016	9.04	72.28	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
MW-3	--	11/1/1989	--	--	--	--	13,000	57	48	1.7	120	

Table 4
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WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	(ft)		(ft)	(ft)	(ft)							
--		2/15/1990	--	--	--	--	20,000	1,700	2,100	750	3,100	
--		8/16/1990	--	--	--	--	6,800	600	660	760	160	
--		11/7/1990	--	--	--	--	42,000	1,400	5,000	1,800	7,500	
--		2/25/1991	--	--	--	--	37,000	730	2,900	1,300	7,300	
--		5/28/1991	--	--	--	--	24,000	570	1,100	810	4,200	
--		8/28/1991	--	--	--	--	16,000	650	2,200	1,100	5,400	
--		11/19/1991	--	--	--	--	22,000	250	440	660	3,000	
--		2/6/1992	--	--	--	--	24,000	600	1,800	1,200	5,800	
--		5/23/1992	--	--	--	--	25,000	300	130	880	4,900	
--		8/26/1992	--	--	--	--	20,000	690	1,900	1,300	5,700	
--		11/20/1992	--	--	--	--	1,100,000	1,800	6,400	3,000	15,000	
82.01		12/4/1992	10.30	71.71	0	--	--	--	--	--	--	
82.01		12/21/1992	9.78	72.23	0	--	--	--	--	--	--	Sheen
82.01		1/9/1993	8.55	73.46	0	--	--	--	--	--	--	
82.01		1/30/1993	8.90	73.11	0	--	--	--	--	--	--	
82.01		2/10/1993	9.01	72.99	0.01	--	--	--	--	--	--	
82.01		2/24/1993	8.26	73.74	0.01	--	--	--	--	--	--	
82.01		3/9/1993	9.18	72.82	0.02	--	--	--	--	--	--	
82.01		3/22/1993	8.81	73.19	0.02	--	--	--	--	--	--	
82.01		4/8/1993	9.14	72.86	0.02	--	--	--	--	--	--	
82.01		4/28/1993	9.44	72.55	0.03	--	--	--	--	--	--	
82.01		5/12/1993	9.57	72.42	0.03	--	--	--	--	--	--	
82.01		5/25/1993	9.45	72.54	0.03	--	--	--	--	--	--	
81.41		6/7/1993	8.94	72.47	0	--	--	--	--	--	--	
81.41		6/23/1993	9.20	72.20	0.02	--	--	--	--	--	--	
81.41		7/8/1993	9.31	72.08	0.03	--	--	--	--	--	--	
81.41		7/22/1993	9.47	71.94	0	--	--	--	--	--	--	
81.41		8/11/1993	9.59	71.82	0	--	--	--	--	--	--	
81.41		8/25/1993	9.67	71.72	0.03	--	--	--	--	--	--	
81.41		9/8/1993	10.34	71.07	0	--	--	--	--	--	--	
81.41		9/22/1993	9.84	71.56	0.02	--	--	--	--	--	--	
81.41		10/7/1993	9.87	71.54	0	--	--	--	--	--	--	
81.41		10/28/1993	10.03	71.38	0	--	--	--	--	--	--	
81.41		11/12/1993	9.76	71.65	0	--	--	--	--	--	--	
81.41		11/30/1993	9.66	71.74	0.02	--	--	--	--	--	--	
81.41		2/16/1994	8.87	72.54	0	--	57,000	910	2,500	2,100	9,000	Sheen

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WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.41	5/31/1994	9.48	71.93	0	--	39,000	670	630	1,500	6,200		
81.41	8/31/1994	10.08	71.33	0	--	44,000	500	240	1,400	5,700		
81.41	9/24/1994	10.22	71.19	0	--	--	--	--	--	--	--	
81.41	10/11/1994	10.41	70.99	0.01	--	--	--	--	--	--	--	LPH in well
81.41	11/10/1994	7.47	73.94	0	--	86,000	3,300	3,800	1,800	8,300		Sheen
81.41	2/7/1995	8.05	73.36	0	--	45,000	1,400	1,300	1,500	5,600		
81.41	3/14/1995	7.05	74.36	0	--	--	--	--	--	--	--	
81.41	5/3/1995	7.91	73.50	0	--	26,000	740	990	1,100	4,400		
81.41	8/3/1995	9.28	72.13	0	--	18,000	59	ND	530	1,900		
81.41	8/19/1995	--	--	0	--	--	--	--	--	--	--	
81.41	11/7/1995	10.79	70.62	0	--	17,000	110	26	400	1,500		
81.41	5/6/1996	9.44	71.97	0	--	5,100	48	ND	87	210		Sheen
81.41	11/5/1996	10.64	70.77	0	--	35,000	2,200	ND	1,200	2,800		
81.41	5/15/1997	9.61	71.80	0	--	2,400	110	ND	ND	140		
81.41	11/12/1997	9.18	72.23	0	--	29,000	2,000	ND	1,800	3,000		
81.41	5/4/1998	9.50	71.91	0	--	8,200	430	ND	310	320		
81.41	11/11/1998	9.25	72.16	0	--	8,700	500	ND	330	310		
81.41	5/20/1999	8.95	72.46	0	--	4,300	250	ND	ND	86		
81.41	11/15/1999	10.35	71.06	0	--	6,720	326	ND	398	226		
81.41	5/22/2000	9.14	72.27	0	--	4,000	99	4.5	190	75		
81.41	11/22/2000	9.33	72.08	0	--	6,130	93.7	6.71	174	47.8		
81.41	5/15/2001	9.25	72.16	0	--	4,490	229	7.09	160	31.6		
81.41	11/23/2001	9.12	72.29	0	--	3,500	41	ND<5.0	120	8.0		
81.41	5/24/2002	8.58	72.83	0	--	4,000	86	6.0	120	5.8		
81.41	11/29/2002	9.81	71.60	0	--	5,300	ND<25	ND<25	65	ND<50		
81.41	5/15/2003	8.76	72.65	0	--	5,600	ND<5.0	ND<5.0	81	ND<10		
81.41	11/4/2003	9.90	71.51	0	13,000	--	ND<20	ND<20	72	56		
81.41	5/24/2004	9.29	72.12	0	10,000	--	14	ND<10	81	ND<20		
81.41	11/29/2004	9.15	72.26	0	9,000	--	5.9	ND<5.0	45	ND<10		
81.41	6/24/2005	8.65	72.76	0	5,600	--	31	4.1	97	220		
81.41	12/15/2005	9.27	72.14	0	6,800	--	81	45	110	220		
81.41	6/14/2006	8.73	72.68	0	10,000	--	38	ND<2.5	130	170		
81.41	12/21/2006	8.95	72.46	0	6,600	--	36	ND<2.5	150	120		
81.41	6/28/2007	10.01	71.40	0	6,700	--	33	ND<0.50	70	24		
81.41	12/13/2007	10.22	71.19	0	4,000	--	20	ND<1.0	51	19		
81.41	6/9/2008	10.25	71.16	0	9,700	--	190	ND<2.5	170	48		

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.41	12/30/2008	--	--	--	--	--	--	--	--	--	--	Unable to locate due to debris
81.41	9/28/2009	10.15	71.26	0	6,200	--	39	ND<2.5	170	12		
81.41	12/15/2009	9.18	72.23	0	3,300	--	9.1	ND<2.5	47	5.6		
81.41	6/28/2010	9.82	71.59	0	10,000	--	13	ND<0.50	92	14		
81.41	12/29/2010	7.84	73.57	0	3,900	--	16	ND<0.50	36	5.2		
81.41	6/7/2011	6.10	75.31	0	3,700	--	170	ND<1.0	150	40		
81.41	12/9/2011	10.08	71.33	0	--	9,900	11	ND<2.5	98	47		
81.41	6/1/2012	9.92	71.49	0	--	4,300	4.6	ND<0.50	17	3.4		
81.41	11/23/2012	9.78	71.63	0	--	2,000	1.3	ND<0.50	12	ND<1.0		
81.41	12/13/2013	10.39	71.02	0	--	1,100	ND<0.50	ND<0.50	23	4.2		
81.41	6/23/2014	10.28	71.13	0	--	4,200	87	ND<0.50	76	13		
81.41	12/17/2014	7.99	73.42	0	8,700	5,900	35	ND<0.50	56	4.7		
81.41	6/9/2015	9.74	71.67	0	--	6,500	4	ND<0.50	ND<0.50	ND<1.0		Sheen
81.41	12/30/2015	9.44	71.97	0	--	3,100	2.3	ND<0.50	20	ND<1.0		
81.41	6/22/2016	9.81	71.60	0	--	1,900	71	ND<2.5	81	6.2		
MW-4	--	2/15/1990	--	--	--	--	150	8.0	8.0	10	45	
	--	8/16/1990	--	--	--	--	3,600	480	17	230	260	
	--	11/7/1990	--	--	--	--	180	1.5	0.37	6.3	26	
	--	2/25/1991	--	--	--	--	22,000	600	1,300	780	2,800	
	--	5/28/1991	--	--	--	--	38	ND	ND	ND	2	
	--	8/28/1991	--	--	--	--	2,000	1,500	20	120	300	
	--	11/19/1991	--	--	--	--	55	9.2	4.5	1.4	6.7	
	--	2/6/1992	--	--	--	--	5,700	2,200	140	57	980	
	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/26/1992	--	--	--	--	120	86	0.52	0.57	1.6	
	--	11/20/1992	--	--	--	--	ND	6.2	ND	1.2	0.52	
81.48	1/30/1993	8.35	73.13	0	--	--	--	--	--	--	--	
81.48	2/24/1993	8.17	73.31	0	--	140	12	0.64	9.4	3.7		
81.48	3/22/1993	8.12	73.36	0	--	--	--	--	--	--	--	
81.48	4/28/1993	9.36	72.12	0	--	--	--	--	--	--	--	
81.48	5/25/1993	8.75	72.73	0	--	74	10	ND	4.6	1.8		
81.29	6/23/1993	8.90	72.39	0	--	--	--	--	--	--	--	
81.29	7/22/1993	9.26	72.03	0	--	--	--	--	--	--	--	
81.29	8/25/1993	9.45	71.84	0	--	640	100	1.1	100	22		
81.29	9/22/1993	9.63	71.66	0	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.29	10/28/1993	9.62	71.67	0	--	--	--	--	--	--	--	
81.29	11/30/1993	9.40	71.89	0	--	200	28	ND	17	8.1		
81.48	12/21/1993	9.10	72.38	0	--	--	--	--	--	--	--	
81.29	2/16/1994	9.21	72.08	0	--	190	11	0.98	21	6.6		
81.29	5/31/1994	9.11	72.18	0	--	1,100	190	ND	100	58		
81.29	8/31/1994	10.01	71.28	0	--	400	17	0.94	14	5.2		
81.29	9/27/1994	10.09	71.20	0	--	--	--	--	--	--	--	
81.29	10/11/1994	11.50	69.79	0	--	--	--	--	--	--	--	
81.29	11/10/1994	9.21	72.08	0	--	7,700	1,800	280	460	1,300		
81.29	2/7/1995	7.66	73.63	0	--	540	47	ND	17	2.5		
81.29	5/3/1995	8.29	73.00	0	--	160	8.3	0.52	1.5	3.7		
81.29	8/3/1995	8.60	72.69	0	--	57	2.0	ND	ND	ND		
81.29	8/19/1995	--	--	0	--	--	--	--	--	--	--	
81.29	11/7/1995	10.28	71.01	0	--	ND	0.71	ND	ND	ND	ND	
81.29	5/6/1996	8.70	72.59	0	--	1,200	12	11	15	36		
81.29	11/5/1996	10.00	71.29	0	--	700	32	0.71	1.8	1.3		
81.29	5/15/1997	9.37	71.92	0	--	51	ND	ND	ND	ND		
81.29	11/12/1997	8.92	72.37	0	--	74	1.7	ND	ND	ND		
81.29	5/4/1998	9.48	71.81	0	--	ND	ND	ND	ND	ND		
81.29	11/11/1998	9.13	72.16	0	--	ND	0.63	ND	ND	ND		
81.29	5/20/1999	8.41	72.88	0	--	ND	ND	ND	ND	ND		
81.29	11/15/1999	9.68	71.61	0	--	ND	ND	ND	ND	ND		
81.29	5/22/2000	8.60	72.69	0	--	ND	ND	ND	ND	ND		
81.29	11/22/2000	8.91	72.38	0	--	ND	ND	ND	ND	ND		
81.29	5/15/2001	8.66	72.63	0	--	ND	ND	1.10	ND	1.16		
81.29	11/23/2001	8.84	72.45	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
81.29	5/24/2002	7.93	73.36	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
81.29	11/29/2002	9.34	71.95	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.29	5/15/2003	7.87	73.42	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.48	11/4/2003	9.45	72.03	0	61	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.48	5/24/2004	8.49	72.99	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.48	11/29/2004	9.01	72.47	0	120	--	ND<0.50	ND<0.50	ND<0.50	0.52	ND<1.0	
81.48	6/24/2005	7.81	73.67	0	90	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.48	12/15/2005	8.73	72.75	0	170	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.48	6/14/2006	7.43	74.05	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	12/21/2006	7.04	--	0	62	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	Casing elevation modified on 6/21/2006	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g ($\mu\text{g}/\text{L}$)	B ($\mu\text{g}/\text{L}$)	T ($\mu\text{g}/\text{L}$)	E ($\mu\text{g}/\text{L}$)	X ($\mu\text{g}/\text{L}$)	COMMENTS
	--	6/28/2007	11.49	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	--	12/13/2007	11.79	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/9/2008	12.24	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	12/30/2008	9.34	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	9/28/2009	--	--	--	--	--	--	--	--	--	Car parked over well
	--	12/15/2009	10.22	--	0	1,800	--	4.4	ND<0.50	8.5	ND<1.0	
	--	6/28/2010	11.74	--	0	230	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	12/29/2010	9.33	--	0	5,300	--	0.72	0.55	35	ND<1.0	
	--	6/7/2011	8.68	--	0	3,900	--	ND<2.5	ND<2.5	46	ND<5.0	
	--	12/9/2011	9.04	--	0	--	1,900	ND<0.50	ND<0.50	1.4	ND<1.0	
	--	6/1/2012	9.92	--	0	--	680	ND<2.5	ND<2.5	ND<2.5	ND<5.0	
	--	6/6/2013	9.17	--	0	--	410	0.52	ND<0.50	ND<0.50	ND<1.0	
	--	12/13/2013	10.05	--	0	--	3,200	2.1	ND<0.50	3.2	ND<1.0	
	--	6/23/2014	10.28	--	0	--	2,600	2.5	ND<0.50	9.1	ND<1.0	
	--	12/17/2014	9.32	--	0	1,900	1,800	4.5	ND<0.50	9.1	ND<1.0	
	--	6/9/2015	9.41	--	0	--	2,200	1.8	ND<0.50	11	ND<1.0	
	--	12/30/2015	9.78	--	0	--	5,000	1.4	ND<0.50	9.3	ND<1.0	
	--	6/22/2016	9.08	--	0	--	1,900	ND<0.50	ND<0.50	7.2	ND<1.0	
MW-5	--	2/15/1990	--	--	--	--	24,000	1,500	1,700	260	3,600	
	--	8/16/1990	--	--	--	--	16,000	1,400	1,900	2,800	660	
	--	11/7/1990	--	--	--	--	20,000	640	1,100	670	3,000	
	--	2/25/1991	--	--	--	--	25,000	950	1,300	900	3,500	
	--	5/28/1991	--	--	--	--	24,000	2,300	3,400	1,300	6,000	
	--	8/28/1991	--	--	--	--	--	--	--	--	--	
	--	11/19/1991	--	--	--	--	--	--	--	--	--	
	--	2/6/1992	--	--	--	--	--	--	--	--	--	
	--	5/23/1992	--	--	--	--	--	--	--	--	--	
	--	8/26/1992	--	--	--	--	--	--	--	--	--	
	--	11/20/1992	--	--	--	--	--	--	--	--	--	
81.59	12/4/1992	10.03	71.50	0.08	--	--	--	--	--	--	--	
81.59	12/21/1992	9.50	72.08	0.01	--	--	--	--	--	--	--	
81.59	1/9/1993	8.22	73.37	0	--	--	--	--	--	--	--	
81.59	1/30/1993	8.58	73.01	0	--	--	--	--	--	--	--	Sheen
81.59	2/10/1993	8.68	72.91	0	--	--	--	--	--	--	--	Sheen
81.59	2/24/1993	7.91	73.67	0.01	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g ($\mu\text{g}/\text{L}$)	B ($\mu\text{g}/\text{L}$)	T ($\mu\text{g}/\text{L}$)	E ($\mu\text{g}/\text{L}$)	X ($\mu\text{g}/\text{L}$)	COMMENTS
	(ft)		(ft)	(ft)	(ft)							
81.59	3/9/1993	8.87	72.71	0.01	--	--	--	--	--	--	--	
81.59	3/22/1993	8.46	73.12	0.01	--	--	--	--	--	--	--	
81.59	4/8/1993	8.84	72.74	0.01	--	--	--	--	--	--	--	
81.59	4/28/1993	9.14	72.43	0.02	--	--	--	--	--	--	--	
81.59	5/12/1993	9.28	72.29	0.02	--	--	--	--	--	--	--	
81.59	5/25/1993	9.63	71.86	0.13	--	--	--	--	--	--	--	
81.38	6/7/1993	9.75	71.62	0.01	--	--	--	--	--	--	--	
81.38	6/23/1993	9.32	72.04	0.03	--	--	--	--	--	--	--	
81.38	7/8/1993	9.48	71.87	0.04	--	--	--	--	--	--	--	
81.38	7/22/1993	9.73	71.53	0.16	--	--	--	--	--	--	--	
81.38	8/11/1993	9.84	71.51	0.04	--	--	--	--	--	--	--	
81.38	8/25/1993	9.81	71.55	0.02	--	--	--	--	--	--	--	
81.38	9/8/1993	10.09	71.27	0.03	--	--	--	--	--	--	--	
81.38	9/22/1993	10.01	71.33	0.05	--	--	--	--	--	--	--	
81.38	10/7/1993	9.94	71.42	0.03	--	--	--	--	--	--	--	
81.38	10/28/1993	10.04	71.32	0.02	--	--	--	--	--	--	--	
81.38	11/12/1993	9.79	71.59	0	--	--	--	--	--	--	--	
81.38	11/30/1993	9.62	71.76	0	--	--	--	--	--	--	--	
81.38	2/16/1994	8.95	72.41	0.02	--	--	--	--	--	--	--	
81.38	5/31/1994	9.63	71.75	0	--	43,000	1,500	1,200	1,600	6,700		
81.38	8/31/1994	10.25	71.11	0.02	--	--	--	--	--	--	--	
81.38	9/27/1994	10.38	71.00	0	--	--	--	--	--	--	--	
81.38	10/11/1994	10.45	70.91	0.02	--	--	--	--	--	--	--	
81.38	11/10/1994	7.54	73.78	0.08	--	--	--	--	--	--	--	
81.38	2/7/1995	8.10	73.28	0	--	25,000	1,400	740	990	3,000		
81.38	3/14/1995	7.04	74.34	0	--	--	--	--	--	--	--	
81.38	5/3/1995	7.98	73.40	0	--	12,000	680	160	600	1,800		
81.38	8/3/1995	9.25	72.13	0	--	23,000	940	280	810	2,700		
81.38	8/19/1995	--	--	0	--	--	--	--	--	--	--	
81.38	11/7/1995	10.00	71.38	0	--	40,000	510	280	1,000	5,700		
81.38	5/6/1996	9.03	72.35	0	--	13,000	200	ND	180	610		Sheen
81.38	11/5/1996	10.41	70.97	0	--	35,000	1,800	ND	1,300	4,900		
81.38	5/15/1997	9.41	71.97	0	--	10,000	490	ND	ND	1,300		Sheen
81.38	11/12/1997	9.27	72.11	0	--	100	5	ND	ND	ND		
81.38	5/4/1998	9.18	72.20	0	--	39,000	1,600	230	1,000	3,200		
81.38	11/11/1998	9.23	71.87	0.37	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g ($\mu\text{g}/\text{L}$)	B ($\mu\text{g}/\text{L}$)	T ($\mu\text{g}/\text{L}$)	E ($\mu\text{g}/\text{L}$)	X ($\mu\text{g}/\text{L}$)	COMMENTS
	(ft)		(ft)	(ft)	(ft)							
81.38	2/22/1999	7.69	73.50	0.25	--	--	--	--	--	--	--	
81.38	4/2/1999	8.19	72.98	0.28	--	--	--	--	--	--	--	
81.38	5/4/1999	8.44	72.93	0.01	--	--	--	--	--	--	--	
81.38	5/20/1999	8.73	72.62	0.04	--	--	--	--	--	--	--	
81.38	6/29/1999	8.91	72.43	0.05	--	--	--	--	--	--	--	
81.38	7/29/1999	9.12	72.21	0.07	--	--	--	--	--	--	--	
81.38	8/24/1999	9.37	71.94	0.09	--	--	--	--	--	--	--	
81.38	9/27/1999	9.51	71.82	0.06	--	--	--	--	--	--	--	
81.38	10/28/1999	--	--	0.05	--	--	--	--	--	--	--	
81.38	11/15/1999	9.29	72.09	0	--	--	--	--	--	--	--	Sheen
81.38	12/20/1999	9.14	72.24	0	--	--	--	--	--	--	--	
81.38	1/20/2000	9.08	72.30	0	--	--	--	--	--	--	--	
81.38	2/26/2000	8.69	72.69	0	--	--	--	--	--	--	--	
81.38	3/31/2000	8.48	72.90	0	--	--	--	--	--	--	--	
81.38	4/13/2000	8.66	72.72	0	--	--	--	--	--	--	--	
81.38	5/22/2000	9.06	72.32	0	--	240,000	33,000	5,000	18,000	59,000		
81.38	11/22/2000	9.24	71.64	0.67	--	--	--	--	--	--	--	
81.38	2/14/2001	7.63	73.50	0.33	--	--	--	--	--	--	--	
81.38	3/28/2001	8.82	72.56	0	--	--	--	--	--	--	--	
81.38	4/28/2001	8.66	72.72	0	--	--	--	--	--	--	--	
81.38	5/15/2001	8.97	72.41	0	--	--	--	--	--	--	--	
81.38	6/29/2001	8.73	72.65	0	--	--	--	--	--	--	--	
81.38	7/17/2001	8.92	72.44	0.02	--	--	--	--	--	--	--	
81.38	8/30/2001	8.85	72.53	0	--	--	--	--	--	--	--	
81.38	9/24/2001	8.89	72.49	0	--	--	--	--	--	--	--	
81.38	10/15/2001	9.11	72.25	0.03	--	--	--	--	--	--	--	
81.38	11/23/2001	8.77	72.61	0	--	29,000	3,900	450	1,400	3,500		
81.38	12/10/2001	8.75	72.63	0	--	--	--	--	--	--	--	
81.38	1/14/2002	8.26	73.12	0	--	--	--	--	--	--	--	
81.38	2/22/2002	6.30	75.08	0	--	--	--	--	--	--	--	
81.38	3/11/2002	6.47	74.91	0	--	--	--	--	--	--	--	
81.38	4/15/2002	6.56	74.82	0	--	--	--	--	--	--	--	
81.38	5/24/2002	8.32	72.95	0.15	--	--	--	--	--	--	--	
81.38	6/17/2002	8.41	72.82	0.2	--	--	--	--	--	--	--	
81.38	7/15/2002	8.63	72.60	0.2	--	--	--	--	--	--	--	
81.38	8/19/2002	8.76	72.39	0.31	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.38	9/5/2002	8.73	72.53	0.16	--	--	--	--	--	--	--	
81.38	10/7/2002	8.79	72.52	0.09	--	--	--	--	--	--	--	
81.38	11/29/2002	9.18	72.16	0.05	--	--	--	--	--	--	--	
81.38	12/12/2002	9.12	72.23	0.04	--	--	--	--	--	--	--	
81.38	1/6/2003	9.05	72.31	0.03	--	--	--	--	--	--	--	
81.38	2/12/2003	8.87	72.48	0.04	--	--	--	--	--	--	--	
81.38	3/13/2003	8.25	73.11	0.03	--	--	--	--	--	--	--	
81.38	4/7/2003	8.31	73.05	0.02	--	--	--	--	--	--	--	
81.38	5/15/2003	8.58	72.78	0.03	--	--	--	--	--	--	--	
81.38	6/12/2003	8.63	72.73	0.02	--	--	--	--	--	--	--	
81.38	7/7/2003	8.59	72.77	0.02	--	--	--	--	--	--	--	
81.38	8/14/2003	8.65	72.71	0.03	--	--	--	--	--	--	--	
81.38	9/12/2003	8.82	72.54	0.03	--	--	--	--	--	--	--	
81.38	11/4/2003	9.90	71.29	0.25	--	--	--	--	--	--	--	
81.38	5/24/2004	9.33	71.86	0.25	--	--	--	--	--	--	--	
81.38	11/29/2004	9.16	72.38	0.21	--	--	--	--	--	--	--	
81.38	6/24/2005	8.41	72.97	0	53,000	--	560	230	1,600	5,100		
81.38	12/15/2005	8.96	72.42	0	27,000	--	130	ND<25	560	1,800		
81.38	6/14/2006	8.41	72.97	0	11,000	--	110	ND<12	360	640		
81.38	12/21/2006	9.65	71.73	0	78,000	--	490	43	1,400	4,300		
81.38	6/28/2007	9.99	71.17	0.29	--	--	--	--	--	--	--	
81.38	12/13/2007	10.12	71.13	0.17	--	--	--	--	--	--	--	
81.38	6/9/2008	10.12	71.13	0.17	--	--	--	--	--	--	--	
81.38	12/30/2008	9.33	71.95	0.13	--	--	--	--	--	--	--	
81.38	9/28/2009	9.77	71.60	0.01	--	--	--	--	--	--	--	
81.38	12/15/2009	8.87	72.50	0.01	--	--	--	--	--	--	--	
81.38	6/28/2010	9.82	71.18	0.5	--	--	--	--	--	--	--	
81.38	12/29/2010	8.69	71.57	1.49	--	--	--	--	--	--	--	
81.38	2/1/2011	8.30	72.07	1.35	--	--	34,000	--	--	--	--	
81.38	6/7/2011	5.43	75.95	0	37,000	--	ND<12	ND<12	190	450		
81.38	9/13/2011	6.70	74.68	0	--	--	--	--	--	--	--	
81.38	10/21/2011	6.72	74.66	0	--	--	--	--	--	--	--	
81.38	11/4/2011	6.64	74.74	0	--	--	--	--	--	--	--	
81.38	12/9/2011	10.02	71.20	0.21	--	--	--	--	--	--	--	
81.38	1/12/2012	10.12	71.24	0.02	--	--	--	--	--	--	--	
81.38	6/1/2012	8.22	73.14	0.02	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.38	6/6/2013	9.75	71.63	0	--	30,000	410	7	970	1,300		
81.38	12/13/2013	10.30	70.92	0.21	--	--	--	--	--	--	--	
81.38	6/23/2014	10.26	70.96	0.21	--	--	--	--	--	--	--	
81.38	12/17/2014	6.61	74.75	0.03	--	--	--	--	--	--	--	
81.38	6/9/2015	9.41	71.95	0.03	--	--	--	--	--	--	--	
81.38	9/2/2015	10.58	70.57	0.30	--	--	--	--	--	--	--	
81.38	10/16/2015	10.91	70.21	0.35	--	--	--	--	--	--	--	
81.38	11/12/2015	10.40	70.81	0.22	--	--	--	--	--	--	--	
81.38	12/30/2015	9.35	71.89	0.19	--	--	--	--	--	--	--	
81.38	6/22/2016	9.43	71.95	0	--	17,000	210	ND<5.0	450	540		
MW-6	--	11/7/1990	--	--	--	--	ND	ND	ND	ND	ND	
	--	2/25/1991	--	--	--	--	ND	0.37	0.4	0.35	1.5	
	--	5/28/1991	--	--	--	--	ND	ND	ND	ND	0.42	
	--	8/28/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/19/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	2/6/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/26/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/20/1992	--	--	--	--	ND	ND	ND	ND	ND	
80.47	12/21/1992	7.71	72.76	0	--	--	--	--	--	--	--	
80.47	1/30/1993	7.25	73.22	0	--	--	--	--	--	--	--	
80.47	2/24/1993	6.74	73.73	0	--	ND	ND	ND	ND	ND	ND	
80.47	3/22/1993	5.85	74.62	0	--	--	--	--	--	--	--	
80.47	4/28/1993	7.58	72.89	0	--	--	--	--	--	--	--	
80.47	5/25/1993	7.48	72.99	0	--	ND	ND	ND	ND	ND	ND	
79.94	6/23/1993	7.34	72.60	0	--	--	--	--	--	--	--	
79.94	7/22/1993	7.53	72.41	0	--	--	--	--	--	--	--	
79.94	8/25/1993	7.66	72.28	0	--	ND	ND	ND	ND	ND	ND	
79.94	9/22/1993	7.76	72.18	0	--	--	--	--	--	--	--	
79.94	10/28/1993	8.30	71.64	0	--	--	--	--	--	--	--	
79.94	11/30/1993	7.40	72.54	0	--	--	--	--	--	--	--	
79.94	2/16/1994	7.13	72.81	0	--	ND	ND	ND	ND	ND	ND	
79.94	5/31/1994	7.49	72.45	0	--	--	--	--	--	--	--	
79.94	8/31/1994	7.93	72.01	0	--	ND	ND	1.5	ND	1.6		
79.94	9/27/1994	8.03	71.91	0	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
79.94	10/11/1994	8.05	71.89	0	--	--	--	--	--	--	--	
79.94	11/10/1994	6.12	73.82	0	--	--	--	--	--	--	--	
79.94	2/7/1995	6.65	73.29	0	--	ND	ND	ND	ND	ND	ND	
79.94	5/3/1995	6.47	73.47	0	--	ND	ND	ND	ND	ND	1.0	
79.94	8/3/1995	7.28	72.66	0	--	--	--	--	--	--	--	
79.94	11/7/1995	7.98	71.96	0	--	ND	ND	ND	ND	ND	ND	
79.94	5/6/1996	7.80	72.14	0	--	--	--	--	--	--	--	
79.94	11/5/1996	7.63	72.31	0	--	--	--	--	--	--	--	
79.94	5/15/1997	7.41	72.53	0	--	--	--	--	--	--	--	
79.94	11/12/1997	7.51	72.43	0	--	--	--	--	--	--	--	
79.94	5/4/1998	7.15	72.79	0	--	--	--	--	--	--	--	
79.94	11/11/1998	7.04	72.90	0	--	--	--	--	--	--	--	
79.94	5/20/1999	7.00	72.94	0	--	--	--	--	--	--	--	
79.94	11/15/1999	7.42	72.52	0	--	--	--	--	--	--	--	
79.94	5/22/2000	7.24	72.70	0	--	--	--	--	--	--	--	
79.94	11/22/2000	7.40	72.54	0	--	--	--	--	--	--	--	
79.94	5/15/2001	7.12	72.82	0	--	--	--	--	--	--	--	
79.94	11/23/2001	7.19	72.75	0	--	--	--	--	--	--	--	
79.94	5/24/2002	6.54	73.40	0	--	--	--	--	--	--	--	
79.94	11/29/2002	7.26	72.68	0	--	--	--	--	--	--	--	
79.94	5/15/2003	6.26	73.68	0	--	--	--	--	--	--	--	
79.94	11/4/2003	7.80	72.14	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	5/24/2004	7.54	72.40	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	11/29/2004	7.01	72.93	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	6/24/2005	7.68	72.26	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	12/15/2005	7.49	72.45	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	6/14/2006	6.45	73.49	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	12/21/2006	6.91	73.03	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
79.94	6/28/2007	7.46	72.48	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
79.94	12/13/2007	7.41	72.53	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	6/9/2008	8.20	71.74	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	12/30/2008	7.47	72.47	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	9/28/2009	7.96	71.98	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	12/15/2009	7.22	72.72	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	6/28/2010	7.68	72.26	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.94	12/29/2010	5.93	74.01	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
79.94	6/7/2011	6.24	73.70	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	12/9/2011	6.75	73.19	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	6/1/2012	7.32	72.62	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	6/6/2013	7.50	72.44	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	12/13/2013	8.02	71.92	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	6/23/2014	7.87	72.07	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	12/17/2014	5.54	74.40	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	6/9/2015	7.71	72.23	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	12/30/2015	7.21	72.73	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
79.94	6/22/2016	7.91	72.03	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
MW-7	--	11/7/1990	--	--	--	--	ND	ND	ND	ND	ND	
	--	2/25/1991	--	--	--	--	70	ND	ND	ND	0.52	
	--	5/28/1991	--	--	--	--	39	ND	ND	ND	0.73	
	--	8/28/1991	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/19/1991	--	--	--	--	32	ND	ND	ND	ND	
	--	2/6/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/26/1992	--	--	--	--	ND	ND	ND	0.73	ND	
	--	11/20/1992	--	--	--	--	ND	ND	ND	ND	ND	
81.83	12/21/1992	8.42	73.41	0	--	--	--	--	--	--	--	
81.83	1/30/1993	8.21	73.62	0	--	--	--	--	--	--	--	
81.83	2/24/1993	7.85	73.98	0	--	ND	ND	ND	ND	ND	ND	
81.83	3/22/1993	6.97	74.86	0	--	--	--	--	--	--	--	
81.83	4/28/1993	8.39	73.44	0	--	--	--	--	--	--	--	
81.83	5/25/1993	8.43	73.40	0	--	ND	ND	ND	ND	ND	ND	
81.64	6/23/1993	8.47	73.17	0	--	--	--	--	--	--	--	
81.64	7/22/1993	8.83	72.81	0	--	--	--	--	--	--	--	
81.64	8/25/1993	8.81	72.83	0	--	ND	ND	ND	ND	ND	ND	
81.64	9/22/1993	8.96	72.68	0	--	--	--	--	--	--	--	
81.64	10/28/1993	8.98	72.66	0	--	--	--	--	--	--	--	
81.64	11/30/1993	8.65	72.99	0	--	--	--	--	--	--	--	
81.64	2/16/1994	8.36	73.28	0	--	ND	ND	ND	ND	ND	0.7	
81.64	5/31/1994	8.67	72.97	0	--	--	--	--	--	--	--	
81.64	8/31/1994	9.12	72.52	0	--	ND	ND	0.8	ND	ND	0.75	
81.64	9/27/1994	9.22	72.42	0	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.64	10/11/1994	9.23	72.41	0	--	--	--	--	--	--	--	
81.64	11/10/1994	7.66	73.98	0	--	--	--	--	--	--	--	
81.64	2/7/1995	7.88	73.76	0	--	ND	ND	ND	ND	ND	ND	
81.64	5/3/1995	7.71	73.93	0	--	ND	ND	ND	ND	ND	1.0	
81.64	8/3/1995	8.40	73.24	0	--	--	--	--	--	--	--	
81.64	11/7/1995	8.95	72.69	0	--	ND	ND	ND	ND	ND	ND	
81.64	5/6/1996	8.15	73.49	0	--	--	--	--	--	--	--	
81.64	11/5/1996	8.67	72.97	0	--	--	--	--	--	--	--	
81.64	5/15/1997	8.47	73.17	0	--	--	--	--	--	--	--	
81.64	11/12/1997	7.88	73.76	0	--	--	--	--	--	--	--	
81.64	5/4/1998	7.93	73.71	0	--	--	--	--	--	--	--	
81.64	11/11/1998	8.20	73.44	0	--	--	--	--	--	--	--	
81.64	5/20/1999	8.04	73.60	0	--	--	--	--	--	--	--	
81.64	11/15/1999	8.17	73.47	0	--	--	--	--	--	--	--	
81.64	5/22/2000	8.10	73.54	0	--	--	--	--	--	--	--	
81.64	11/22/2000	8.30	73.34	0	--	--	--	--	--	--	--	
81.64	5/15/2001	8.09	73.55	0	--	--	--	--	--	--	--	
81.64	11/23/2001	8.14	73.50	0	--	--	--	--	--	--	--	
81.64	5/24/2002	7.56	74.08	0	--	--	--	--	--	--	--	
81.64	11/29/2002	8.23	73.41	0	--	--	--	--	--	--	--	
81.64	5/15/2003	7.25	74.39	0	--	--	--	--	--	--	--	
81.64	11/4/2003	8.76	72.88	0	70	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.64	5/24/2004	8.32	73.32	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.64	11/29/2004	8.21	73.43	0	62	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.64	6/24/2005	7.84	73.80	0	85	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.64	12/15/2005	8.15	73.49	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.64	6/14/2006	7.76	73.88	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	12/21/2006	7.64	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	Casing elevation modified on 6/21/2006
--	6/28/2007	8.18	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
--	12/13/2007	8.52	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	6/9/2008	8.67	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	12/30/2008	8.46	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	9/28/2009	8.30	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	12/15/2009	8.22	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	6/28/2010	8.02	--	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
--	12/29/2010	7.18	--	0	56	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	

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WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	--	6/7/2011	6.97	--	0	790	--	11	ND<0.50	6.5	ND<1.0	
	--	12/9/2011	8.54	--	0	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/1/2012	8.22	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/6/2013	8.56	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	12/13/2013	9.09	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/23/2014	9.01	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	12/17/2014	6.95	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/9/2015	8.82	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	12/30/2015	8.58	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/22/2016	8.79	--	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
MW-8	--	11/7/1990	--	--	--	--	4,700	28	38	86	7,200	
	--	2/25/1991	--	--	--	--	5,300	17	6.1	53	300	
	--	5/28/1991	--	--	--	--	4,800	4.2	1.3	5.1	170	
	--	8/28/1991	--	--	--	--	1,800	3.2	1.9	19	74	
	--	11/19/1991	--	--	--	--	1,600	8.1	1.8	19	52	
	--	2/6/1992	--	--	--	--	2,600	4.1	7.0	31	93	
	--	5/23/1992	--	--	--	--	2,100	8.6	1.6	1.7	28	
	--	8/26/1992	--	--	--	--	1,800	12	8.0	4.0	13	
	--	11/20/1992	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	12/21/1992	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	1/9/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	1/30/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	2/10/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	2/24/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	3/9/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	3/22/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	4/8/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	4/28/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	--	5/12/1993	--	--	--	--	--	--	--	--	--	Inaccessible
81.71	5/25/1993	10.12	71.59	0	--	1,200	5.4	ND	9.0	21		
81.41	6/7/1993	9.98	71.43	0	--	--	--	--	--	--	--	Inaccessible
81.41	6/23/1993	10.36	71.05	0	--	--	--	--	--	--	--	Inaccessible
81.41	7/8/1993	10.52	70.89	0	--	--	--	--	--	--	--	Inaccessible
81.41	7/22/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	8/11/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.41	8/25/1993	10.95	70.46	0	--	1,800	11	17	8.9	29		
81.41	9/8/1993	11.34	70.07	0	--	--	--	--	--	--	--	Inaccessible
81.41	9/22/1993	11.13	70.28	0	--	--	--	--	--	--	--	Inaccessible
81.41	10/7/1993	10.96	70.45	0	--	--	--	--	--	--	--	Inaccessible
81.41	10/28/1993	11.19	70.22	0	--	--	--	--	--	--	--	Inaccessible
81.41	11/12/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	11/30/1993	10.42	70.99	0	--	3,500	18	ND	ND	ND	ND	
81.41	2/16/1994	9.86	71.55	0	--	990	4.9	1.8	2.4	4.5		
81.41	5/31/1994	10.61	70.80	0	--	350	3.0	1.0	0.73	1.7		
81.41	8/31/1994	11.37	70.04	0	--	1,800	ND	ND	ND	ND	ND	
81.41	9/27/1994	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	10/11/1994	11.50	69.91	0	--	--	--	--	--	--	--	Inaccessible
81.41	11/10/1994	7.81	73.60	0	--	940	6.7	6.3	ND	16		
81.41	2/7/1995	8.69	72.72	0	--	230	1.4	0.95	0.9	1.1		
81.41	5/3/1995	8.60	72.81	0	--	75	ND	ND	ND	1.0		
81.41	8/3/1995	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	11/7/1995	11.05	70.36	0	--	210	1.3	1.2	ND	ND		
81.41	5/6/1996	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	11/5/1996	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	5/15/1997	10.46	70.95	0	--	ND	ND	ND	ND	ND	ND	
81.41	11/12/1997	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	5/4/1998	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	11/11/1998	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	5/20/1999	9.75	71.66	0	--	ND	ND	ND	ND	ND	ND	
81.41	11/15/1999	--	--	--	--	--	--	--	--	--	--	Car parked over well
81.41	5/22/2000	9.80	71.61	0	--	ND	ND	1.9	ND	3.3		
81.41	11/22/2000	9.76	71.65	0	--	ND	ND	1.16	ND	1.22		
81.41	5/15/2001	9.87	71.54	0	--	ND	ND	ND	ND	ND	ND	
81.41	11/23/2001	9.92	71.49	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
81.41	5/24/2002	9.26	72.15	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
81.41	11/29/2002	9.71	71.70	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	5/15/2003	9.04	72.37	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	11/4/2003	10.20	71.21	0	690	--	ND<1.0	ND<1.0	3.3	ND<2.0		
81.41	5/24/2004	10.04	71.37	0	450	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0		
81.41	11/29/2004	9.88	71.53	0	1,500	--	ND<10	ND<10	ND<10	ND<20		
81.41	6/24/2005	9.40	72.01	0	150	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.41	12/15/2005	10.01	71.40	0	520	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	6/14/2006	5.91	75.50	0	230	--	ND<0.50	ND<0.50	0.60	ND<1.0		
81.41	12/21/2006	9.65	71.76	0	260	--	2.5	ND<0.50	12	43		
81.41	6/28/2007	11.10	70.31	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
81.41	12/13/2007	11.18	70.23	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	6/9/2008	11.25	70.16	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	12/30/2008	10.05	71.36	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	9/28/2009	11.10	70.31	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	12/15/2009	10.00	71.41	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	6/28/2010	10.86	70.55	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	12/29/2010	8.57	72.84	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.41	6/7/2011	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	12/9/2011	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	6/1/2012	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	6/6/2013	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	12/13/2013	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	6/23/2014	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	12/17/2014	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	6/9/2015	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	12/30/2015	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.41	6/22/2016	--	--	--	--	--	--	--	--	--	--	Inaccessible
MW-9	--	11/7/1990	--	--	--	480	7.8	1.2	13	47		
	--	2/25/1991	--	--	--	390	13	1.1	2.8	14		
	--	5/28/1991	--	--	--	590	6.0	0.43	6.8	1.4		
	--	8/28/1991	--	--	--	450	17	0.9	13	14		
	--	11/19/1991	--	--	--	360	17	0.45	15	11		
	--	2/6/1992	--	--	--	660	41	1.0	33	15		
	--	5/23/1992	--	--	--	460	18	0.66	1.4	3.2		
	--	8/26/1992	--	--	--	250	13	ND	8.6	3.8		
	--	11/20/1992	--	--	--	--	--	--	--	--	--	Inaccessible
81.13	12/21/1992	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.13	1/30/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.13	2/24/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.13	3/22/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.13	4/28/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.13	5/25/1993	11.50	69.63	0	--	160	6.1	ND	7.4	1.1		
80.53	6/23/1993	9.78	70.75	0	--	--	--	--	--	--	--	Inaccessible
80.53	7/22/1993	10.10	70.43	0	--	--	--	--	--	--	--	Inaccessible
80.53	8/25/1993	10.44	70.09	0	--	220	10	ND	6.8	1.4		
80.53	9/22/1993	10.64	69.89	0	--	--	--	--	--	--	--	Inaccessible
80.53	10/28/1993	10.68	69.85	0	--	--	--	--	--	--	--	Inaccessible
80.53	11/30/1993	9.87	70.66	0	--	200	5.6	ND	2.9	2.7		
80.53	2/16/1994	9.21	71.32	0	--	250	5.1	1.3	4.4	1.5		
80.53	5/31/1994	10.15	70.38	0	--	360	7.8	0.97	4.6	2.2		
80.53	8/31/1994	10.97	69.56	0	--	650	7.7	2.8	4.4	5.0		
80.53	9/27/1994	11.10	69.43	0	--	--	--	--	--	--	--	Inaccessible
80.53	10/11/1994	11.20	69.33	0	--	--	--	--	--	--	--	Inaccessible
80.53	11/10/1994	7.25	73.28	0	--	ND	ND	ND	ND	ND	ND	
80.53	2/7/1995	7.76	72.77	0	--	57	0.7	ND	0.86	ND		
80.53	5/3/1995	7.82	72.71	0	--	ND	0.85	0.67	1.3	1.0		
80.53	8/3/1995	9.70	70.83	0	--	91	1.1	ND	ND	ND	ND	
80.53	11/7/1995	10.64	69.89	0	--	130	1.5	0.62	0.71	ND		
80.53	5/6/1996	9.01	71.52	0	--	860	6.1	13	6.0	25		
80.53	11/5/1996	11.42	69.11	0	--	84	0.74	ND	1.2	4.5		
80.53	5/15/1997	9.89	70.64	0	--	ND	ND	ND	ND	ND	ND	
80.53	11/12/1997	10.22	70.31	0	--	ND	0.55	ND	ND	ND	ND	
80.53	5/4/1998	10.05	70.48	0	--	ND	ND	ND	ND	ND	ND	
80.53	11/11/1998	9.23	71.30	0	--	ND	ND	ND	ND	ND	ND	
80.53	5/20/1999	8.78	71.75	0	--	ND	ND	ND	ND	ND	ND	
80.53	11/15/1999	9.12	71.41	0	--	ND	ND	ND	ND	ND	ND	
80.53	5/22/2000	9.17	71.36	0	--	ND	ND	1.9	ND	3.5		
80.53	11/22/2000	9.08	71.45	0	--	ND	ND	1.18	ND	1.16		
80.53	5/15/2001	8.85	71.68	0	--	ND	ND	ND	ND	ND	ND	
80.53	11/23/2001	9.10	71.43	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
80.53	5/24/2002	8.79	71.74	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
80.53	11/29/2002	9.24	71.29	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	5/15/2003	8.56	71.97	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	11/4/2003	--	--	--	--	--	--	--	--	--	--	Car parked over well
80.53	5/24/2004	9.38	71.15	0	330	--	1.8	ND<0.50	ND<0.50	ND<1.0		
80.53	11/29/2004	9.55	70.98	0	690	--	0.72	ND<0.50	1.3	ND<1.0		
80.53	6/24/2005	8.65	71.88	0	240	--	0.80	ND<0.50	0.55	ND<1.0		

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
80.53	12/15/2005	9.43	71.10	0	400	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	6/14/2006	9.43	71.10	0	<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	12/21/2006	9.01	71.52	0	580	--	ND<0.50	ND<0.50	ND<0.50	0.71	ND<0.50	
80.53	6/28/2007	11.64	68.89	0	1,200	--	0.81	ND<0.50	ND<0.50	ND<0.50	0.54	
80.53	12/13/2007	11.18	69.35	0	1,100	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	6/9/2008	11.10	69.43	0	1,500	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	12/30/2008	9.66	70.87	0	970	--	ND<0.50	ND<0.50	ND<0.50	0.84	ND<1.0	
80.53	9/28/2009	10.83	69.70	0	860	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	12/15/2009	10.00	70.53	0	870	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	6/28/2010	10.45	70.08	0	360	--	ND<0.50	ND<0.50	ND<0.50	1.0	ND<1.0	
80.53	12/29/2010	7.72	72.81	0	53	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
80.53	6/7/2011	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	12/9/2011	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	6/1/2012	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	6/6/2013	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	12/13/2013	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	6/23/2014	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	12/17/2014	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	6/9/2015	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	12/30/2015	--	--	--	--	--	--	--	--	--	--	Inaccessible
80.53	6/22/2016	--	--	--	--	--	--	--	--	--	--	Inaccessible
MW-10	--	2/6/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	8/26/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/20/1992	--	--	--	--	ND	ND	ND	ND	ND	
	81.90	12/21/1992	13.41	68.49	0	--	--	--	--	--	--	
	81.90	1/30/1993	11.60	70.30	0	--	--	--	--	--	--	
	81.90	2/24/1993	11.23	70.67	0	--	ND	ND	ND	ND	ND	
	81.90	3/22/1993	10.89	71.01	0	--	--	--	--	--	--	
	81.90	4/28/1993	12.11	69.79	0	--	--	--	--	--	--	
	81.90	5/25/1993	12.02	69.88	0	--	ND	ND	ND	ND	ND	
81.61	6/23/1993	12.11	69.50	0	--	--	--	--	--	--	--	
81.61	7/22/1993	12.49	69.12	0	--	--	--	--	--	--	--	
81.61	8/25/1993	12.78	68.83	0	--	ND	ND	ND	ND	ND	ND	
81.61	9/22/1993	13.06	68.55	0	--	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.61	10/28/1993	13.23	68.38	0	--	--	--	--	--	--	--	
81.61	11/30/1993	--	--	--	--	--	--	--	--	--	--	Inaccessible
81.61	2/16/1994	12.43	69.18	0	--	ND	ND	ND	ND	ND	ND	
81.61	5/31/1994	12.69	68.92	0	--	ND	ND	0.9	ND	ND	0.91	
81.61	8/31/1994	13.47	68.14	0	--	ND	ND	0.64	ND	ND	0.54	
81.61	9/27/1994	13.72	67.89	0	--	--	--	--	--	--	--	
81.61	10/11/1994	14.80	66.81	0	--	--	--	--	--	--	--	
81.61	11/10/1994	12.64	68.97	0	--	ND	ND	ND	ND	ND	ND	
81.61	2/7/1995	10.29	71.32	0	--	--	--	--	--	--	--	
81.61	5/3/1995	10.22	71.39	0	--	ND	ND	ND	ND	ND	0.65	
81.61	8/3/1995	11.73	69.88	0	--	--	--	--	--	--	--	
81.61	11/7/1995	12.98	68.63	0	--	ND	ND	ND	ND	ND	ND	
81.61	5/6/1996	10.90	70.71	0	--	--	--	--	--	--	--	
81.61	11/5/1996	11.96	69.65	0	--	--	--	--	--	--	--	
81.61	5/15/1997	10.79	70.82	0	--	--	--	--	--	--	--	
81.61	11/12/1997	10.07	71.54	0	--	--	--	--	--	--	--	
81.61	5/4/1998	10.01	71.60	0	--	--	--	--	--	--	--	
81.61	11/11/1998	12.03	69.58	0	--	--	--	--	--	--	--	
81.61	5/20/1999	10.05	71.56	0	--	--	--	--	--	--	--	
81.61	11/15/1999	10.16	71.45	0	--	--	--	--	--	--	--	
81.61	5/22/2000	10.06	71.55	0	--	--	--	--	--	--	--	
81.61	11/22/2000	10.12	71.49	0	--	--	--	--	--	--	--	
81.61	5/15/2001	10.08	71.53	0	--	--	--	--	--	--	--	
81.61	11/23/2001	10.14	71.47	0	--	--	--	--	--	--	--	
81.61	5/24/2002	9.48	72.13	0	--	--	--	--	--	--	--	
81.61	11/29/2002	10.11	71.50	0	--	--	--	--	--	--	--	
81.61	5/15/2003	9.22	72.39	0	--	--	--	--	--	--	--	
81.61	11/4/2003	12.82	68.79	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	5/24/2004	11.52	70.09	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	11/29/2004	12.58	69.03	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/24/2005	10.70	70.91	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/15/2005	12.09	69.52	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/14/2006	9.77	71.84	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/21/2006	11.57	70.04	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
81.61	6/28/2007	14.11	67.50	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
81.61	12/13/2007	15.72	65.89	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
81.61	6/9/2008	14.93	66.68	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/30/2008	13.56	68.05	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	9/28/2009	13.52	68.09	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/15/2009	14.02	67.59	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/28/2010	13.55	68.06	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/29/2010	13.23	68.38	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/7/2011	12.36	69.25	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/9/2011	14.41	67.20	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/1/2012	12.65	68.96	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/6/2013	13.28	68.33	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/13/2013	14.48	67.13	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/23/2014	14.10	67.51	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/17/2014	12.93	68.68	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/9/2015	14.04	67.57	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	12/30/2015	14.66	66.95	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
81.61	6/22/2016	13.58	68.03	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
MW-11												
MW-11	--	2/6/1992	--	--	--	--	ND	ND	ND	ND	ND	
MW-11	--	5/23/1992	--	--	--	--	ND	ND	ND	ND	ND	
MW-11	--	8/26/1992	--	--	--	--	ND	ND	ND	ND	ND	
MW-11	--	11/20/1992	--	--	--	--	ND	ND	ND	ND	ND	
78.43	12/21/1992	12.34	66.09	0	--	--	--	--	--	--	--	
78.43	1/30/1993	14.17	64.26	0	--	--	--	--	--	--	--	
78.43	2/24/1993	12.70	65.73	0	--	ND	ND	ND	ND	ND	ND	
78.43	3/22/1993	8.95	69.48	0	--	--	--	--	--	--	--	
78.43	4/28/1993	13.87	64.56	0	--	--	--	--	--	--	--	
78.43	5/25/1993	15.14	63.29	0	--	ND	ND	0.75	ND	ND	1.0	
78.43	6/23/1993	15.08	63.10	0	--	--	--	--	--	--	--	
78.43	7/22/1993	15.46	62.72	0	--	--	--	--	--	--	--	
78.43	8/25/1993	14.10	64.08	0	--	ND	ND	ND	ND	ND	ND	
78.43	9/22/1993	15.03	63.15	0	--	--	--	--	--	--	--	
78.43	10/28/1993	13.84	64.34	0	--	--	--	--	--	--	--	
78.43	11/30/1993	13.04	65.14	0	--	ND	ND	ND	ND	ND	ND	
78.43	2/16/1994	12.76	65.42	0	--	ND	ND	ND	ND	ND	ND	
78.43	5/31/1994	12.79	65.39	0	--	ND	ND	ND	ND	ND	ND	
78.43	8/31/1994	12.97	65.21	0	--	ND	ND	1.5	ND	ND	1.8	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
78.43	9/27/1994	14.88	63.30	0	--	--	--	--	--	--	--	
78.43	10/11/1994	13.40	64.78	0	--	--	--	--	--	--	--	
78.43	11/10/1994	13.57	64.61	0	--	ND	ND	ND	ND	ND	ND	
78.43	2/7/1995	12.28	65.90	0	--	--	--	--	--	--	--	
78.43	5/3/1995	9.28	68.90	0	--	ND	ND	ND	ND	ND	ND	
78.43	8/3/1995	12.67	65.51	0	--	--	--	--	--	--	--	
78.43	11/7/1995	12.28	65.90	0	--	ND	ND	ND	ND	ND	ND	
78.43	5/6/1996	13.30	64.88	0	--	--	--	--	--	--	--	
78.43	11/5/1996	10.90	67.28	0	--	--	--	--	--	--	--	
78.43	5/15/1997	11.65	66.53	0	--	--	--	--	--	--	--	
78.43	11/12/1997	9.66	68.52	0	--	--	--	--	--	--	--	
78.43	5/4/1998	10.87	67.31	0	--	--	--	--	--	--	--	
78.43	11/11/1998	11.40	66.78	0	--	--	--	--	--	--	--	
78.43	5/20/1999	10.71	67.47	0	--	ND	ND	ND	ND	ND	ND	
78.43	11/15/1999	11.32	66.86	0	--	ND	ND	1.04	ND	ND	ND	
78.43	5/22/2000	10.98	67.20	0	--	ND	ND	ND	ND	ND	ND	
78.43	11/22/2000	11.17	67.01	0	--	ND	ND	ND	ND	ND	ND	
78.43	5/15/2001	10.93	67.25	0	--	ND	ND	ND	ND	ND	ND	
78.43	11/23/2001	11.08	67.10	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
78.43	5/24/2002	10.58	67.60	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
78.43	11/29/2002	11.27	66.91	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	5/15/2003	10.25	67.93	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	11/4/2003	11.23	66.95	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	5/24/2004	10.10	68.08	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	11/29/2004	10.96	67.22	0	63	--	ND<0.50	ND<0.50	ND<0.50	1.0	2.5	
78.43	6/24/2005	14.07	64.11	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	12/15/2005	13.28	64.90	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	6/14/2006	12.53	65.65	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	12/21/2006	12.78	65.40	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
78.43	6/28/2007	--	--	--	--	--	--	--	--	--	--	Bus parked over well
78.43	12/13/2007	15.37	62.81	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	6/9/2008	14.80	63.38	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	12/30/2008	12.90	65.28	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	9/28/2009	12.57	65.61	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
78.43	12/15/2009	--	--	--	--	--	--	--	--	--	--	Car parked over well
78.43	6/28/2010	14.42	63.76	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	78.43	12/29/2010	15.40	62.78	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.43	6/7/2011	15.79	62.39	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	12/9/2011	13.27	64.91	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	6/1/2012	14.50	63.68	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	6/6/2013	15.32	62.86	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	12/13/2013	15.04	63.14	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	6/23/2014	--	--	--	--	--	--	--	--	--	Unable to access
	78.18	12/17/2014	14.56	63.62	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	6/9/2015	14.51	63.67	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	12/30/2015	10.81	67.37	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	78.18	6/22/2016	13.07	65.11	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
MW-12	--	8/26/1992	--	--	--	--	ND	ND	ND	ND	ND	
	--	11/20/1992	--	--	--	--	ND	ND	ND	ND	ND	
	79.89	12/21/1992	12.11	67.78	0	--	--	--	--	--	--	
	79.89	1/30/1993	13.18	66.71	0	--	--	--	--	--	--	
	79.89	2/24/1993	12.13	67.76	0	--	ND	ND	ND	ND	ND	
	79.89	3/22/1993	11.22	68.67	0	--	--	--	--	--	--	
	79.89	4/28/1993	13.42	66.47	0	--	--	--	--	--	--	
	79.89	5/25/1993	13.68	66.21	0	--	ND	ND	ND	ND	ND	
	79.61	6/23/1993	14.56	65.05	0	--	--	--	--	--	--	
	79.61	7/22/1993	14.96	64.65	0	--	--	--	--	--	--	
	79.61	8/25/1993	13.61	66.00	0	--	ND	ND	ND	ND	ND	
	79.61	9/22/1993	15.02	64.59	0	--	--	--	--	--	--	
	79.61	10/28/1993	14.04	65.57	0	--	--	--	--	--	--	
	79.61	11/30/1993	13.28	66.33	0	--	ND	ND	ND	ND	ND	
	79.61	2/16/1994	12.76	66.85	0	--	ND	ND	ND	ND	ND	
	79.61	5/31/1994	12.64	66.97	0	--	ND	ND	0.81	ND	0.82	
	79.61	8/31/1994	12.82	66.79	0	--	ND	ND	1.0	ND	1.0	
	79.61	9/27/1994	14.66	64.95	0	--	--	--	--	--	--	
	79.61	10/11/1994	14.25	65.36	0	--	--	--	--	--	--	
	79.61	11/10/1994	13.40	66.21	0	--	ND	ND	ND	ND	ND	
	79.61	2/7/1995	11.72	67.89	0	--	--	--	--	--	--	
	79.61	5/3/1995	13.38	66.23	0	--	ND	ND	ND	ND	ND	
	79.61	8/3/1995	13.47	66.14	0	--	--	--	--	--	--	
	79.61	11/7/1995	12.78	66.83	0	--	ND	ND	ND	ND	ND	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
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3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
79.61	5/6/1996	13.25	66.36	0	--	--	--	--	--	--	--	
79.61	11/5/1996	11.88	67.73	0	--	--	--	--	--	--	--	
79.61	5/15/1997	11.72	67.89	0	--	--	--	--	--	--	--	
79.61	11/12/1997	10.01	69.60	0	--	--	--	--	--	--	--	
79.61	5/4/1998	10.96	68.65	0	--	--	--	--	--	--	--	
79.61	11/11/1998	11.53	68.08	0	--	--	--	--	--	--	--	
79.61	5/20/1999	10.84	68.77	0	--	--	--	--	--	--	--	
79.61	11/15/1999	11.36	68.25	0	--	--	--	--	--	--	--	
79.61	5/22/2000	11.19	68.42	0	--	--	--	--	--	--	--	
79.61	11/22/2000	11.36	68.25	0	--	--	--	--	--	--	--	
79.61	5/15/2001	11.04	68.57	0	--	--	--	--	--	--	--	
79.61	11/23/2001	11.14	68.47	0	--	--	--	--	--	--	--	
79.61	5/24/2002	10.69	68.92	0	--	--	--	--	--	--	--	
79.61	11/29/2002	11.23	68.38	0	--	--	--	--	--	--	--	
79.61	5/15/2003	10.38	69.23	0	--	--	--	--	--	--	--	
79.61	11/4/2003	11.34	68.27	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	5/24/2004	9.84	69.77	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	11/29/2004	12.17	67.44	0	64	--	0.68	ND<0.50	1.2	3.0		
79.61	6/24/2005	13.16	66.45	0	53	--	ND<0.50	ND<0.50	0.13	0.42		
79.61	12/15/2005	13.94	65.67	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/14/2006	13.11	66.50	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	12/21/2006	9.03	70.58	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
79.61	6/28/2007	11.75	67.86	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
79.61	12/13/2007	14.83	64.78	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/9/2008	14.84	64.77	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	12/30/2008	13.22	66.39	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	9/28/2009	10.55	69.06	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	12/15/2009	9.33	70.28	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/28/2010	9.31	70.30	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	12/29/2010	9.51	70.10	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/7/2011	7.33	72.28	0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	12/9/2011	9.42	70.19	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/1/2012	10.13	69.48	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/6/2013	9.52	70.09	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	12/13/2013	10.96	68.65	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
79.61	6/23/2014	11.11	68.50	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		

Table 4
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Oakland, California

WELL ID	TOC*	DATE	DTW	GWE*	LNAPL THICKNESS	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	79.61	12/17/2014	9.76	69.85	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	79.61	6/9/2015	10.13	69.48	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	79.61	12/30/2015	10.06	69.55	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	79.61	6/22/2016	10.27	69.34	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
RW-1	81.20	2/24/1993	7.19	74.01	0	--	--	--	--	--	--	
	81.20	5/12/1993	8.82	72.38	0	--	--	--	--	--	--	
	81.20	5/25/1993	8.58	72.62	0	--	--	--	--	--	--	
	80.63	6/7/1993	8.16	72.47	0	--	--	--	--	--	--	
	80.63	6/23/1993	8.53	72.10	0	--	--	--	--	--	--	
	80.63	7/8/1993	8.69	71.94	0	--	--	--	--	--	--	
	80.63	8/11/1993	9.00	71.63	0	--	--	--	--	--	--	
	80.63	8/25/1993	9.07	71.56	0	--	--	--	--	--	--	
	80.63	9/8/1993	9.71	70.92	0	--	--	--	--	--	--	
	80.63	9/22/1993	9.25	71.38	0	--	--	--	--	--	--	
	80.63	11/12/1993	9.00	71.63	--	--	--	--	--	--	--	
	80.63	2/16/1994	7.82	72.81	0	--	--	--	--	--	--	
	80.63	5/31/1994	8.81	71.82	0	--	--	--	--	--	--	
	80.63	8/31/1994	9.61	71.02	0	--	--	--	--	--	--	
	80.63	11/10/1994	6.34	74.29	0	--	--	--	--	--	--	
	80.63	2/7/1995	7.18	73.45	0	--	--	--	--	--	--	
	80.63	3/14/1995	6.01	74.62	0	--	--	--	--	--	--	
	--	11/7/1995	--	--	--	--	--	--	--	--	--	
	80.63	10/15/2001	8.43	72.20	0	--	--	--	--	--	--	
	80.63	11/23/2001	8.57	72.06	0	--	--	--	--	--	--	
	80.63	12/10/2001	8.51	72.12	0	--	--	--	--	--	--	
	80.63	1/14/2002	8.13	72.50	0	--	--	--	--	--	--	
	80.63	2/22/2002	6.18	74.45	0	--	--	--	--	--	--	
	80.63	3/11/2002	6.31	74.32	0	--	--	--	--	--	--	
	80.63	4/15/2002	6.39	74.24	0	--	--	--	--	--	--	
	80.63	5/24/2002	8.14	72.49	0	--	--	--	--	--	--	
	80.63	6/17/2002	8.18	72.45	0	--	--	--	--	--	--	
	80.63	7/15/2002	8.29	72.34	0	--	--	--	--	--	--	
	80.63	8/19/2002	8.44	72.19	0	--	--	--	--	--	--	
	80.63	9/5/2002	8.47	72.16	0	--	--	--	--	--	--	
	80.63	10/7/2002	8.43	72.20	0	--	--	--	--	--	--	

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
80.63	11/29/2002	8.92	71.71	0	--	--	--	--	--	--	--	
80.63	12/12/2002	8.87	71.76	0	--	--	--	--	--	--	--	
80.63	1/6/2003	8.66	71.97	0	--	--	--	--	--	--	--	
80.63	2/12/2003	8.39	72.24	0	--	--	--	--	--	--	--	
80.63	3/13/2003	8.06	72.57	0	--	--	--	--	--	--	--	
80.63	4/7/2003	8.09	72.54	0	--	--	--	--	--	--	--	
80.63	5/15/2003	8.07	72.56	0	--	--	--	--	--	--	--	
80.63	6/12/2003	8.11	72.52	0	--	--	--	--	--	--	--	
80.63	7/7/2003	8.13	72.50	0	--	--	--	--	--	--	--	
80.63	8/14/2003	8.23	72.40	0	--	--	--	--	--	--	--	
80.63	9/12/2003	8.29	72.34	0	--	--	--	--	--	--	--	
80.63	11/4/2003	9.97	70.66	0	2,600	--	11	ND<10	ND<10	ND<20		
80.63	5/24/2004	8.31	72.32	0	3,100	--	20	ND<5.0	16	ND<10		
80.63	11/29/2004	8.23	72.40	0	4,500	--	46	ND<1.0	34	3.6		
80.63	6/24/2005	7.53	73.10	0	2,000	--	20	0.87	50	3.0		
80.63	12/15/2005	8.11	72.52	0	3,300	--	37	0.70	35	4.7		
80.63	6/14/2006	7.41	73.22	0	1,500	--	2.0	0.95	6.9	ND<1.0		
80.63	12/21/2006	7.78	72.85	0	3,100	--	21	0.65	56	5.4		
80.63	6/28/2007	9.09	71.54	0	2,800	--	46	0.96	44	2.6		
80.63	12/13/2007	9.21	71.42	0	9,100	--	190	2.1	400	81		
80.63	6/9/2008	9.30	71.33	0	5,400	--	23	ND<2.5	330	13		
80.63	12/30/2008	8.23	72.40	0	5,800	--	130	ND<2.5	270	58		
80.63	9/28/2009	9.10	71.53	0	3,400	--	3.8	ND<2.5	23	5.0		
80.63	12/15/2009	7.96	72.67	0	9,100	--	18	ND<2.5	450	160		
80.63	6/28/2010	8.68	71.95	0	2,300	--	20	1.0	56	ND<1.0		
80.63	12/29/2010	6.04	74.59	0	4,100	--	9.3	1.3	6.8	ND<1.0		
80.63	6/7/2011	3.61	77.02	0	730	--	4.1	ND<0.50	16	ND<1.0		
80.63	10/21/2011	5.45	75.18	0	--	--	--	--	--	--		
80.63	12/9/2011	9.28	71.35	0	--	2,900	240	1.2	180	30		
80.63	1/12/2012	9.53	71.10	0	--	--	--	--	--	--		

Table 4
Historical Groundwater Monitoring Data and Analytical Results
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL THICKNESS (ft)	TPH-GRO (8260B)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
80.63	6/1/2012	8.48	72.15	0	--	3,600	140	ND<2.5	56	ND<5.0		
80.63	6/6/2013	8.73	71.90	0	--	1,300	1.2	1.4	5.8	ND<1.0		
80.63	12/13/2013	9.20	71.43	0	--	150	0.81	ND<0.50	ND<0.50	ND<1.0		
80.63	6/23/2014	9.20	71.43	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
80.63	12/17/2014	5.81	74.82	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
80.63	6/9/2015	8.10	72.53	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
80.63	10/16/2015	9.58	71.05	0	--	--	--	--	--	--	--	
80.63	11/12/2015	9.18	71.45	0	--	--	--	--	--	--	--	
80.63	12/30/2015	7.94	72.69	0	--	75	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
80.63	6/22/2016	8.41	72.22	0	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		
QA	--	12/30/2015	--	--	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	
	--	6/22/2016	--	--	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	

NOTES:

* TOC and GWE are in feet above mean sea level. GWE for wells with LNAPL has been adjusted for LNAPL thickness.

µg/L = Micrograms per liter

-- = Not available/not sampled

8260B = Analyzed by Environmental Protection Agency (EPA) Method 8260B

B = Benzene

DTW = Depth to water below TOC

E = Ethylbenzene

ft = Feet

GWE = Groundwater elevation

ID = Identification

J = Laboratory estimated value

LNAPL = Light non-aqueous phase liquid

ND = Not detected

ND<# = Analyte not detected at or above indicated laboratory practical quantitation limit

QA = Quality assurance/trip blank

T = Toluene

TOC = Top of casing

TPH-g = Total petroleum hydrocarbons as gasoline; reported as Total Purgeable Petroleum Hydrocarbons in the laboratory report

TPH-GRO = Total petroleum hydrocarbons-gasoline range organics

X = Total xylenes

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
MW-1	11/1/1989	--	--	--	--	--	--	--	--	--	--
	2/15/1990	--	--	--	--	--	--	--	--	--	--
	8/16/1990	--	--	--	--	--	--	--	--	--	--
	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	5/6/1996	55	--	--	--	--	--	--	--	--	--
	11/5/1996	5.2	--	--	--	--	--	--	--	--	--
	5/15/1997	16	--	--	--	--	--	--	--	--	--
	11/12/1997	11	--	--	--	--	--	--	--	--	--
	5/4/1998	320	--	--	--	--	--	--	--	--	--
	11/11/1998	200	--	--	--	--	--	--	--	--	--
	5/20/1999	89	47	ND	ND	ND	ND	ND	--	--	--
	11/15/1999	8.12	7.19	ND	ND	ND	ND	ND	--	--	--
	5/22/2000	220	290	130	ND	ND	ND	ND	--	--	--
	11/22/2000	105	142	--	--	ND	ND	ND	--	--	--
	5/15/2001	178	374	ND	ND	ND	ND	ND	--	--	--
	11/23/2001	350	350	ND<57	ND<1,400	ND<2.9	ND<2.9	ND<2.9	ND<2.9	--	ND<2.9
	5/24/2002	200	240	ND<200	ND<1,000	ND<4.0	ND<4.0	ND<4.0	ND<4.0	--	ND<4.0
	11/29/2002	--	330	ND<500	ND<2,500	ND<10	ND<10	ND<10	ND<10	--	ND<10
	5/15/2003	--	210	ND<500	ND<2,500	ND<10	ND<10	ND<10	ND<10	--	ND<10
	11/4/2003	--	140	ND<200	ND<1,000	ND<4.0	ND<4.0	ND<4.0	--	--	--
	5/24/2004	--	26	ND<5.0	ND<50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	11/29/2004	--	44	--	ND<50	--	--	--	--	--	--
	6/24/2005	--	80	--	ND<1,000	--	--	--	--	--	--
	12/15/2005	--	32	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/14/2006	--	44	--	ND<250	--	--	--	--	--	--
	12/21/2006	--	16	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE		TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
		8021B (µg/L)	8260B (µg/L)								
	6/28/2007	--	5.6	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	10	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	29	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	3.2	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	0.98	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	8.1	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	1.6	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	22	--	--	--	--	--	--	--	--
	12/9/2011	--	4.2	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	0.87	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	0.51	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	1.3	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	0.89	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-2	11/1/1989	--	--	--	--	--	--	--	--	--	--
	2/15/1990	--	--	--	--	--	--	--	--	--	--
	8/16/1990	--	--	--	--	--	--	--	--	--	--
	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	2,700	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	8/19/1995	--	--	--	--	--	--	--	--	--	--
	10/11/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	160	--	--	--	--	--	--	--	--	--
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	5/15/1997	--	--	--	--	--	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	--	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	--	--	--	--	--	--	--	--	--	--
	11/15/1999	--	--	--	--	--	--	--	--	--	--
	5/22/2000	--	--	--	--	--	--	--	--	--	--
	11/22/2000	--	--	--	--	--	--	--	--	--	--
	5/15/2001	--	--	--	--	--	--	--	--	--	--
	11/23/2001	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	--	--	--	--	--	--	--	--	--
	5/24/2004	--	--	--	--	--	--	--	--	--	--
	11/29/2004	--	--	--	--	--	--	--	--	--	--
	6/24/2005	--	--	--	--	--	--	--	--	--	--
	12/15/2005	--	--	--	--	--	--	--	--	--	--
	6/14/2006	--	190	--	ND<250	--	--	--	--	--	--
	12/21/2006	--	32	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/28/2007	--	8.3	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	10	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	12	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	--	--	--	--	--	--	--	--	--
	9/28/2009	--	--	--	--	--	--	--	--	--	--
	12/15/2009	--	5.9	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	4.3	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	2.1	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	14	--	--	--	--	--	--	--	--
	12/9/2011	--	7.9	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	2.9	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	0.95	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	1.1	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	0.82	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	0.68	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	0.58	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	0.91	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-3	11/1/1989	--	--	--	--	--	--	--	--	--	--
	2/15/1990	--	--	--	--	--	--	--	--	--	--
	8/16/1990	--	--	--	--	--	--	--	--	--	--
	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/4/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/9/1993	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/10/1993	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/9/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/8/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/12/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/7/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/8/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/11/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/8/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/7/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/12/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/24/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	3/14/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	8/19/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	880	--	--	--	--	--	--	--	--	--
	5/6/1996	370	--	--	--	--	--	--	--	--	--
	11/5/1996	460	--	--	--	--	--	--	--	--	--
	5/15/1997	100	--	--	--	--	--	--	--	--	--
	11/12/1997	ND	--	--	--	--	--	--	--	--	--
	5/4/1998	ND	--	--	--	--	--	--	--	--	--
	11/11/1998	ND	--	--	--	--	--	--	--	--	--
	5/20/1999	ND	--	--	--	--	--	--	--	--	--
	11/15/1999	120	45.1	--	--	--	--	--	--	--	--
	5/22/2000	100	94	ND	ND	ND	ND	ND	--	--	--
	11/22/2000	212	131	--	--	ND	ND	ND	--	--	--
	5/15/2001	97.1	75.5	ND	ND	ND	ND	ND	--	--	--
	11/23/2001	320	390	79	ND<1,200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	ND<2.5
	5/24/2002	120	73	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	ND<2.0
	11/29/2002	--	340	ND<5,000	ND<25,000	ND<100	ND<100	ND<100	ND<100	--	ND<100
	5/15/2003	--	440	ND<1,000	ND<5,000	ND<20	ND<20	ND<20	ND<20	--	ND<20
	11/4/2003	--	530	ND<4,000	ND<20,000	ND<80	ND<80	ND<80	--	--	--
	5/24/2004	--	1200	190	ND<1,000	ND<20	ND<10	ND<10	ND<10	--	ND<10
	11/29/2004	--	550	--	ND<500	--	--	--	--	--	--
	6/24/2005	--	400	--	ND<10,000	--	--	--	--	--	--
	12/15/2005	--	280	ND<500	ND<12,000	ND<25	ND<25	ND<25	ND<25	--	ND<25
	6/14/2006	--	160	--	ND<1,200	--	--	--	--	--	--
	12/21/2006	--	96	110	ND<1,200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	ND<2.5
	6/28/2007	--	75	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	27	--	ND<500	--	--	--	--	--	--
	6/9/2008	--	19	--	ND<1,200	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	12/30/2008	--	--	--	--	--	--	--	--	--	--
	9/28/2009	--	18	--	ND<1,200	--	--	--	--	--	--
	12/15/2009	--	13	--	ND<1,200	--	--	--	--	--	--
	6/28/2010	--	17	--	ND<250	--	--	--	ND<0.50	ND<0.010	ND<0.50
	12/29/2010	--	28	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	5.7	--	--	--	--	--	--	--	--
	12/9/2011	--	9.3	--	ND<1,200	--	--	--	ND<2.5	--	ND<2.5
	6/1/2012	--	19	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	11/23/2012	--	11	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	6	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	7.6	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	15	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	16	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	6.3	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	21	ND<50	ND<1,200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	ND<2.5
MW-4	2/15/1990	--	--	--	--	--	--	--	--	--	--
	8/16/1990	--	--	--	--	--	--	--	--	--	--
	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	12/21/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	8/19/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	0.86	--	--	--	--	--	--	--	--	--
	5/6/1996	ND	--	--	--	--	--	--	--	--	--
	11/5/1996	6.5	--	--	--	--	--	--	--	--	--
	5/15/1997	ND	--	--	--	--	--	--	--	--	--
	11/12/1997	ND	--	--	--	--	--	--	--	--	--
	5/4/1998	ND	--	--	--	--	--	--	--	--	--
	11/11/1998	ND	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE		MTBE		DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
		8021B (µg/L)	8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)						
	5/20/1999	ND	--	--	--	ND<2.0	--	--	--	--	--
	11/15/1999	ND	--	--	--	--	--	--	--	--	--
	5/22/2000	ND	--	--	--	--	--	--	--	--	--
	11/22/2000	ND	--	--	--	--	--	--	--	--	--
	5/15/2001	ND	--	--	--	--	--	--	--	--	--
	11/23/2001	ND<5.0	--	--	--	--	--	--	--	--	--
	5/24/2002	9.6	3.5	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	ND<2.0
	11/29/2002	--	2.6	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	--	ND<2.0
	5/15/2003	--	ND<2.0	--	--	--	--	--	--	--	--
	11/4/2003	--	ND<2.0	--	ND<500	--	--	--	--	--	--
	5/24/2004	--	ND<0.50	--	ND<50	ND<1.0	--	--	--	--	--
	11/29/2004	--	0.55	ND<5.0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/24/2005	--	ND<0.50	--	ND<1,000	ND<0.50	--	--	--	--	--
	12/15/2005	--	0.65	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/14/2006	--	ND<0.50	--	ND<250	ND<0.50	--	--	--	--	--
	12/21/2006	--	0.67	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/28/2007	--	0.61	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	0.62	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	0.99	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	1.1	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	--	--	--	--	--	--	--	--	--
	12/15/2009	--	4.0	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	2.7	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	0.78	ND<10	ND<250		ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	ND<2.5	--	--	--	--	--	--	--	--
	12/9/2011	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	ND<2.5	--	ND<1,200	--	--	--	ND<2.5	--	ND<2.5
	6/6/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	0.55	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-5	2/15/1990	--	--	--	--	--	--	--	--	--	--
	8/16/1990	--	--	--	--	--	--	--	--	--	--
	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/4/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/9/1993	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/10/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/9/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/8/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	5/12/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/7/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/8/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/11/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/8/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/7/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/12/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	3/14/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	8/19/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	630	--	--	--	--	--	--	--	--	--
	5/6/1996	170	--	--	--	--	--	--	--	--	--
	11/5/1996	580	--	--	--	--	--	--	--	--	--
	5/15/1997	ND	--	--	--	--	--	--	--	--	--
	11/12/1997	74	--	--	--	--	--	--	--	--	--
	5/4/1998	ND	--	--	ND	--	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	2/22/1999	--	--	--	--	--	--	--	--	--	--
	4/2/1999	--	--	--	--	--	--	--	--	--	--
	5/4/1999	--	--	--	--	--	--	--	--	--	--
	5/20/1999	--	--	--	--	--	--	--	--	--	--
	6/29/1999	--	--	--	--	--	--	--	--	--	--
	7/29/1999	--	--	--	--	--	--	--	--	--	--
	8/24/1999	--	--	--	--	--	--	--	--	--	--
	9/27/1999	--	--	--	--	--	--	--	--	--	--
	10/28/1999	--	--	--	--	--	--	--	--	--	--
	11/15/1999	--	--	--	--	--	--	--	--	--	--
	12/20/1999	--	--	--	--	--	--	--	--	--	--
	1/20/2000	--	--	--	--	--	--	--	--	--	--
	2/26/2000	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--
	4/13/2000	--	--	--	--	--	--	--	--	--	--
	5/22/2000	640	21	ND	ND	--	ND	ND	--	--	--
	11/22/2000	--	--	--	--	--	--	--	--	--	--
	2/14/2001	--	--	--	--	--	--	--	--	--	--
	3/28/2001	--	--	--	--	--	--	--	--	--	--
	4/28/2001	--	--	--	--	--	--	--	--	--	--
	5/15/2001	--	--	--	--	--	--	--	--	--	--
	6/29/2001	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--
	8/30/2001	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	9/24/2001	--	--	--	--	--	--	--	--	--	--
	10/15/2001	--	--	--	--	--	--	--	--	--	--
	11/23/2001	ND<500	--	--	--	--	--	--	--	--	--
	12/10/2001	--	--	--	--	--	--	--	--	--	--
	1/14/2002	--	--	--	--	--	--	--	--	--	--
	2/22/2002	--	--	--	--	--	--	--	--	--	--
	3/11/2002	--	--	--	--	--	--	--	--	--	--
	4/15/2002	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	6/17/2002	--	--	--	--	--	--	--	--	--	--
	7/15/2002	--	--	--	--	--	--	--	--	--	--
	8/19/2002	--	--	--	--	--	--	--	--	--	--
	9/5/2002	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	12/12/2002	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--
	2/12/2003	--	--	--	--	--	--	--	--	--	--
	3/13/2003	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	6/12/2003	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--
	8/14/2003	--	--	--	--	--	--	--	--	--	--
	9/12/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	--	--	--	--	--	--	--	--	--
	5/24/2004	--	--	--	--	--	--	--	--	--	--
	11/29/2004	--	--	--	--	--	--	--	--	--	--
	6/24/2005	--	82	--	ND<50,000	ND<25	--	--	--	--	--
	12/15/2005	--	120	ND<500	ND<12,000	--	ND<25	ND<25	ND<25	--	ND<25
	6/14/2006	--	48	--	ND<6,200	ND<25	--	--	--	--	--
	12/21/2006	--	96	ND<500	ND<12,000	--	ND<25	ND<25	ND<25	--	ND<25
	6/28/2007	--	--	--	--	--	--	--	--	--	--
	12/13/2007	--	--	--	--	--	--	--	--	--	--
	6/9/2008	--	--	--	--	--	--	--	--	--	--
	12/30/2008	--	--	--	--	--	--	--	--	--	--
	9/28/2009	--	--	--	--	--	--	--	--	--	--
	12/15/2009	--	--	--	--	--	--	--	--	--	--
	6/28/2010	--	--	--	--	--	--	--	--	--	--
	12/29/2010	--	--	--	--	--	--	--	--	--	--
	2/1/2011	--	--	--	--	--	--	--	--	--	--
	6/7/2011	--	ND<12	--	--	--	--	--	--	--	--
	9/13/2011	--	--	--	--	--	--	--	--	--	--
	10/21/2011	--	--	--	--	--	--	--	--	--	--
	11/4/2011	--	--	--	--	--	--	--	--	--	--
	12/9/2011	--	--	--	--	--	--	--	--	--	--
	1/12/2012	--	--	--	--	--	--	--	--	--	--
	6/1/2012	--	--	--	--	--	--	--	--	--	--
	6/6/2013	--	2.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	--	--	--	--	--	--	--	--	--
	6/23/2014	--	--	--	--	--	--	--	--	--	--
	12/17/2014	--	--	--	--	--	--	--	--	--	--
	6/9/2015	--	--	--	--	--	--	--	--	--	--
	12/30/2015	--	--	--	--	--	--	--	--	--	--
	6/22/2016	--	ND<5.0	ND<100	ND<2,500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	ND<5.0

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
MW-6	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--
	5/15/1997	--	--	--	--	--	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	ND<2.0	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	--	--	--	--	--	--	--	--	--	--
	11/15/1999	--	--	--	--	--	--	--	--	--	--
	5/22/2000	--	--	--	--	--	--	--	--	--	--
	11/22/2000	--	--	--	--	--	--	--	--	--	--
	5/15/2001	--	--	--	--	--	--	--	--	--	--
	11/23/2001	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	2.4	ND<100	ND<500	ND<1.0	ND<2.0	ND<2.0	--	--	--
	5/24/2004	--	2.8	ND<5.0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	11/29/2004	--	4.8	--	ND<50	--	--	--	--	--	--
	6/24/2005	--	0.47	--	ND<1,000	ND<0.50	--	--	--	--	--
	12/15/2005	--	0.88	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/14/2006	--	3.0	--	ND<250	ND<0.50	--	--	--	--	--
	12/21/2006	--	1.0	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/28/2007	--	1.2	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	0.64	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	0.65	--	ND<250	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE		TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
		8021B (µg/L)	8260B (µg/L)								
	12/30/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	0.67	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	ND<0.50	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	ND<0.50	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	12	--	--	--	--	--	--	--	--
	12/9/2011	--	2.0	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	0.64	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-7	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--
	5/15/1997	--	--	--	--	--	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	--	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	--	--	--	--	--	--	--	--	--	--
	11/15/1999	--	--	--	--	--	--	--	--	--	--
	5/22/2000	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE		MTBE		DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
		8021B (µg/L)	8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)						
	11/22/2000	--	--	--	--	--	--	--	--	--	--
	5/15/2001	--	--	--	--	--	--	--	--	--	--
	11/23/2001	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	ND<2.0	--	ND<500	ND<1.0	--	--	--	--	--
	5/24/2004	--	1.4	ND<5.0	ND<50	--	ND<0.5	ND<0.5	ND<0.5	--	ND<0.5
	11/29/2004	--	3.6	--	ND<50	--	--	--	--	--	--
	6/24/2005	--	1.6	--	ND<1,000	ND<0.50	--	--	--	--	--
	12/15/2005	--	0.72	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/14/2006	--	ND<0.50	--	ND<250	ND<0.50	--	--	--	--	--
	12/21/2006	--	0.75	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/28/2007	--	0.51	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	0.58	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	0.54	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	1.0	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	0.52	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	1.6	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	ND<0.50	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	6.0	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	19	--	--	--	--	--	--	--	--
	12/9/2011	--	4.5	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	0.71	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	2.1	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-8	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/9/1993	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/10/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/9/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/8/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/12/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/7/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/8/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	8/11/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/8/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/7/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/12/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--
	5/15/1997	43	--	--	--	ND	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	--	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	23	10	ND	ND	ND	ND	ND	--	--	--
	11/15/1999	--	--	ND	ND	ND<4.0	ND	ND	--	--	--
	5/22/2000	ND	--	--	--	--	--	--	--	--	--
	11/22/2000	ND	--	--	--	--	--	--	--	--	--
	5/15/2001	ND	--	--	--	--	--	--	--	--	--
	11/23/2001	ND<5.0	--	--	--	--	--	--	--	--	--
	5/24/2002	ND<5.0	--	--	--	--	--	--	--	--	--
	11/29/2002	--	ND<2.0	--	--	--	--	--	--	--	--
	5/15/2003	--	ND<2.0	--	--	--	--	--	--	--	--
	11/4/2003	--	190	ND<200	ND<1,000	ND<5.0	ND<4.0	ND<4.0	--	--	--
	5/24/2004	--	750	ND<25	ND<250	ND<20	ND<2.5	ND<2.5	ND<2.5	--	ND<2.5
	11/29/2004	--	1,600	ND<100	ND<1,000	--	ND<10	ND<10	ND<10	--	ND<10
	6/24/2005	--	190	--	ND<1,000	ND<0.50	--	--	--	--	--
	12/15/2005	--	1,000	ND<10	ND<250	--	ND<0.50	0.95	ND<0.50	--	ND<0.50
	6/14/2006	--	39	--	ND<250	ND<0.50	--	--	--	--	--
	12/21/2006	--	15	13	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/28/2007	--	8.4	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	6.8	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	6.5	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	2.9	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	3.1	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	2.9	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	3.6	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	2.7	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	--	--	--	--	--	--	--	--	--
	12/9/2011	--	--	--	--	--	--	--	--	--	--
	6/1/2012	--	--	--	--	--	--	--	--	--	--
	6/6/2013	--	--	--	--	--	--	--	--	--	--
	12/13/2013	--	--	--	--	--	--	--	--	--	--
	6/23/2014	--	--	--	--	--	--	--	--	--	--
	12/17/2014	--	--	--	--	--	--	--	--	--	--
	6/9/2015	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	12/30/2015	--	--	--	--	--	--	--	--	--	--
	6/22/2016	--	--	--	--	--	--	--	--	--	--
MW-9	11/7/1990	--	--	--	--	--	--	--	--	--	--
	2/25/1991	--	--	--	--	--	--	--	--	--	--
	5/28/1991	--	--	--	--	--	--	--	--	--	--
	8/28/1991	--	--	--	--	--	--	--	--	--	--
	11/19/1991	--	--	--	--	--	--	--	--	--	--
	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	59	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	60	--	--	--	--	--	--	--	--	--
	5/6/1996	ND	--	--	--	--	--	--	--	--	--
	11/5/1996	ND	--	--	--	--	--	--	--	--	--
	5/15/1997	ND	--	--	--	--	--	--	--	--	--
	11/12/1997	74	--	--	--	--	--	--	--	--	--
	5/4/1998	45	--	--	--	--	--	--	--	--	--
	11/11/1998	ND	--	--	--	--	--	--	--	--	--
	5/20/1999	ND	--	--	--	ND<1.0	--	--	--	--	--
	11/15/1999	ND	--	--	--	--	--	--	--	--	--
	5/22/2000	ND	--	--	--	--	--	--	--	--	--
	11/22/2000	ND	--	--	--	--	--	--	--	--	--
	5/15/2001	ND	--	--	--	--	--	--	--	--	--
	11/23/2001	ND<5.0	--	--	--	--	--	--	--	--	--
	5/24/2002	ND<5.0	--	--	--	--	--	--	--	--	--
	11/29/2002	--	ND<2.0	--	--	--	--	--	--	--	--
	5/15/2003	--	ND<2.0	--	--	--	--	--	--	--	--
	11/4/2003	--	--	--	--	--	--	--	--	--	--
	5/24/2004	--	160	29	ND<50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	11/29/2004	--	160	23	ND<50	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/24/2005	--	67	--	ND<1,000	ND<0.50	--	--	--	--	--
	12/15/2005	--	82	11	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/14/2006	--	5.2	--	ND<250	ND<0.50	--	--	--	--	--
	12/21/2006	--	36	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE		TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
		8021B (µg/L)	8260B (µg/L)								
	6/28/2007	--	52	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	31	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	27	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	5.0	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	7.5	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	3.7	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	2.2	--	ND<250	ND<0.50	--	--	ND<0.50	ND<0.010	ND<0.50
	12/29/2010	--	ND<0.50	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	--	--	--	--	--	--	--	--	--
	12/9/2011	--	--	--	--	--	--	--	--	--	--
	6/1/2012	--	--	--	--	--	--	--	--	--	--
	6/6/2013	--	--	--	--	--	--	--	--	--	--
	12/13/2013	--	--	--	--	--	--	--	--	--	--
	6/23/2014	--	--	--	--	--	--	--	--	--	--
	12/17/2014	--	--	--	--	--	--	--	--	--	--
	6/9/2015	--	--	--	--	--	--	--	--	--	--
	12/30/2015	--	--	--	--	--	--	--	--	--	--
	6/22/2016	--	--	--	--	--	--	--	--	--	--
MW-10	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--
	5/15/1997	--	--	--	--	--	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	--	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	--	--	--	--	--	--	--	--	--	--
	11/15/1999	--	--	--	--	--	--	--	--	--	--
	5/22/2000	--	--	--	--	--	--	--	--	--	--
	11/22/2000	--	--	--	--	--	--	--	--	--	--
	5/15/2001	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	11/23/2001	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	ND<2.0	--	ND<500	ND<1.0	--	--	--	--	--
	5/24/2004	--	0.75	ND<5.0	ND<50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	11/29/2004	--	0.72	6.1	ND<50	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/24/2005	--	ND<0.50	--	ND<1,000	--	--	--	--	--	--
	12/15/2005	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/14/2006	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/21/2006	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/28/2007	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	ND<0.50	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	ND<0.50	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	ND<0.50	--	--	--	--	--	--	--	--
	12/9/2011	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	1.1	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	0.92	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	0.92	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-11	2/6/1992	--	--	--	--	--	--	--	--	--	--
	5/23/1992	--	--	--	--	--	--	--	--	--	--
	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--
	5/15/1997	--	--	--	--	--	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	--	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	ND	--	--	--	--	--	--	--	--	--
	11/15/1999	ND	--	--	--	--	--	--	--	--	--
	5/22/2000	ND	--	--	--	--	--	--	--	--	--
	11/22/2000	ND	--	--	--	--	--	--	--	--	--
	5/15/2001	ND	--	--	--	--	--	--	--	--	--
	11/23/2001	ND<5.0	--	--	--	--	--	--	--	--	--
	5/24/2002	ND<5.0	--	--	--	--	--	--	--	--	--
	11/29/2002	--	ND<2.0	--	--	--	--	--	--	--	--
	5/15/2003	--	ND<2.0	--	--	--	--	--	--	--	--
	11/4/2003	--	ND<2.0	--	ND<500	--	--	--	--	--	--
	5/24/2004	--	ND<0.50	--	ND<50	--	--	--	--	--	--
	11/29/2004	--	ND<0.50	--	ND<50	--	--	--	--	--	--
	6/24/2005	--	ND<0.50	--	ND<1,000	--	--	--	--	--	--
	12/15/2005	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/14/2006	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/21/2006	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/28/2007	--	--	--	--	--	--	--	--	--	--
	12/13/2007	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	--	--	--	--	--	--	--	--	--
	6/28/2010	--	ND<0.50	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	ND<0.50	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	ND<0.50	--	--	--	--	--	--	--	--
	12/9/2011	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	--	--	--	--	--	--	--	--	--
	12/17/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
MW-12	8/26/1992	--	--	--	--	--	--	--	--	--	--
	11/20/1992	--	--	--	--	--	--	--	--	--	--
	12/21/1992	--	--	--	--	--	--	--	--	--	--
	1/30/1993	--	--	--	--	--	--	--	--	--	--
	2/24/1993	--	--	--	--	--	--	--	--	--	--
	3/22/1993	--	--	--	--	--	--	--	--	--	--
	4/28/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/22/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	10/28/1993	--	--	--	--	--	--	--	--	--	--
	11/30/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	ND	--	--	--	--	--	--	--	--
	9/27/1994	--	--	--	--	--	--	--	--	--	--
	10/11/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	5/3/1995	--	--	--	--	--	--	--	--	--	--
	8/3/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	5/6/1996	--	--	--	--	--	--	--	--	--	--
	11/5/1996	--	--	--	--	--	--	--	--	--	--
	5/15/1997	--	--	--	--	--	--	--	--	--	--
	11/12/1997	--	--	--	--	--	--	--	--	--	--
	5/4/1998	--	--	--	--	ND<2.0	--	--	--	--	--
	11/11/1998	--	--	--	--	--	--	--	--	--	--
	5/20/1999	--	--	--	--	--	--	--	--	--	--
	11/15/1999	--	--	--	--	--	--	--	--	--	--
	5/22/2000	--	--	--	--	--	--	--	--	--	--
	11/22/2000	--	--	--	--	--	--	--	--	--	--
	5/15/2001	--	--	--	--	--	--	--	--	--	--
	11/23/2001	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	4.4	ND<100	ND<500	ND<1.0	ND<2.0	ND<2.0	--	--	--
	5/24/2004	--	1.7	ND<5.0	ND<50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	11/29/2004	--	0.71	ND<5.0	ND<50	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/24/2005	--	ND<0.50	--	ND<1,000	--	--	--	--	--	--
	12/15/2005	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/14/2006	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/21/2006	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/28/2007	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	6/9/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	12/30/2008	--	ND<0.50	--	ND<250	--	--	--	--	--	--
	9/28/2009	--	0.55	--	ND<250	--	--	--	--	--	--
	12/15/2009	--	0.56	--	ND<250	--	--	--	--	--	--
	6/28/2010	--	0.97	--	ND<250	ND<0.50	--	--	ND<0.50	ND<0.010	ND<0.50
	12/29/2010	--	0.95	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	2.0	--	--	--	--	--	--	--	--
	12/9/2011	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/1/2012	--	1.2	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/6/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	0.55	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	0.55	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	1.1	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
RW-1	2/24/1993	--	--	--	--	--	--	--	--	--	--
	5/12/1993	--	--	--	--	--	--	--	--	--	--
	5/25/1993	--	--	--	--	--	--	--	--	--	--
	6/7/1993	--	--	--	--	--	--	--	--	--	--
	6/23/1993	--	--	--	--	--	--	--	--	--	--
	7/8/1993	--	--	--	--	--	--	--	--	--	--

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	8/11/1993	--	--	--	--	--	--	--	--	--	--
	8/25/1993	--	--	--	--	--	--	--	--	--	--
	9/8/1993	--	--	--	--	--	--	--	--	--	--
	9/22/1993	--	--	--	--	--	--	--	--	--	--
	11/12/1993	--	--	--	--	--	--	--	--	--	--
	2/16/1994	--	--	--	--	--	--	--	--	--	--
	5/31/1994	--	--	--	--	--	--	--	--	--	--
	8/31/1994	--	--	--	--	--	--	--	--	--	--
	11/10/1994	--	--	--	--	--	--	--	--	--	--
	2/7/1995	--	--	--	--	--	--	--	--	--	--
	3/14/1995	--	--	--	--	--	--	--	--	--	--
	11/7/1995	--	--	--	--	--	--	--	--	--	--
	10/15/2001	--	--	--	--	--	--	--	--	--	--
	11/23/2001	--	--	--	--	--	--	--	--	--	--
	12/10/2001	--	--	--	--	--	--	--	--	--	--
	1/14/2002	--	--	--	--	--	--	--	--	--	--
	2/22/2002	--	--	--	--	--	--	--	--	--	--
	3/11/2002	--	--	--	--	--	--	--	--	--	--
	4/15/2002	--	--	--	--	--	--	--	--	--	--
	5/24/2002	--	--	--	--	--	--	--	--	--	--
	6/17/2002	--	--	--	--	--	--	--	--	--	--
	7/15/2002	--	--	--	--	--	--	--	--	--	--
	8/19/2002	--	--	--	--	--	--	--	--	--	--
	9/5/2002	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--
	11/29/2002	--	--	--	--	--	--	--	--	--	--
	12/12/2002	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--
	2/12/2003	--	--	--	--	--	--	--	--	--	--
	3/13/2003	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--
	5/15/2003	--	--	--	--	--	--	--	--	--	--
	6/12/2003	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--
	8/14/2003	--	--	--	--	--	--	--	--	--	--
	9/12/2003	--	--	--	--	--	--	--	--	--	--
	11/4/2003	--	210	ND<2,000	ND<10,000	ND<10	ND<40	ND<40	--	--	--
	5/24/2004	--	200	ND<50	ND<500	ND<2.0	ND<5.0	ND<5.0	ND<5.0	--	ND<5.0
	11/29/2004	--	140	38	ND<100	--	ND<1.0	1.3	ND<1.0	--	ND<1.0
	6/24/2005	--	56	--	ND<1,000	ND<0.50	--	--	--	--	--
	12/15/2005	--	44	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/14/2006	--	21	--	ND<250	ND<0.50	--	--	--	--	--
	12/21/2006	--	27	34	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/28/2007	--	65	--	ND<250	--	--	--	--	--	--
	12/13/2007	--	30	--	ND<500	--	--	--	--	--	--
	6/9/2008	--	39	--	ND<1,200	--	--	--	--	--	--
	12/30/2008	--	22	--	ND<1,200	--	--	--	--	--	--
	9/28/2009	--	21	--	ND<1,200	--	--	--	--	--	--
	12/15/2009	--	ND<2.5	--	ND<1,200	--	--	--	--	--	--
	6/28/2010	--	5.6	--	ND<250	ND<0.50	--	--	ND<0.50	--	ND<0.50
	12/29/2010	--	1.6	ND<10	ND<250	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
	6/7/2011	--	ND<0.50	--	--	--	--	--	--	--	--
	10/21/2011	--	--	--	--	--	--	--	--	--	--
	12/9/2011	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	1/12/2012	--	--	--	--	--	--	--	--	--	--
	6/1/2012	--	ND<2.5	--	ND<1,200	--	--	--	ND<2.5	--	ND<2.5

Table 5
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)
	6/6/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/13/2013	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/23/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/17/2014	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/9/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
QA	12/30/2015	--	ND<0.50	--	ND<250	--	--	--	ND<0.50	--	ND<0.50
	6/22/2016	--	ND<0.50	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50

NOTES:

µg/L = Micrograms per liter

-- = Not available/not sampled

504 = Analyzed by Environmental Protection Agency (EPA) Method 504

8021 = Analyzed by EPA Method 8021B

8260B = Analyzed by EPA Method 8260B

DIPE = Diisopropyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

ID = Identification

J = Laboratory estimated value

MTBE = Methyl t-Butyl Ether

ND = Not detected

ND<# = Analyte not detected at or above indicated laboratory practical quantitation limit

QA = Quality assurance/trip blank

TAME = t-Amyl Methyl ether

TBA = t-Butyl alcohol

Table 6
LNAPL Recovery Data
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

DATE	MW-5	RW-1
11/11/1998	0	0
2/22/1999	0.04	0
4/2/1999	0.07	0
5/4/1999	0	0
5/20/1999	0	0
6/29/1999	0	0
0729/99	0	0
8/24/1999	0	0
9/27/1999	0	0
10/28/1999	0	0
11/15/1999	0	0
12/20/1999	0	0
1/20/2000	0	0
2/26/2000	0	0
3/31/2000	0	0
4/13/2000	0	0
5/22/2000	0	0
11/22/2000	0.02	0
2/14/2001	0.06	0
3/28/2001	0	0
4/28/2001	0	0
5/15/2001	0	0
6/29/2001	0	0
7/17/2001	0	0
8/30/2001	0	0
9/24/2001	0	0
10/15/2001	0.03	0
11/23/2001	0	0
12/10/2001	0	0
1/14/2002	0	0
2/22/2002	0	0
3/11/2002	0	0
4/15/2002	0	0
5/24/2002	0.04	0
6/17/2002	0.04	0
7/15/2002	0.02	0
8/19/2002	0.05	0
9/5/2002	0.03	0
10/7/2002	0.02	0
11/29/2002	0.02	0
12/12/2002	0.01	0
1/6/2003	0.01	0
2/12/2003	0.02	0
3/13/2003	0.02	0
4/7/2003	0.01	0
5/15/2003	0.03	0
6/12/2003	0.02	0
7/7/2003	0.01	0
8/14/2003	0.02	0
9/12/2003	0.02	0
10/15/2003	0.087	0
11/4/2003	0.043	0
11/21/2003	0.032	0
12/18/2003	0.024	0
1/7/2004	0.009	0

Table 6
LNAPL Recovery Data
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

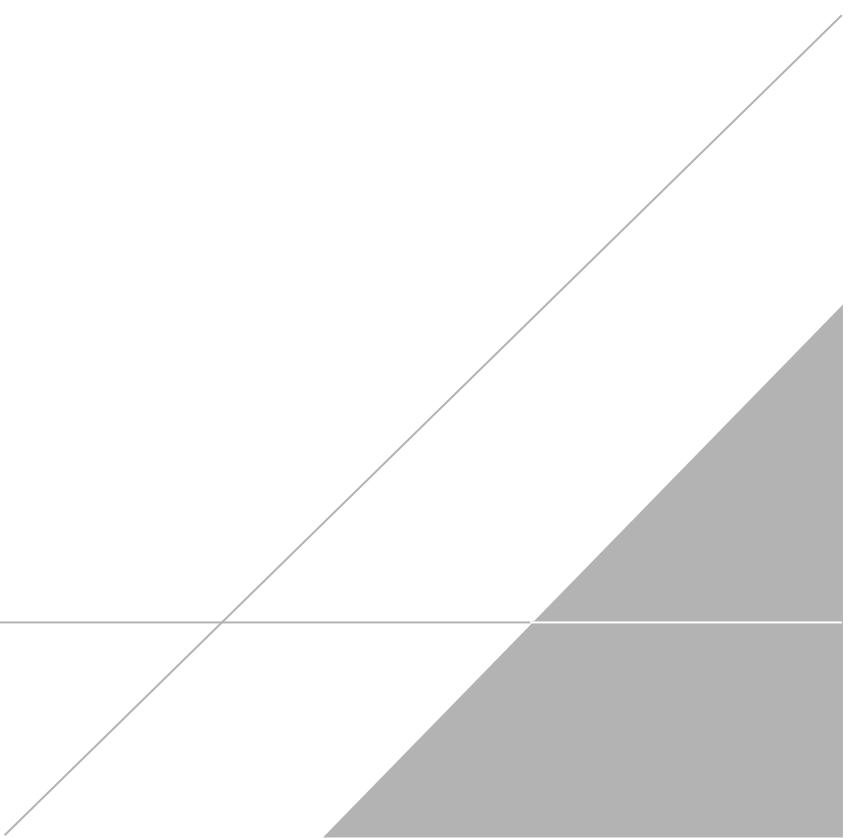
DATE	MW-5	RW-1
2/9/2004	0.01	0.01
3/24/2004	0.031	0
4/16/2004	0	0
5/24/2004	0.050	0
6/8/2004	0.049	0
7/2/2004	0.046	0
8/20/2004	0.080	0
9/17/2004	0.048	0
10/22/2004	0.024	0
11/29/2004	0.036	0
12/21/2004	0.010	0
1/24/2005	0.027	0
2/18/2005	0.020	0
3/18/2005	0.024	0
4/14/2005	0.010	0
5/17/2005	0.010	0
6/24/2005	0	0
7/14/2005	0.020	0
8/5/2005	0.050	0
9/16/2005	0.009	0
10/21/2005	0	0
11/22/2005	0	0
12/15/2005	0	0
1/19/2006	0	0
2/15/2006	0	0
3/25/2006	0	0
4/27/2006	0	0
5/25/2006	0	0
6/14/2006	0	0
7/3/2006	0	0
8/10/2006	0	0
9/15/2006	0.027	0
10/27/2006	0.009	0
11/22/2006	0.017	0
12/21/2006	0	0
2/5/2007	0.010	0
2/20/2007	0	0
3/28/2007	0	0
4/30/2007	0	0
5/23/2007	0.073	0
6/28/2007	0.049	0
8/1/2007	0	0
8/27/2007	0	0
9/12/2007	0.040	0
10/16/2007	0	0
12/13/2007	0.029	0
1/29/2008	0.010	0
2/28/2008	0.020	0
3/21/2008	0	0
4/11/2008	0.058	0
5/21/2008	0.044	0
6/9/2008	0.029	0
7/18/2008	0.032	0
8/15/2008	0.024	0
9/24/2008	0.051	0

Table 6
LNAPL Recovery Data
76 Station No. 0746 (351647)
3943 Broadway
Oakland, California

DATE	MW-5	RW-1
10/22/2008	0.044	0
11/26/2008	0.034	0
12/30/2008	0.022	0
1/23/2009	NA	0
3/27/2009	0	0
4/28/2009	0.102	0
5/28/2009	NA	NA
7/31/2009	0.034	0
8/21/2009	0.102	0
9/28/2009	0.017	0
10/26/2009	0.063	0
11/30/2009	0.075	0
12/15/2009	0.010	0
1/25/2010	0.003	0
2/26/2010	0	0
3/23/2010	0.01	0
4/22/2010	0.009	0
5/21/2010	0.117	0
6/28/2010	0.085	0
7/21/2010	0.04	0
8/18/2010	0.07	0
9/29/2010	0.03	0
10/18/2010	0.046	0
11/30/2010	0.058	0
12/29/2010	0.25	0
1/6/2011	0.138	0
1/20/2011	0.231	0
2/1/2011	0.23	0
2/14/2011	0	0
3/3/2011	0	0
3/22/2011	0	0
4/25/2011	0	0
5/27/2011	0	0
9/13/2011	0	0
10/20/2011	0	0
11/4/2011	0	0
12/23/2011	0.21	0
9/2/2015	0	NA
10/16/2015	0	0
11/12/2015	0	0
12/30/2015	0	0
1/22/2016	0	NM
2/24/2016	0	NM
3/14/2016	0	0.05
4/21/2016	0	0
5/20/2016	0.21	0.31
6/22/2016	0.14	0.33
Total LNAPL Removed (gallons):		4.26
NOTES:		
LNAPL = Light non-aqueous phase liquid		
NA = Not applicable		
NM = Not measured		

ATTACHMENT C

[Laboratory Report and Chain-of-Custody Documentation]





Date of Report: 01/03/2017

Tamera Rogers

Arcadis

6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Client Project: 351647

BCL Project: 0746

BCL Work Order: 1635702

Invoice ID: B255718

Enclosed are the results of analyses for samples received by the laboratory on 12/27/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1635702 Page 1 of 3

1635702 CHAIN OF CUSTODY FORM
Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

Union Oil Site ID: <u>0746</u>	Union Oil Consultant: <u>ARCADIS</u>	COC <u>1</u> of <u>1</u>		
Site Global ID: <u>T0600101471</u>	Consultant Contact: <u>TAMEERA ROGERS</u>	ANALYSES REQUIRED		
Site Address: <u>3943 BROADWAY</u> <u>OAKLAND, CA</u>	Consultant Phone No: <u>(408) 797-2013</u>	Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>		
Union Oil PM: <u>JAMES P KIERNAN</u>	Sampling Company: <u>GRETTER-RYAN INC</u>	Special Instructions <u>RUN 8 OXYS BY</u> <u>8260 ON ALL</u> <u>8260 MTBE HRS</u>		
Union Oil PM Phone No.: <u>(925) 842 3200</u>	Sampled By (PRINT): <u>GILBERT MEDINA</u>			
Charge Code: NWRTB-0351647-0-LAB	Sampler Signature: <u>G. Medina</u>			
TPH - Diesel by EPA 8015				
TPH - G by ██████████ (C6-C12) (8015B)				
BTX/MTBE ██████████ by EPA 8260B				
Ethanediol by EPA 8260B				
EPA 8260B Full List with OXYS				
Notes / Comments				
SAMPLE ID	Matrix	Depth	Date (yymmdd)	# of Containers
Field Point Name				
1 QA	W-SA		161222	2
2 MW-1	W-SA		1005	6
3 MW-2	W-SA		0555	
4 MW-3	W-SA		0825	
5 MW-4	W-SA		0650	
6 MW-5	W-SA		1205	
7 MW-6	W-SA		0510	
8 MW-7	W-SA		0420	
9 MW-10	W-SA		0245	
10 MW-11	W-SA		0910	
11 MW-12	W-SA		0330	
12 RW-1	W-SA		1110	
Relinquished By	Company	Date / Time:	Relinquished By	Company
<u>John Bogen</u>	<u>BC LABS</u>	<u>12/27/16 1300</u>	<u>John Bogen</u>	<u>BC LABS</u>
Received By	Company	Date / Time:	Received By	Company
<u>John Bogen</u>	<u>BC LABS</u>	<u>12/27/16 1320</u>	<u>John Bogen</u>	<u>BC LABS</u>
Date / Time: <u>12/27/16 12:00</u>				
Date / Time: <u>12/27/16 18:00</u>				

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Chain of Custody and Cooler Receipt Form for 1635702 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM								Page <u>1</u> Of <u>2</u>	
Submission #: <u>16.35702</u>											
SHIPPING INFORMATION				SHIPPING CONTAINER				FREE LIQUID			
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	YES <input type="checkbox"/>	NO <input type="checkbox"/>	W / S	
BC Lab Field Service <input checked="" type="checkbox"/>											
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____											
Custody Seals		Ice Chest <input checked="" type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/>		Comments: _____					
Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.98</u>		Container: <u>PE</u>		Thermometer ID: <u>207</u>		Date/Time <u>12/27/21:45</u>			
		Temperature: (A) <u>0.2</u> °C / (C) <u>0.3</u> °C						Analyst Init <u>GSP</u>			
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES											
2oz Cr ⁶⁺											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments: _____											
Sample Numbering Completed By: <u>M</u>	Date/Time: <u>12/27/16 11:56</u>										
Rev 21 05/23/2016											

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Chain of Custody and Cooler Receipt Form for 1635702 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM						Page <u>2</u> Of <u>2</u>		
Submission #: <u>16-35702</u>										
SHIPPING INFORMATION FedEx <input type="checkbox"/> UPS <input type="checkbox"/> OnTrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> <u>(W)</u> / S			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals		Ice Chest <input checked="" type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.98</u>	Container: <u>PE</u>	Thermometer ID: <u>207</u>		Date/Time <u>12/27/21:45</u>				
		Temperature: (A) <u>0.2</u> °C / (C) <u>0.3</u> °C				Analyst Init <u>GSP</u>				
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments:										
Sample Numbering Completed By:	M Date/Time: <u>12/27/16 21:58</u>									
Rev. 21 05/23/2016										

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1635702-01	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: QA-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 00:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): QA Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1635702-02	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-1-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 10:05 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1635702-03	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-2-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 05:55 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:		

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San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1635702-04	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-3-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 08:25 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1635702-05	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-4-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 06:50 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1635702-06	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-5-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 12:05 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

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San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1635702-07	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-6-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 05:10 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1635702-08	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-7-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 04:20 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1635702-09	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-10-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 02:45 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-10 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1635702-10	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-11-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 09:10 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-11 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1635702-11	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-12-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 03:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-12 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1635702-12	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: RW-1-W-161222 Sampled By: GRD	Receive Date: 12/27/2016 22:00 Sampling Date: 12/22/2016 11:10 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): RW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:		

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-01	Client Sample Name:	0746, QA-W-161222, 12/22/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	94.4	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	98.0	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	13:57	JMS	MS-V14	1	BZL2193

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San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-01	Client Sample Name:	0746, QA-W-161222, 12/22/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	92.1	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 10:52	AKM	GC-V9	1	BZL2275



Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-02	Client Sample Name:	0746, MW-1-W-161222, 12/22/2016 10:05:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	95.9	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	98.3	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	14:20	JMS	MS-V14	1	BZL2193

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-02	Client Sample Name:	0746, MW-1-W-161222, 12/22/2016 10:05:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	94.6	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 11:12	AKM	GC-V9	1	BZL2275

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San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-03	Client Sample Name:	0746, MW-2-W-161222, 12/22/2016 5:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	1.2	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	96.4	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	95.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	14:42	JMS	MS-V14	1	BZL2193

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-03	Client Sample Name:	0746, MW-2-W-161222, 12/22/2016 5:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	98.2	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 11:33	AKM	GC-V9	1	BZL2275

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-04	Client Sample Name:	0746, MW-3-W-161222, 12/22/2016 8:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.71	ug/L	0.50		EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	26	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	8.4	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	18	ug/L	1.0		EPA-8260B	ND		1
Ethanol	ND	ug/L	250		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	18:07	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-04	Client Sample Name: 0746, MW-3-W-161222, 12/22/2016 8:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	8600	ug/L	2500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	102	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 23:43	AKM	GC-V9	50	BZL2275

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-05	Client Sample Name:	0746, MW-4-W-161222, 12/22/2016 6:50:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.87	ug/L	0.50		EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	2.2	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	3.0	ug/L	1.0		EPA-8260B	ND		1
Ethanol	ND	ug/L	250		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	91.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	15:05	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-05	Client Sample Name: 0746, MW-4-W-161222, 12/22/2016 6:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	3700	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	105	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/29/16 04:28	AKM	GC-V9	10	BZL2275

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-06	Client Sample Name:	0746, MW-5-W-161222, 12/22/2016 12:05:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	95	ug/L	2.5		EPA-8260B	ND	A01	1
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260B	ND		2
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260B	ND		2
Ethylbenzene	69	ug/L	0.50		EPA-8260B	ND		2
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		2
Toluene	ND	ug/L	0.50		EPA-8260B	ND		2
Total Xylenes	22	ug/L	1.0		EPA-8260B	ND		2
Ethanol	ND	ug/L	250		EPA-8260B	ND		2
1,2-Dichloroethane-d4 (Surrogate)	89.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	93.0	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	95.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	108	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/29/16	15:08	JMS	MS-V14	5	BZL2193
2	EPA-8260B	12/28/16	12/28/16	17:45	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-06	Client Sample Name: 0746, MW-5-W-161222, 12/22/2016 12:05:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	6900	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	110	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/29/16 04:48	AKM	GC-V9	10	BZL2275

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-07	Client Sample Name:	0746, MW-6-W-161222, 12/22/2016 5:10:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	91.1	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.1	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	15:28	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-07	Client Sample Name:	0746, MW-6-W-161222, 12/22/2016 5:10:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	101	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 20:40	AKM	GC-V9	1	BZL2275

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-08	Client Sample Name:	0746, MW-7-W-161222, 12/22/2016 4:20:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	93.7	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	96.3	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	15:50	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-08	Client Sample Name:	0746, MW-7-W-161222, 12/22/2016 4:20:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	98.4	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 12:13	AKM	GC-V9	1	BZL2275



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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-09	Client Sample Name:	0746, MW-10-W-161222, 12/22/2016 2:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	90.8	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	95.6	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	16:13	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-09	Client Sample Name: 0746, MW-10-W-161222, 12/22/2016 2:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND			1
a,a,a-Trifluorotoluene (FID Surrogate)	94.2	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 12:34	AKM	GC-V9	1	BZL2275



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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-10	Client Sample Name:	0746, MW-11-W-161222, 12/22/2016 9:10:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	98.4	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.3	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	16:36	JMS	MS-V14	1	BZL2193

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-10	Client Sample Name:	0746, MW-11-W-161222, 12/22/2016 9:10:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	96.4	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 12:54	AKM	GC-V9	1	BZL2275

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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-11	Client Sample Name:	0746, MW-12-W-161222, 12/22/2016 3:30:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	16:59	JMS	MS-V14	1	BZL2193

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-11	Client Sample Name: 0746, MW-12-W-161222, 12/22/2016 3:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND			1
a,a,a-Trifluorotoluene (FID Surrogate)	90.7	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 13:15	AKM	GC-V9	1	BZL2275

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San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1635702-12	Client Sample Name:	0746, RW-1-W-161222, 12/22/2016 11:10:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND			1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND			1
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
Ethanol	ND	ug/L	250	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	95.4	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	92.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260B	12/28/16	12/28/16	17:22	JMS	MS-V14	1	BZL2193

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1635702-12	Client Sample Name:	0746, RW-1-W-161222, 12/22/2016 11:10:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	101	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	12/28/16	12/28/16 15:54	AKM	GC-V9	1	BZL2275

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BZL2193						
Benzene	BZL2193-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BZL2193-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BZL2193-BLK1	ND	ug/L	0.50		
Ethylbenzene	BZL2193-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BZL2193-BLK1	ND	ug/L	0.50		
Toluene	BZL2193-BLK1	ND	ug/L	0.50		
Total Xylenes	BZL2193-BLK1	ND	ug/L	1.0		
Ethanol	BZL2193-BLK1	ND	ug/L	250		
1,2-Dichloroethane-d4 (Surrogate)	BZL2193-BLK1	93.6	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZL2193-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZL2193-BLK1	97.2	%	80 - 120 (LCL - UCL)		

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BZL2193									
Benzene	BZL2193-BS1	LCS	27.186	25.000	ug/L	109		70 - 130	
Toluene	BZL2193-BS1	LCS	28.343	25.000	ug/L	113		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZL2193-BS1	LCS	9.8200	10.000	ug/L	98.2		75 - 125	
Toluene-d8 (Surrogate)	BZL2193-BS1	LCS	9.9100	10.000	ug/L	99.1		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZL2193-BS1	LCS	9.0300	10.000	ug/L	90.3		80 - 120	



Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
QC Batch ID: BZL2193		Used client sample: N									
Benzene	MS	1634543-56	ND	21.309	25.000	ug/L		85.2		70 - 130	
	MSD	1634543-56	ND	21.661	25.000	ug/L	1.6	86.6	20	70 - 130	
Toluene	MS	1634543-56	ND	23.190	25.000	ug/L		92.8		70 - 130	
	MSD	1634543-56	ND	23.347	25.000	ug/L	0.7	93.4	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1634543-56	ND	9.4800	10.000	ug/L		94.8		75 - 125	
	MSD	1634543-56	ND	9.4600	10.000	ug/L	0.2	94.6		75 - 125	
Toluene-d8 (Surrogate)	MS	1634543-56	ND	9.9800	10.000	ug/L		99.8		80 - 120	
	MSD	1634543-56	ND	9.9600	10.000	ug/L	0.2	99.6		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1634543-56	ND	9.5800	10.000	ug/L		95.8		80 - 120	
	MSD	1634543-56	ND	9.3500	10.000	ug/L	2.4	93.5		80 - 120	



Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BZL2275						
Gasoline Range Organics (C6 - C12)	BZL2275-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BZL2275-BLK1	97.1	%	70 - 130 (LCL - UCL)		



Arcadis
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San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	
								Percent Recovery	RPD		
QC Batch ID: BZL2275											
Gasoline Range Organics (C6 - C12)	BZL2275-BS1	LCS	944.20	1000.0	ug/L	94.4		85 - 115			
a,a,a-Trifluorotoluene (FID Surrogate)	BZL2275-BS1	LCS	39.103	40.000	ug/L	97.8		70 - 130			



Arcadis
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Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		
									RPD	Percent Recovery	Lab Quals
QC Batch ID: BZL2275		Used client sample: N									
Gasoline Range Organics (C6 - C12)	MS	1634543-56	ND	923.99	1000.0	ug/L		92.4		70 - 130	
	MSD	1634543-56	ND	1120.8	1000.0	ug/L	19.2	112	20	70 - 130	
a,a,a-Trifluorotoluene (FID Surrogate)	MS	1634543-56	ND	39.279	40.000	ug/L		98.2		70 - 130	
	MSD	1634543-56	ND	37.334	40.000	ug/L	5.1	93.3		70 - 130	



Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 01/03/2017 12:21
Project: 0746
Project Number: 351647
Project Manager: Tamera Rogers

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.



December 10, 2016

Tamera Rogers
Arcadis
6296 San Ignacia Ave
Ste C & D
San Jose, CA 95119

RE: Chevron
Project Number: 351647

Pace Analytical received 1 sample on November 17, 2016 for analysis labeled MW-5 Sock. Per client request, the following analyses were performed:

1. C3-C10 PIANO (GC-FID)
2. C8-C40 Full scan (ASTM D5739)

The analyses were performed in house under laboratory number **21043**

Please call the lab at 412-826-5245, or you may email any questions or concerns to ruth.welsh@pacelabs.com regarding any analytical data reports.

Respectfully submitted,

Ruth Welsh

Ruth Welsh
Project Manager

Zymax Forensics Division

Pace Analytical[®]
Energy Services[™]
220 William Pitt Way
Pittsburgh, PA 15238
Phone: 412-826-5245
Fax: 412-826-3433

210743
 *Samples will be disposed of
 after 30 days unless requested otherwise

Chain of Custody

Report To:		Email To:		Analysis Requested									
Company:	Arcadis	Phone:	408-797-2013										
Address:	6296 San Ignacia Ave. Ste C & D San Jose, CA 95119	Project #:	Chevron #351647, Oakland										
Zymax use only	Sample Description	Date Sampled	Time	Matrix	Preserve	C3-C36 Whole Oil	Oxygenates	Organic Lead/Scavengers	Long List PAH	C3-C10 PIANO	GC/MC Full Scan	Simulated Distillation	# of containers
	MW-5 Sock	11.16.16	1015	Sock	NP					X	X	1	
Bill To: Same as Above <input checked="" type="checkbox"/> Yes		PO Number:		Sample Comments:									
Company:		Invoice Email:		Tamera.Rogers@arcadis.com									
Address:		Laboratory Remarks: Temperature: _____ °C Courier Method: _____											
<i>sample integrity upon receipt:</i>		Turnaround Time		Print Name of Sampler: Finn Ryan									
samples received intact <input type="checkbox"/> Yes		ASAP <input type="checkbox"/> 1wk <input type="checkbox"/>		Signature of Sampler: <i>J. Gettler-Ryan Inc.</i> Date: 11.16.16									
samples received cold/on ice <input type="checkbox"/> Yes		48 hr <input type="checkbox"/> STD <input checked="" type="checkbox"/> (2wks)		Relinquished By: <i>J. Gettler-Ryan Inc.</i> Date: 11.16.16 Time: 1145									
custody seals <input type="checkbox"/> Yes		72 hr <input type="checkbox"/>		Relinquished By: Date: Time:									
correct container types <input type="checkbox"/> Yes		*quicker TAT may result in additional surcharges		Relinquished By: Date: Time: Received by Lab: Date: 11.17.16 Time: 0845									

Cooler Receipt Form

Client Name: Arcadis Project: Chevron #351647 Lab Work Order: 21093
Oakland

A. Shipping/Container Information (circle appropriate response)

Courier: FedEx UPS USPS Client Other: _____ Air bill Present: Yes No

Tracking Number: 8D6268607025

Custody Seal on Cooler/Box Present: Yes No Seals Intact: Yes No

Cooler/Box Packing Material: Bubble Wrap Absorbent Foam Other: _____

Type of Ice: Wet Blue None Ice Intact: Yes Melted

Cooler Temperature: n/a Radiation Screened: Yes No Chain of Custody Present: Yes No

Comments: _____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	<input checked="" type="checkbox"/>			
Chain of Custody relinquished	<input checked="" type="checkbox"/>			
Sampler Name & Signature on COC	<input checked="" type="checkbox"/>			
Containers intact	<input checked="" type="checkbox"/>			
Were samples in separate bags			<input checked="" type="checkbox"/>	
Sample container labels match COC	<input checked="" type="checkbox"/>			
Sample name/date and time collected	<input checked="" type="checkbox"/>			
Sufficient volume provided	<input checked="" type="checkbox"/>			
PAES containers used			<input checked="" type="checkbox"/>	
Are containers properly preserved for the requested testing? (as labeled)			<input checked="" type="checkbox"/>	
If an unknown preservation state, were containers checked?			<input checked="" type="checkbox"/>	If yes, see pH form.
Exception: VOA's coliform				
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			<input checked="" type="checkbox"/>	

Comments: _____

Cooler contents examined/received by: CG Date: 11.17.16

Project Manager Review: RW Date: 11-18-16

REPORT OF ANALYTICAL RESULTS

Page 1 of 5

Client: Tamera Rogers Arcadis 6296 San Ignacia Ave, Ste C&D San Jose, CA 95119		Lab Number: Collected: Received: Matrix:	21043-1 11/16/2016 11/17/2016 Soil
Project: Chevron		Sample Description: MW-5 Sock	
Project Number: Collected by:	351647	Analyzed: Method:	12/8/2016 GC/MS

CONSTITUENT	ssRL ug/kg	RESULT ug/kg	QUALIFIER
-------------	---------------	-----------------	-----------

C3-C10 GASOLINE RANGE COMPOUNDS

3-Methyl-1-butene	Olefins	3M1B	49.039	ND
Isopentane	Isoparaffins	IP	49.039	5506.581
1-Pentene	Olefins	1P	49.039	ND
2-Methyl-1-butene	Olefins	2M1B	49.039	ND
Pentane	Paraffins	C5	49.039	2830.031
trans-2-Pentene	Olefins	T2P	49.039	ND
cis-2-Pentene	Olefins	C2P	49.039	ND
2-Methyl-2-butene	Olefins	2M2B	49.039	ND
2,2-Dimethylbutane	Isoparaffins	22DMB	49.039	87.369
t-Butanol	Oxygenate	TBA	49.039	ND
2,3-Dimethylbutane	Isoparaffins	23DMB	49.039	1810.632
Cyclopentane	Naphthalenes	CYP	49.039	ND
2-Methylpentane	Isoparaffins	2MP	49.039	5900.481
MTBE	Oxygenate	MTBE	49.039	ND
2,2-Dimethylpentane	Isoparaffins	22DMP	49.039	127.055
3-Methylpentane	Isoparaffins	3MP	49.039	7667.958
4-Methyl-1-pentene	Olefins	4M1P	49.039	ND
Hexane	Paraffins	C6	49.039	531.336
trans-2-Hexene	Olefins	T2HE	49.039	ND
DIPE	Oxygenate	DIPE	49.039	ND
2-Methyl-2-pentene	Olefins	2M2PE	49.039	ND
3-Methylcyclopentene	Olefins	3MCYPE	49.039	ND
cis-2-Hexene	Olefins	C2HE	49.039	ND
ETBE	Oxygenate	ETBE	49.039	ND
2,4-Dimethyl pentane	Isoparaffins	24DMP	49.039	360.984
2,3-Dimethylpentane	Isoparaffins	23DMP	49.039	4822.499
Methylcyclopentane	Naphthalenes	MCYP	49.039	12362.985

ssRL - Sample Specific Reporting Limit

Results listed as ND would have been reported if present at or above the listed ssRL.

D - Secondary dilution performed

Q - Surrogate recovery limit exceedance

I - Matrix Interference

Note: Extracted by EPA 5030 (Purge and Trap).

US631

120616-1SOIL.D & Dilution - 120616-1SOIL.D

REPORT OF ANALYTICAL RESULTS

Page 2 of 5

Client:	Tamera Rogers Arcadis 6296 San Ignacia Ave, Ste C&D San Jose, CA 95119
---------	---

Lab Number:	21043-1
Collected:	11/16/2016
Received:	11/17/2016
Matrix:	Soil

Project:	Chevron
Project Number:	#
Collected by:	0

Sample Description:	MW-5 Sock
Analyzed:	12/8/2016
Method:	GC/MS

CONSTITUENT	ssRL ug/kg	RESULT ug/kg	QUALIFIER
-------------	---------------	-----------------	-----------

C3-C10 GASOLINE RANGE COMPOUNDS

EDC	Additive	EDC	49.039	ND
3,3-Dimethylpentane	Isoparaffins	33DMP	49.039	95.028
Cyclohexane	Naphthalenes	CYH	49.039	4172.136
Benzene	Aromatics	B	49.039	ND
2-Methylhexane	Isoparaffins	2MH	49.039	949.701
Thiophene	Sulfur	THIO	49.039	ND
3-Methylhexane	Isoparaffins	3MH	49.039	2362.995
TAME	Oxygenate	TAME	49.039	ND
trans-1,3-Dimethylcyclopentane	Naphthalenes	T13DMCYP	49.039	2880.277
cis-1,3-Dimethylcyclopentane	Naphthalenes	C13DMCYP	49.039	3487.201
2,2,4-Trimethylpentane	Isoparaffins	224TMP	49.039	ND
2,2,3-Trimethylpentane	Isoparaffins	223TMP	49.039	ND
trans-1,2-Dimethylcyclopentane	Naphthalenes	T12DMCYP	49.039	2161.828
Heptane	Paraffins	C7	49.039	ND
trans-2-Heptene	Olefins	T2HPE	49.039	ND
Methylcyclohexane	Naphthalenes	MCYH	49.039	6317.517
2,5-Dimethylhexane	Isoparaffins	25DMH	49.039	ND
2,4-Dimethylhexane	Isoparaffins	24DMH	49.039	103.372
3-Methyl heptane	Isoparaffins	3MHP	49.039	218.225
2,3,4-Trimethylpentane	Isoparaffins	234TMP	49.039	ND
2,3-Dimethyl hexane	Isoparaffins	23DMHX	49.039	1122.077
2,3,3-Trimethyl pentane	Isoparaffins	233TMP	49.039	ND
2-Methyl heptane	Isoparaffins	2MHP	49.039	369.729
4-Methyl heptane	Isoparaffins	4MHP	49.039	ND
Toluene	Aromatics	T	49.039	342.218
3-Methyl thiophene	Sulfur	3MTHIO	49.039	ND
trans-1,4-Dimethylcyclohexane	Naphthalenes	T14DMCYH	49.039	150.814

ssRL - Sample Specific Reporting Limit

Results listed as ND would have been reported if present at or above the listed ssRL.

D - Secondary dilution performed

Q - Surrogate recovery limit exceedance

I - Matrix Interference

Note: Extracted by EPA 5030 (Purge and Trap).

US631

120616-1SOIL.D & Dilution - 120616-1SOIL.D

REPORT OF ANALYTICAL RESULTS

Page 3 of 5

Client:	Tamera Rogers Arcadis 6296 San Ignacia Ave, Ste C&D San Jose, CA 95119
---------	---

Lab Number:	21043-1
Collected:	11/16/2016
Received:	11/17/2016
Matrix:	Soil

Project:	Chevron
Project Number:	#
Collected by:	0

Sample Description:	MW-5 Sock
Analyzed:	12/8/2016
Method:	GC/MS

CONSTITUENT	ssRL ug/kg	RESULT ug/kg	QUALIFIER
-------------	---------------	-----------------	-----------

C3-C10 GASOLINE RANGE COMPOUNDS

1-Octene	Olefins	1OE	49.039	ND
Octane	Paraffins	C8	49.039	ND
trans-1,2-Dimethylcyclohexane	Naphthenes	T12DMCYH	49.039	181.025
EDB	Additive	EDB	49.039	ND
2,3-Dimethyl heptane	Isoparaffins	23DMHP	49.039	ND
2,4-Dimethylheptane	Isoparaffins	24DMHP	49.039	ND
2,6-Dimethylheptane	Isoparaffins	26DMHP	49.039	ND
2,5-Dimethylheptane	Isoparaffins	25DMHP	49.039	ND
Ethylcyclohexane	Naphthenes	ECYH	49.039	170.740
1,1,2-Trimethyl Cyclohexane	Naphthenes	112TMCYH	49.039	ND
4-Methyl octane	Isoparaffins	4MO	49.039	272.827
2-Methyl octane	Isoparaffins	2MO	49.039	361.795
Ethylbenzene	Aromatics	EB	49.039	1526.187
3-Methyloctane	Isoparaffins	3MO	49.039	984.837
m-Xylenes	Aromatics	MX	49.039	469.539
p-Xylene	Aromatics	PX	49.039	600.567
1,2,3-Trimethylcyclohexane	Naphthenes	123TMCYH	49.039	ND
2,2-Dimethyl octane	Isoparaffins	22DMO	49.039	ND
Styrene	Olefins	STRE	49.039	ND
Nonane	Paraffins	C9	49.039	ND
o-Xylene	Aromatics	OX	49.039	140.267
3,3-Dimethyl octane	Isoparaffins	33DMO	49.039	ND
Isopropylbenzene	Aromatics	IPROPB	49.039	2247.479
Isopropyl cyclohexane	Naphthenes	IPROPCYH	49.039	ND
3-Methyl nonane	Isoparaffins	3MN	49.039	ND
1-Nonene	Olefins	1N	49.039	ND
n-Propylbenzene	Aromatics	NPRPPB	49.039	1764.476

ssRL - Sample Specific Reporting Limit

Results listed as ND would have been reported if present at or above the listed ssRL.

D - Secondary dilution performed

Q - Surrogate recovery limit exceedance

I - Matrix Interference

Note: Extracted by EPA 5030 (Purge and Trap).

US631

120616-1SOIL.D & Dilution - 120616-1SOIL.D

REPORT OF ANALYTICAL RESULTS

Page 4 of 5

Client: Tamera Rogers Arcadis 6296 San Ignacia Ave, Ste C&D San Jose, CA 95119		Lab Number: Collected: Received: Matrix:	21043-1 11/16/2016 11/17/2016 Soil	
Project: Chevron		Sample Description: MW-5 Sock		
Project Number:	#	Analyzed: 12/8/2016		
Collected by:	0	Method: GC/MS		
CONSTITUENT		ssRL ug/kg	RESULT ug/kg	QUALIFIER

C3-C10 GASOLINE RANGE COMPOUNDS

1-Methyl-3-ethylbenzene	Aromatics	1M3EB	49.039	3335.926	
1-Methyl-4-ethylbenzene	Aromatics	1M4EB	49.039	3316.801	
1,3,5-Trimethylbenzene	Aromatics	135TMB	49.039	3578.698	
1-Methyl-2-ethylbenzene	Aromatics	1M2EB	49.039	872.771	
Decane	Paraffins	C10	49.039	79.630	
1,2,4-Trimethylbenzene	Aromatics	124TMB	49.039	5954.060	
sec-Butylbenzene	Aromatics	SBUB	49.039	429.961	
1-Methyl-3-isopropyl benzene	Aromatics	1M3IPROPE	49.039	962.751	
1,2,3-Trimethylbenzene	Aromatics	123TMB	49.039	2036.750	
1-Decene	Olefins	1D	49.039	ND	
Indane	Aromatics	IA	49.039	2010.337	
1,3-Diethylbenzene	Aromatics	13DEB	49.039	3781.924	
Indene	Olefins	IE	49.039	ND	
n-Butyl benzene	Aromatics	NBB	49.039	372.839	
1,4-Diethylbenzene	Aromatics	14DEB	49.039	ND	
1,3-Dimethyl-5-Ethyl benzene	Aromatics	13DM5EB	49.039	9100.863	
1-Methyl-2-Propyl benzene	Aromatics	1M2PROPB	49.039	7998.048	
1,4-Dimethyl-2-ethylbenzene	Aromatics	14DM2EB	49.039	4623.264	
Undecane	Paraffins	C11	49.039	ND	
1,2-Dimethyl-4-ethylbenzene	Aromatics	12DM4EB	49.039	17464.496	D
1,3-Dimethyl-2-Ethyl benzene	Aromatics	13DM2EB	49.039	3270.430	
1,2,4,5-Tetramethylbenzene	Aromatics	1245TMB	49.039	5059.406	
1,2,3,5-Tetramethylbenzene	Aromatics	1235TMB	49.039	5270.518	
n-Pentyl benzene	Aromatics	NPYB	49.039	ND	
1,2,3,4-Tetramethylbenzene	Aromatics	1234TMB	49.039	1708.925	
Naphthalene	Aromatics	N	49.039	988.986	
Benzothiophene	Sulfur	BTHIO	49.039	ND	
2-Methylnaphthalene	Aromatics	2MN	49.039	2379.963	
1-Methylnaphthalene	Aromatics	1MN	49.039	1275.588	

Percent Surrogate Recovery (1,2-Dichloroethane-D4)	118
Percent Surrogate Recovery (Toluene-D8)	100
Percent Surrogate Recovery (4-Bromofluorobenzene)	90

ssRL - Sample Specific Reporting Limit

Results listed as ND would have been reported if present at or above the listed ssRL.

D - Secondary dilution performed

Q - Surrogate recovery limit exceedance

I - Matrix Interference

Note: Extracted by EPA 5030 (Purge and Trap).

**Submitted by,
Zymax Forensics, A Pace Company**

US631

120616-1SOIL.D & Dilution - 120616-1SOIL.D

Zymax/PAES ID
Sample ID

21043-1
MW-5 Socl

Evaporation

n-Pentane / n-Heptane	
2-Methylpentane / 2-Methylheptane	15.95892

Waterwashing

Benzene / Cyclohexane	
Toluene / Methylcyclohexane	
Aromatics / Total Paraffins (n+iso+cyc)	1.36
Aromatics / Naphthenes	2.91
wt% < o-xylene	44.20

Biodegradation

(C4-C8 Para +Isopara) / C4-C8 Olefins	
3-Methylhexane / n-Heptane	
Methylcyclohexane / n-Heptane	
Isoparaffins + Naphthenes / Paraffins	18.89239

Diagnostic Ratios (Refining Properties)

Alkylate Abundance (2,2,4-Trimethylpentane / Methylcyclohexane)	
Alkylate Type (2,2,4-Trimethylpentane / Total TMPs)	
SRG Abundance (nC9 / Isopropylbenzene)	
SRG Abundance (nC10 / 1-Methyl-2-ethylbenzene)	0.091238
SRG Abundance (nC11 / 1,4-Dimethyl-2-ethylbenzene)	
Isomerate Blending (iC5 / iC5+nC5)	0.66053
Isomerate Blending 2 (2-methylhexane + 2,3dimethylpentane / 3-methylhexane + 2,4 dimethylpentane)	
	2.119032

Oxygenates

MTBE (ug/kg)	0
t-Butanol (ug/kg)	0
DIPE (ug/kg)	0
ETBE (ug/kg)	0
TAME (ug/kg)	0

Lead Scavengers

EDC (ug/kg)	0
EDB (ug/kg)	0

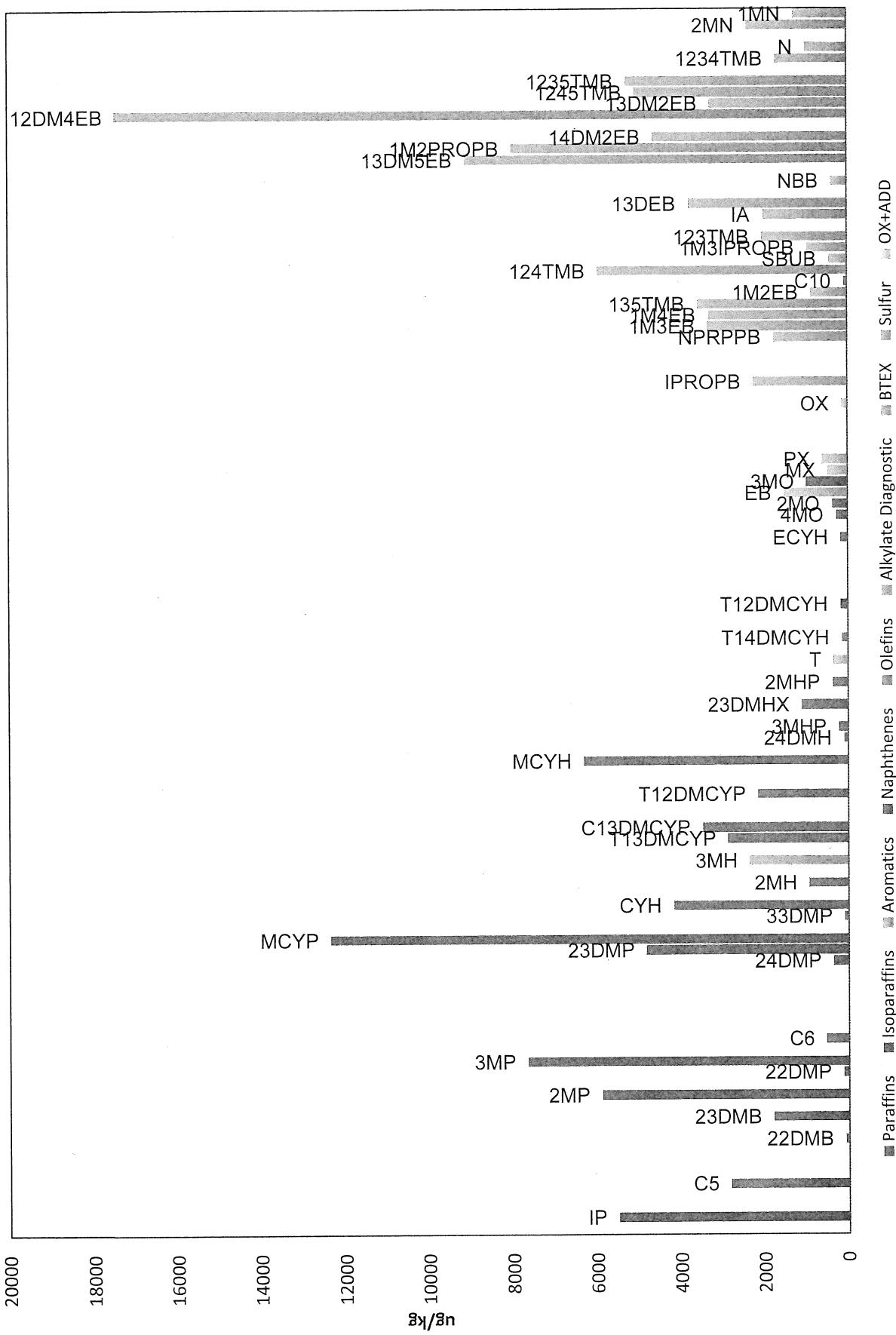
Sulfur Heterocyclics

Thiophene (ug/kg)	0
3-Methyl thiophene (ug/kg)	0
Benzothiophene (ug/kg)	0

Relative Percentages

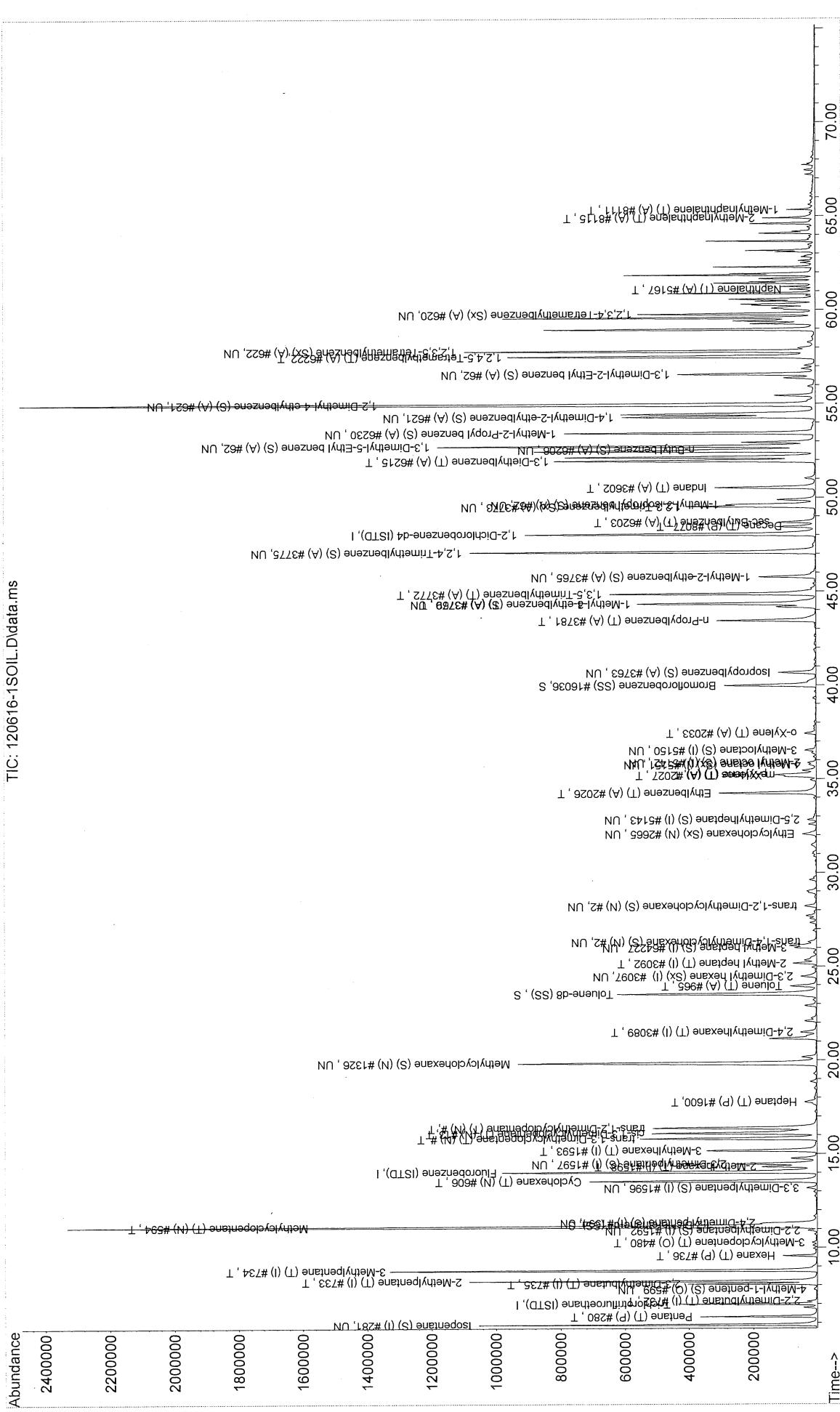
% Paraffinic	2.132845
% Isoparaffinic	20.53145
% Aromatic	57.57262
% Naphthenic	19.76309
% Olefinic	0

21043-1

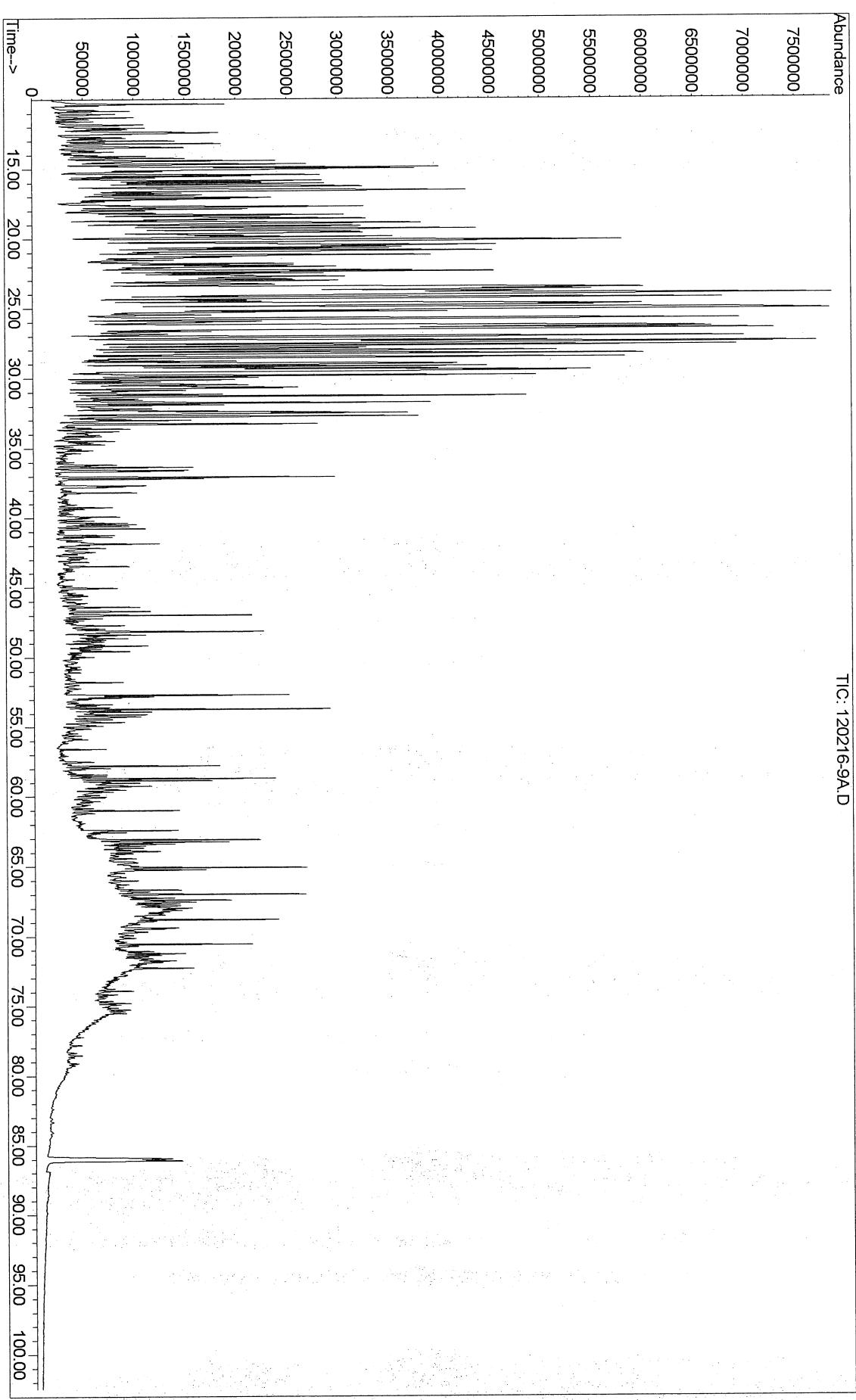


File : C:\msdchem\1\data\PIANOCCMS\120516\120616-1SOIL.D
 Operator : CAM
 Acquired : 8 Dec 2016 10:53 using AcqMethod C3C10PIANO1.M
 Instrument : US631
 Sample Name : 21043-1 5.098G/10ML
 Misc Info : 40ppb IS/ 20ppb SS DF50
 Vial Number : 15

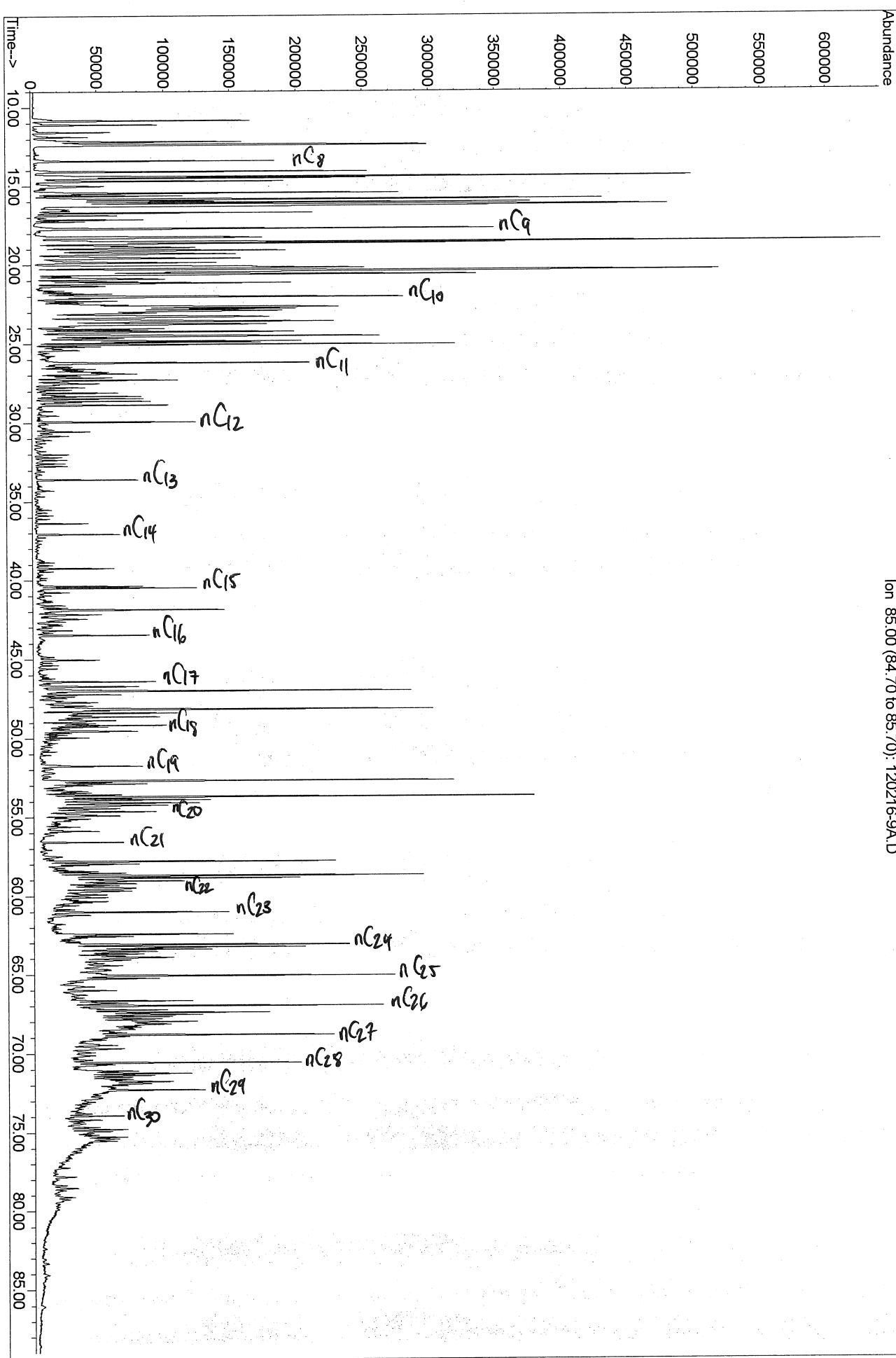
Abundance



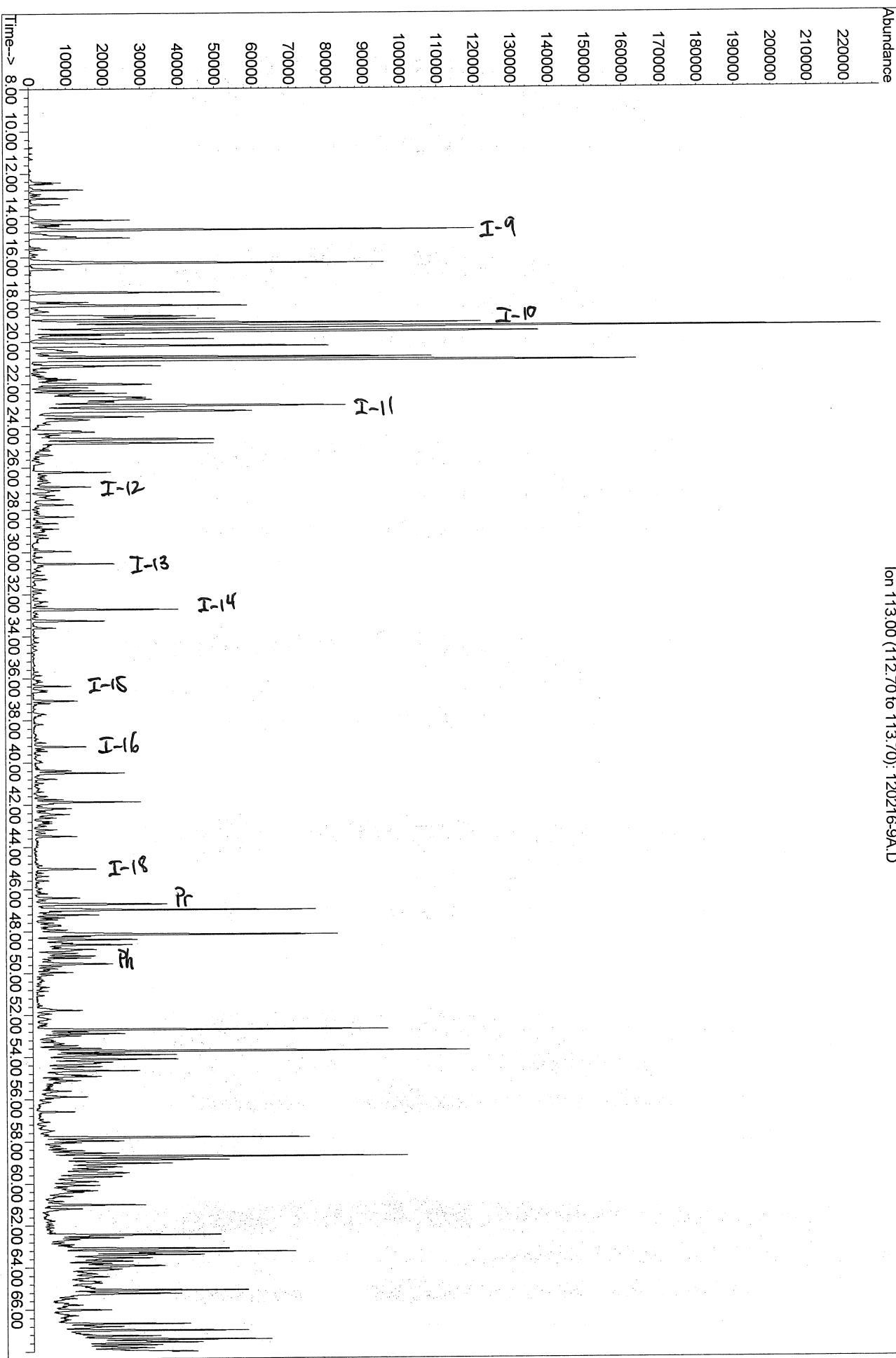
Sample Name: MW-5 SOCK (21043-1)
Misc Info :



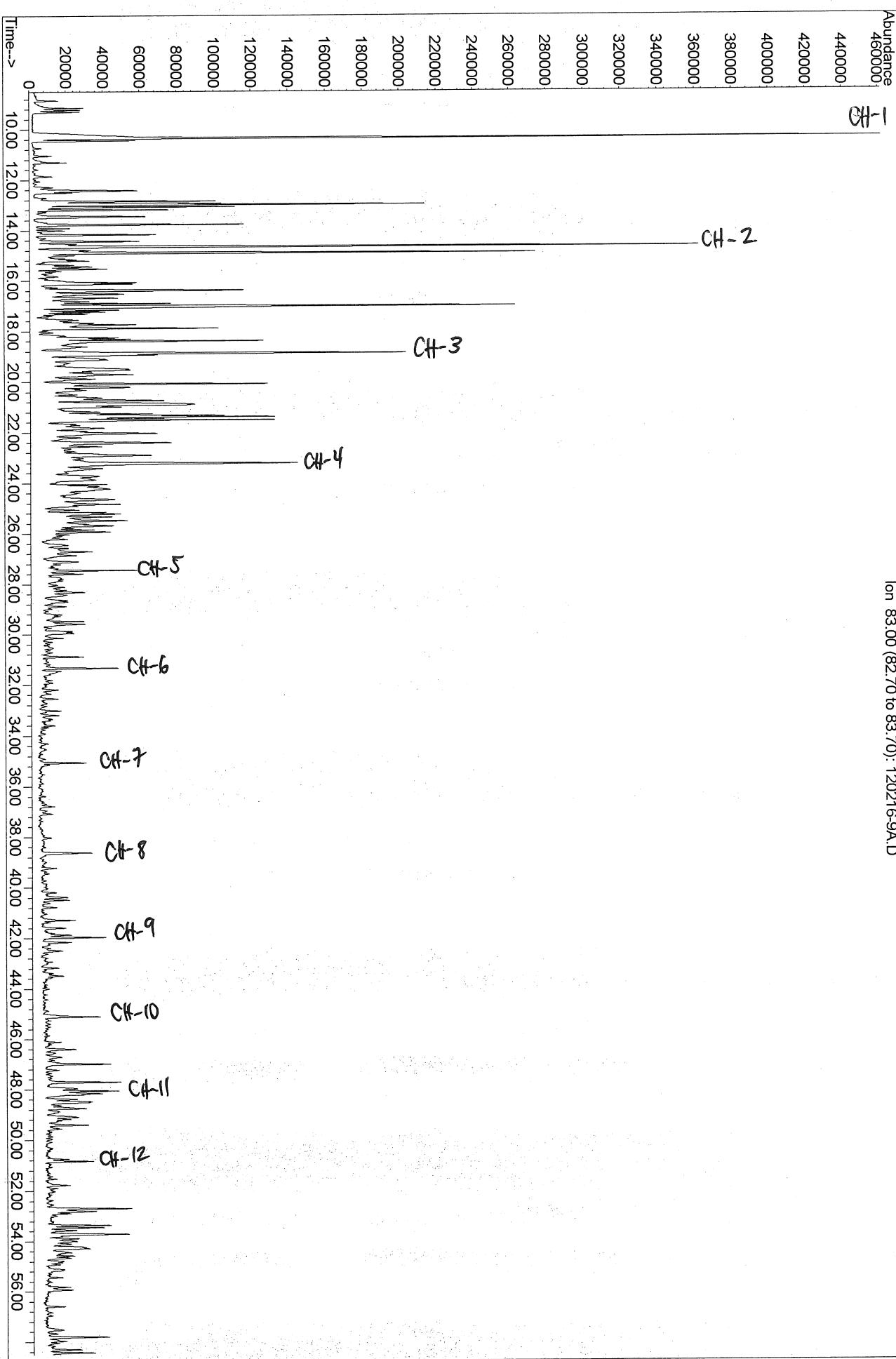
Ion 85.00 (84.70 to 85.70); 120216-9A.D



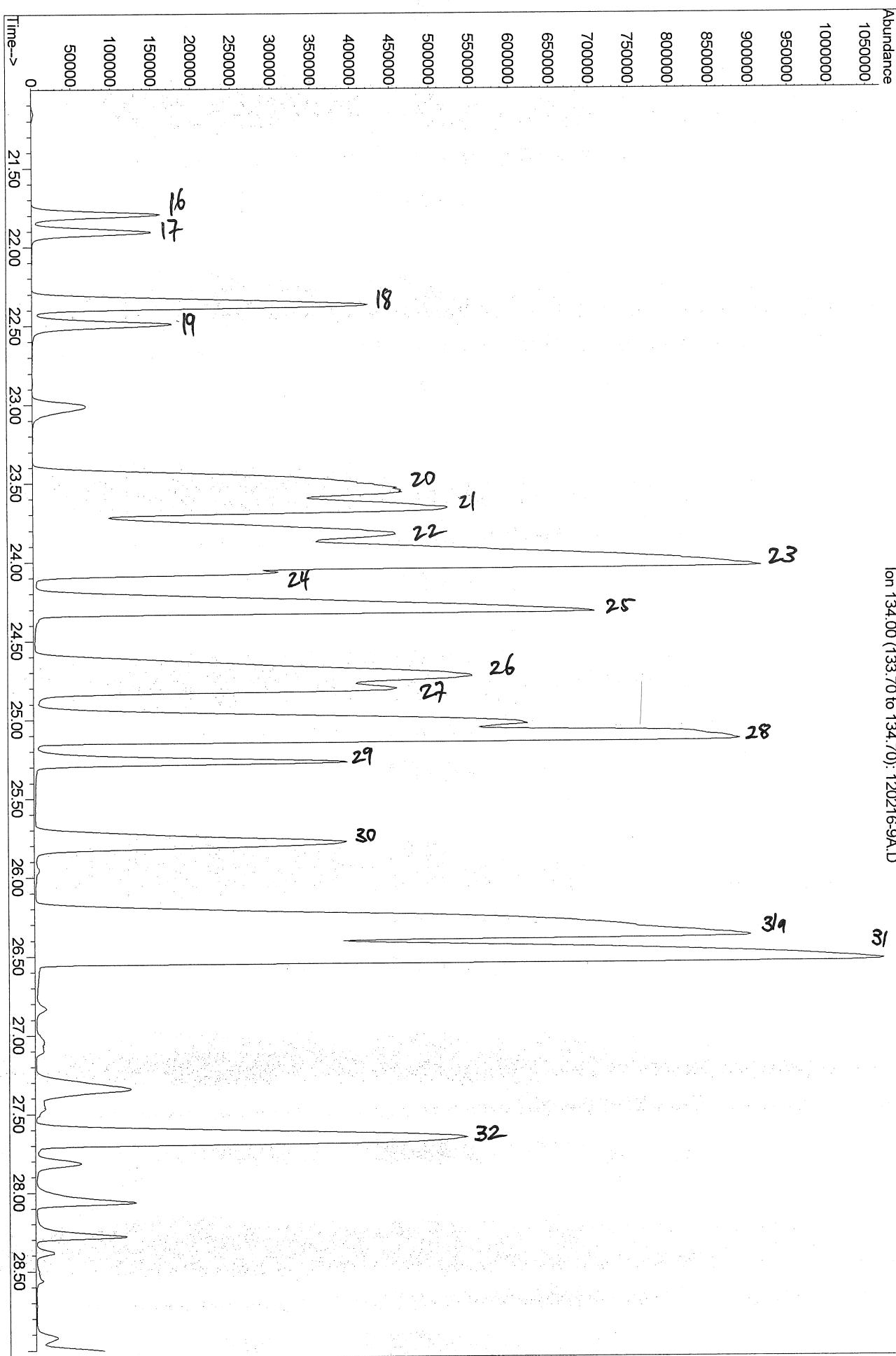
Ion 113.00(112.70 to 113.70); 120216-9A.D



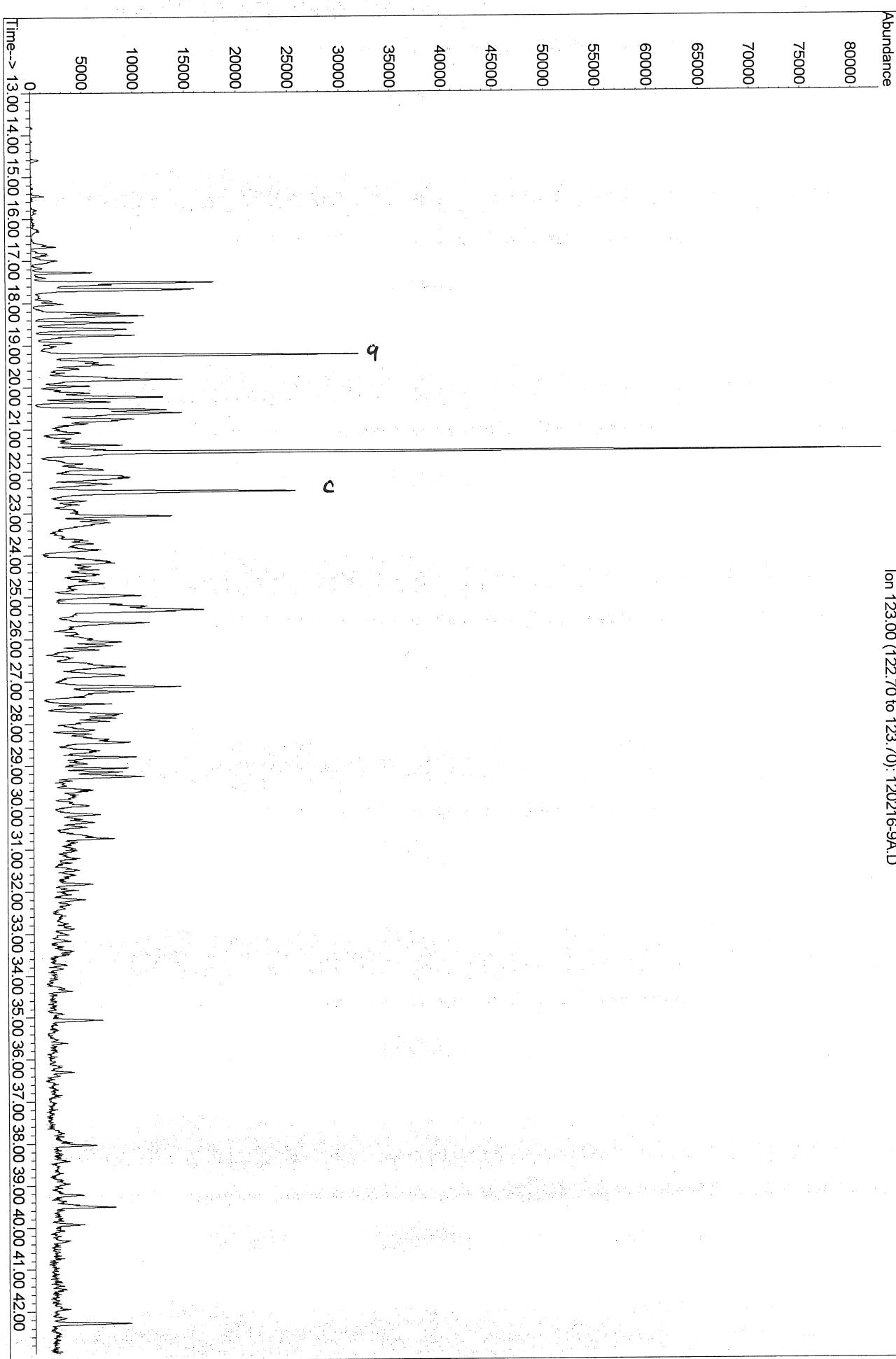
Ion 83.00 (82.70 to 83.70): 120216-9A.D



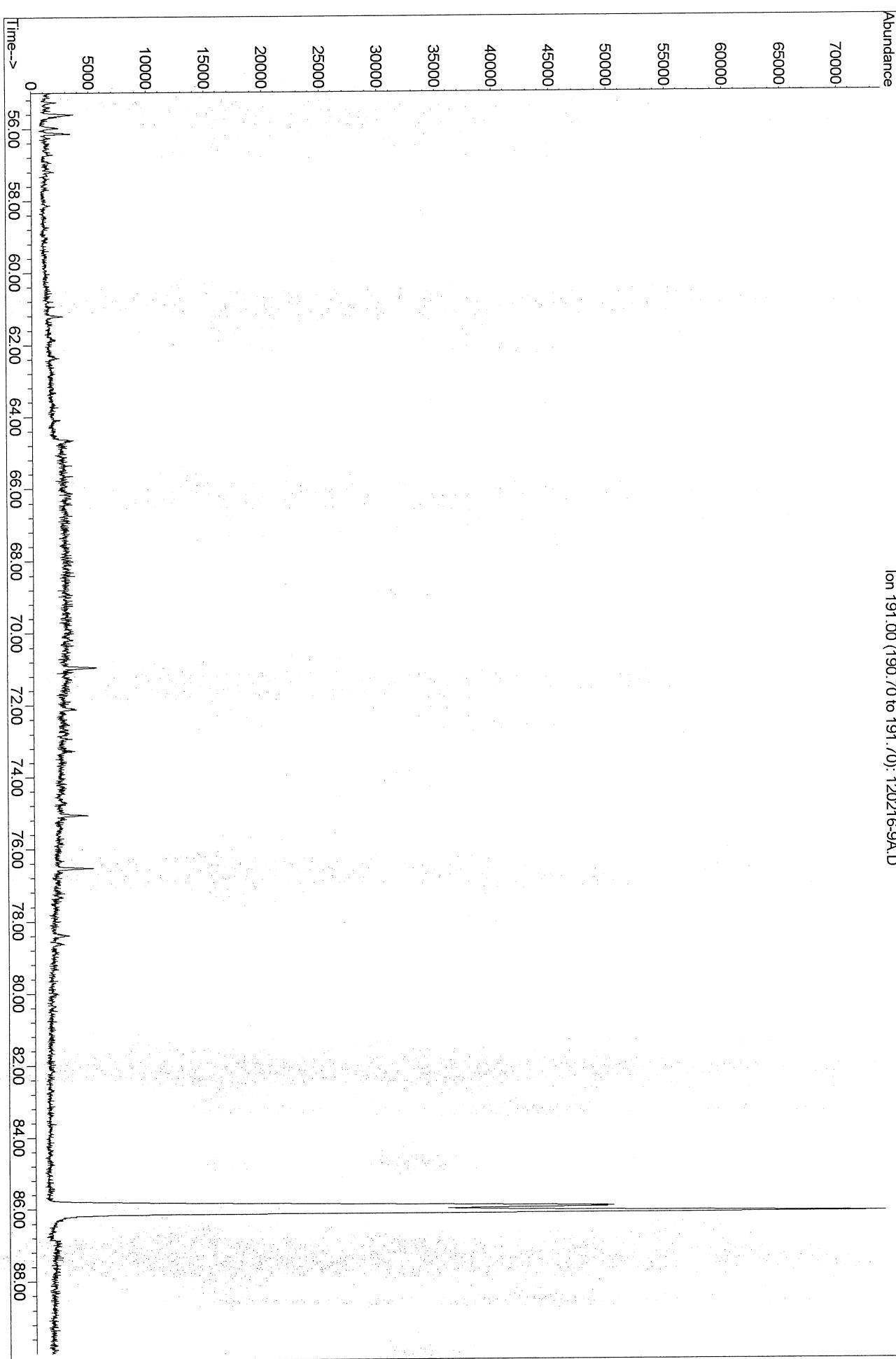
Ion 134.00 (133.70 to 134.70): 120216-9A.D



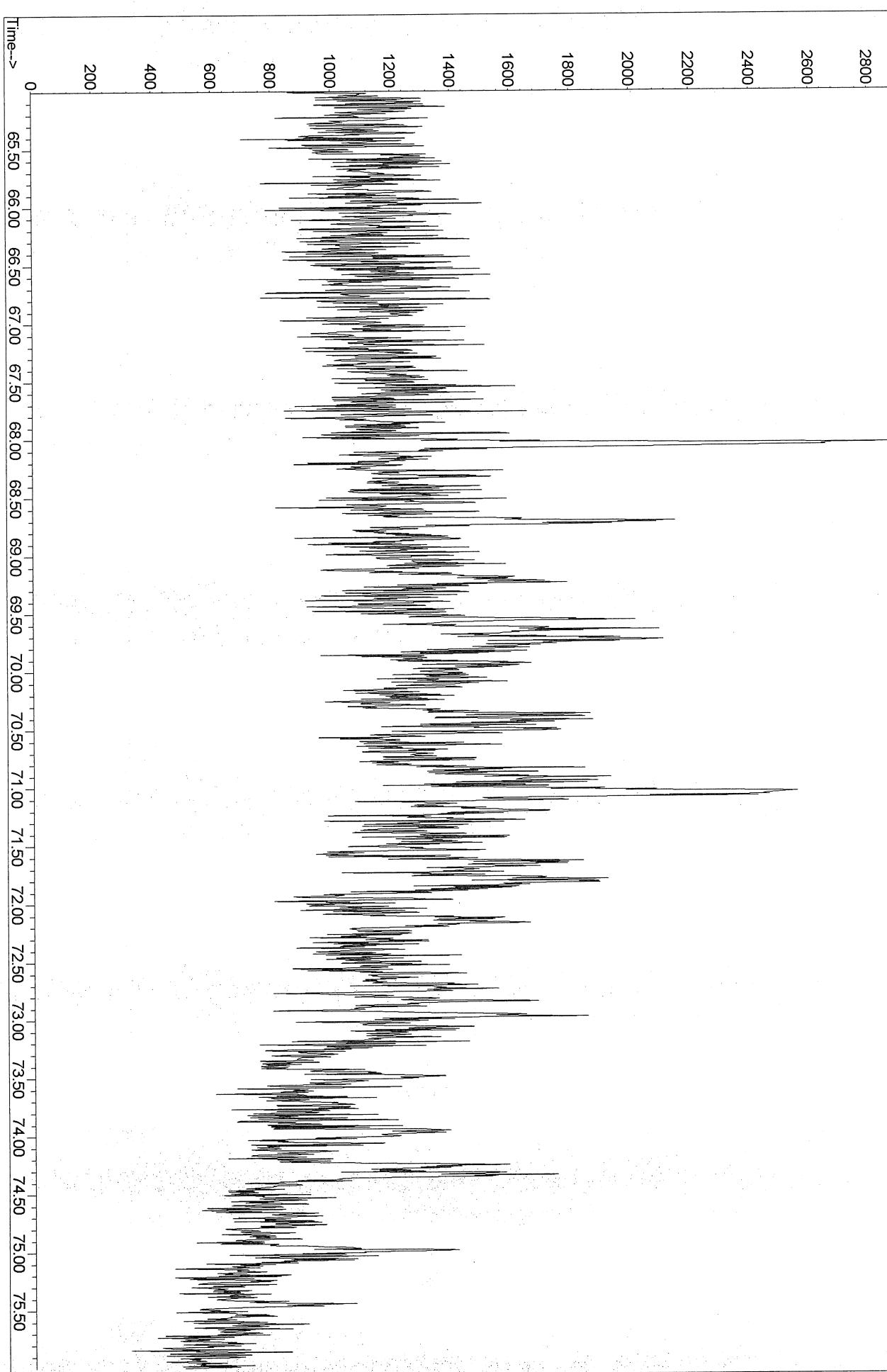
Ion 123.00 (122.70 to 123.70); 120216-9A.D



Ion 191.00 (190.70 to 191.70). 120216-9A.D

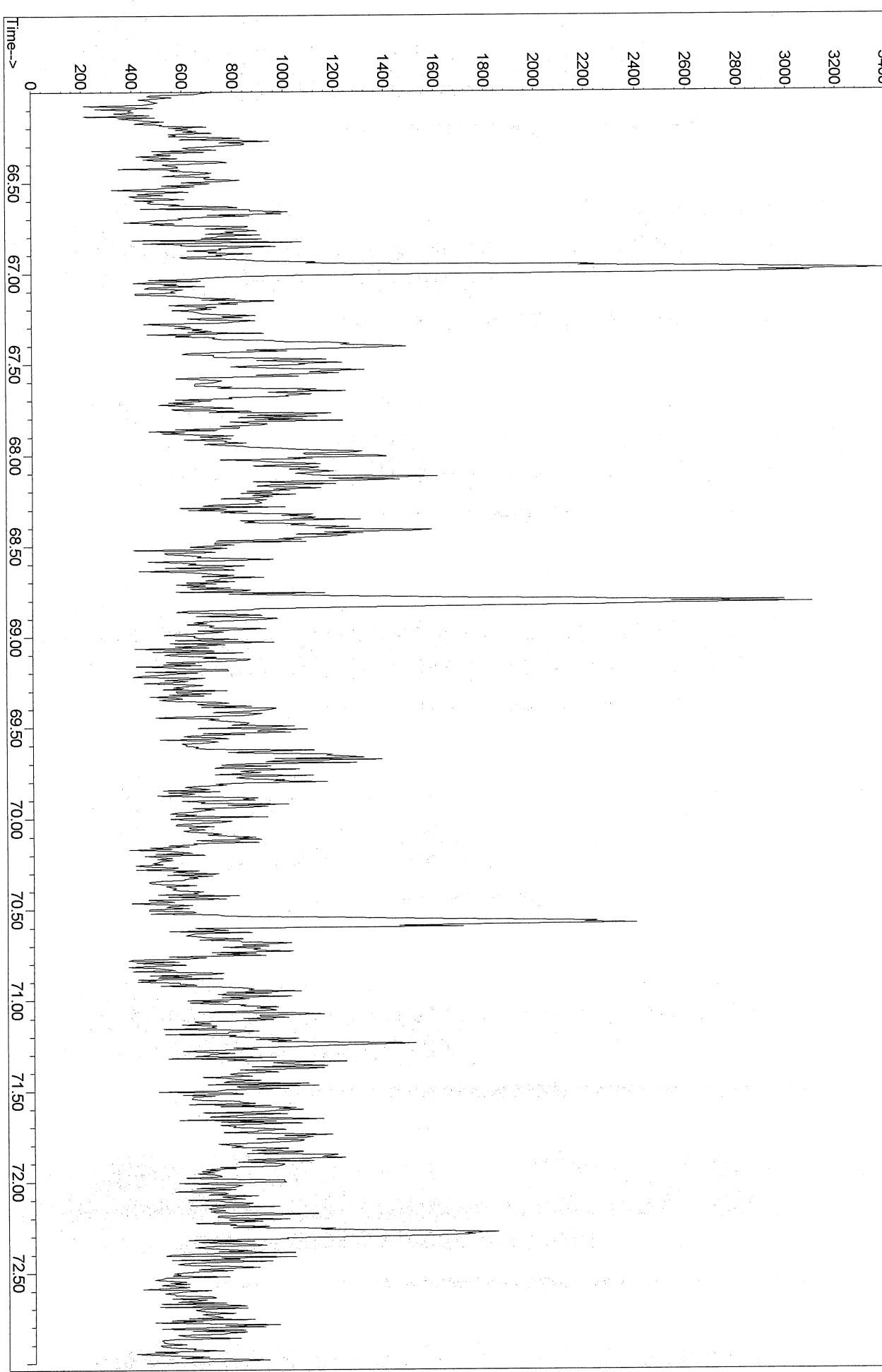


Abundance
Ion 217.00 (216.70 to 217.70), 120216-9A.D



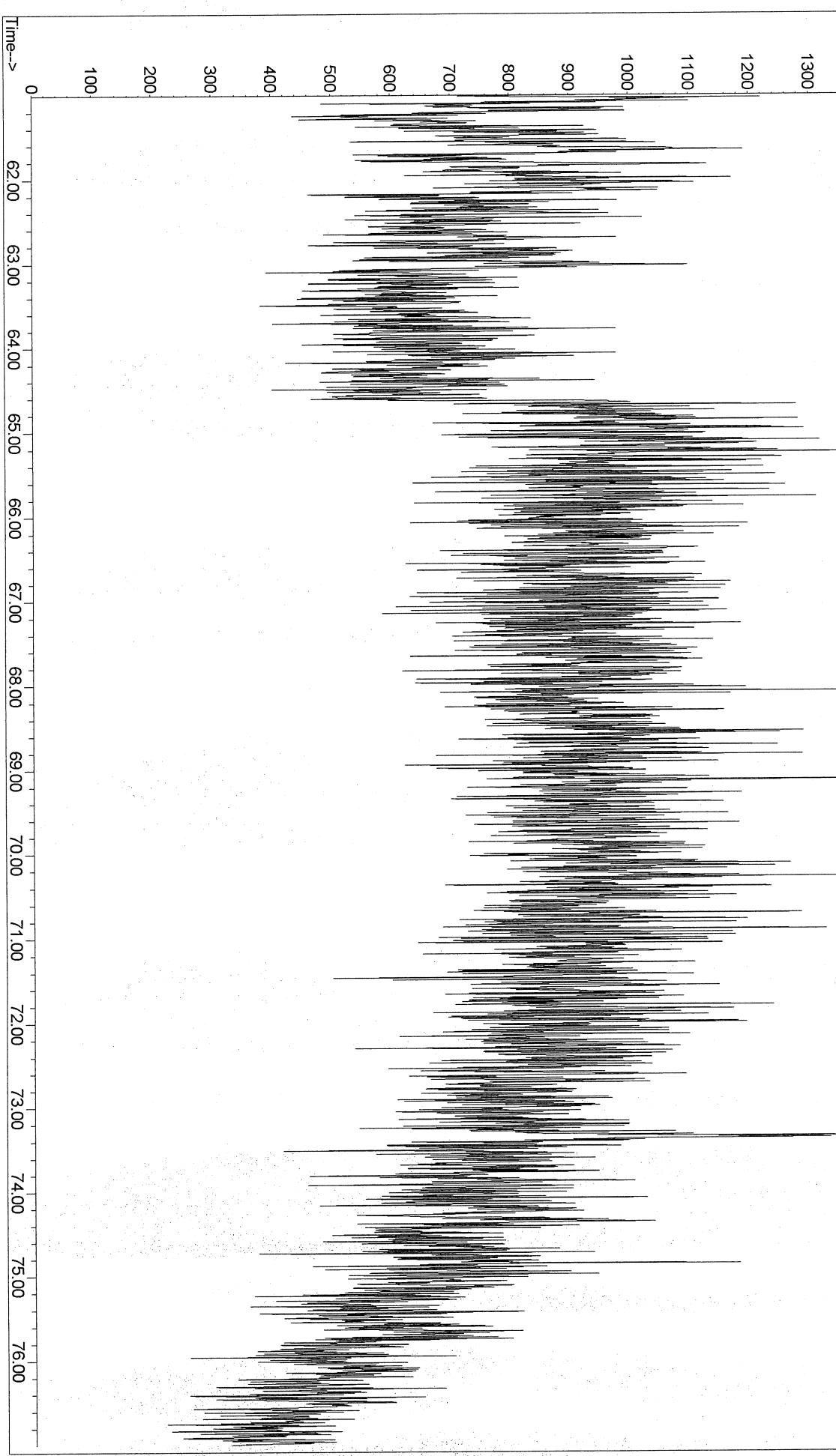
Abundance
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0

Ion 253.00 (252.70 to 253.70). 120216-9A.D

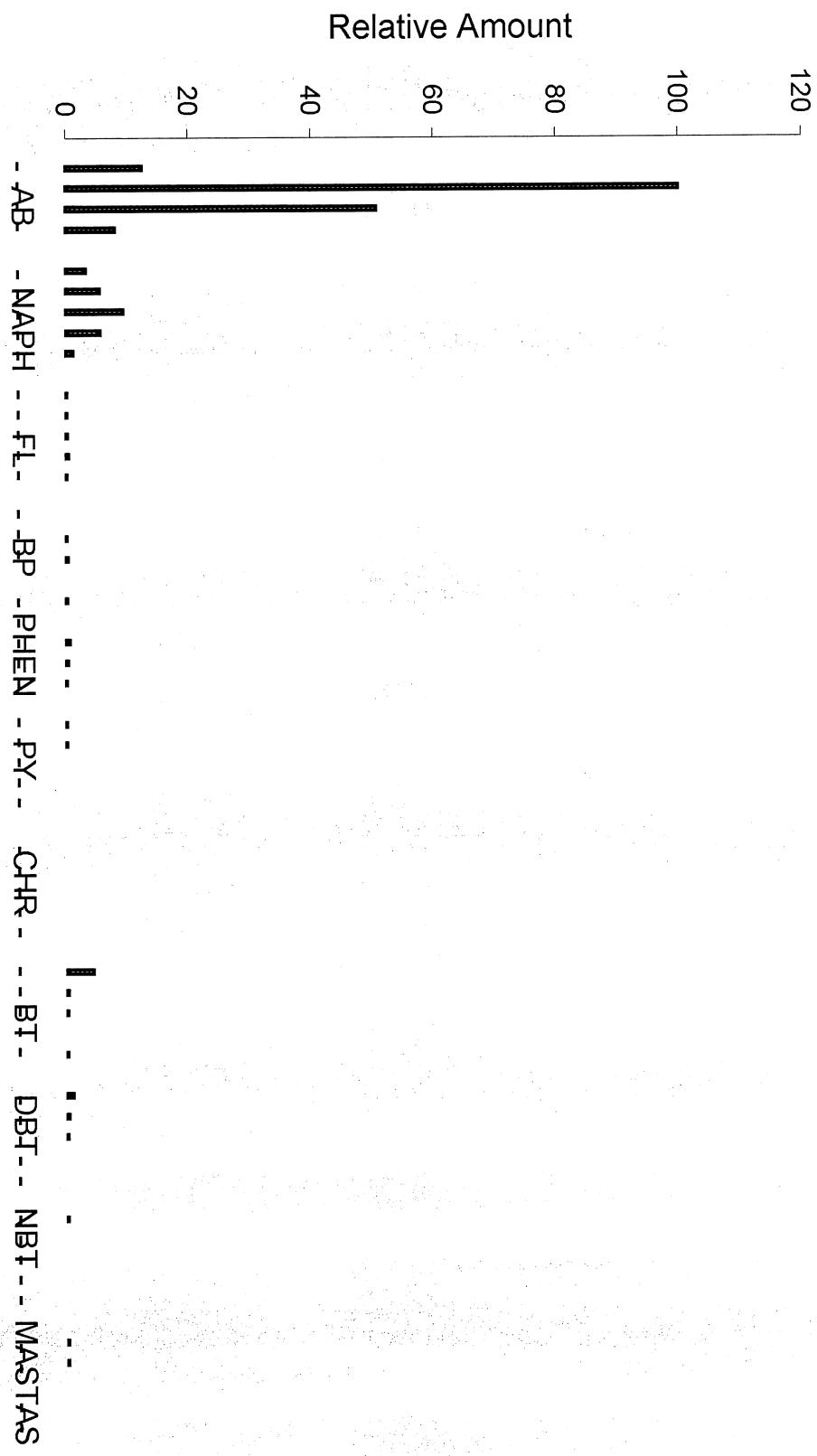


Abundance
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0

Ion 231.00 (230.70 to 231.70), 120216-9A.D



Aromatic Hydrocarbon Distribution
MW-5 SOCK (21043-1)



Aromatic Hydrocarbons

Sulfur Cmpds

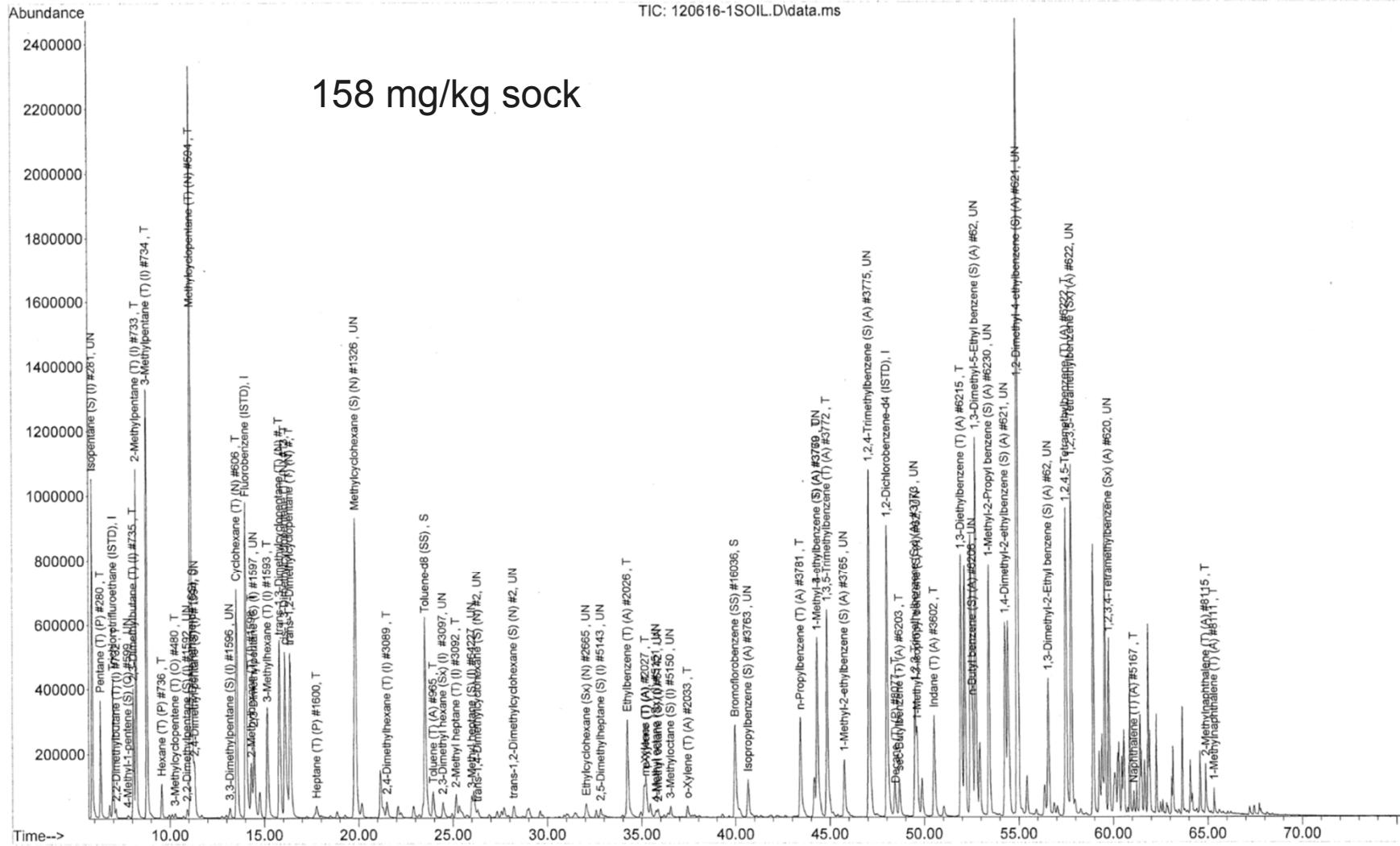
Steranes

ATTACHMENT D

[PIANO Analysis for MW-5]

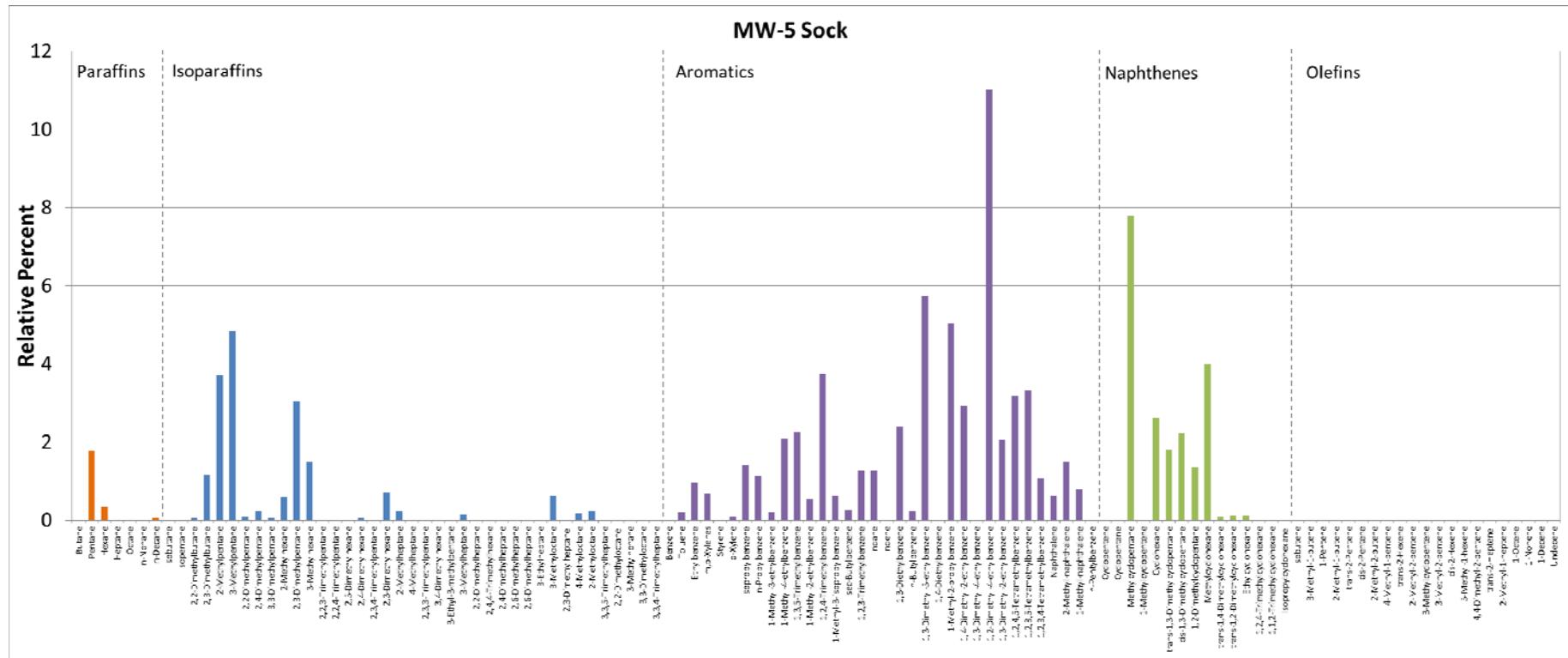


MW-5 Sock – PIANO Chromatogram



MW-5 Sock – PIANO Bar Chart

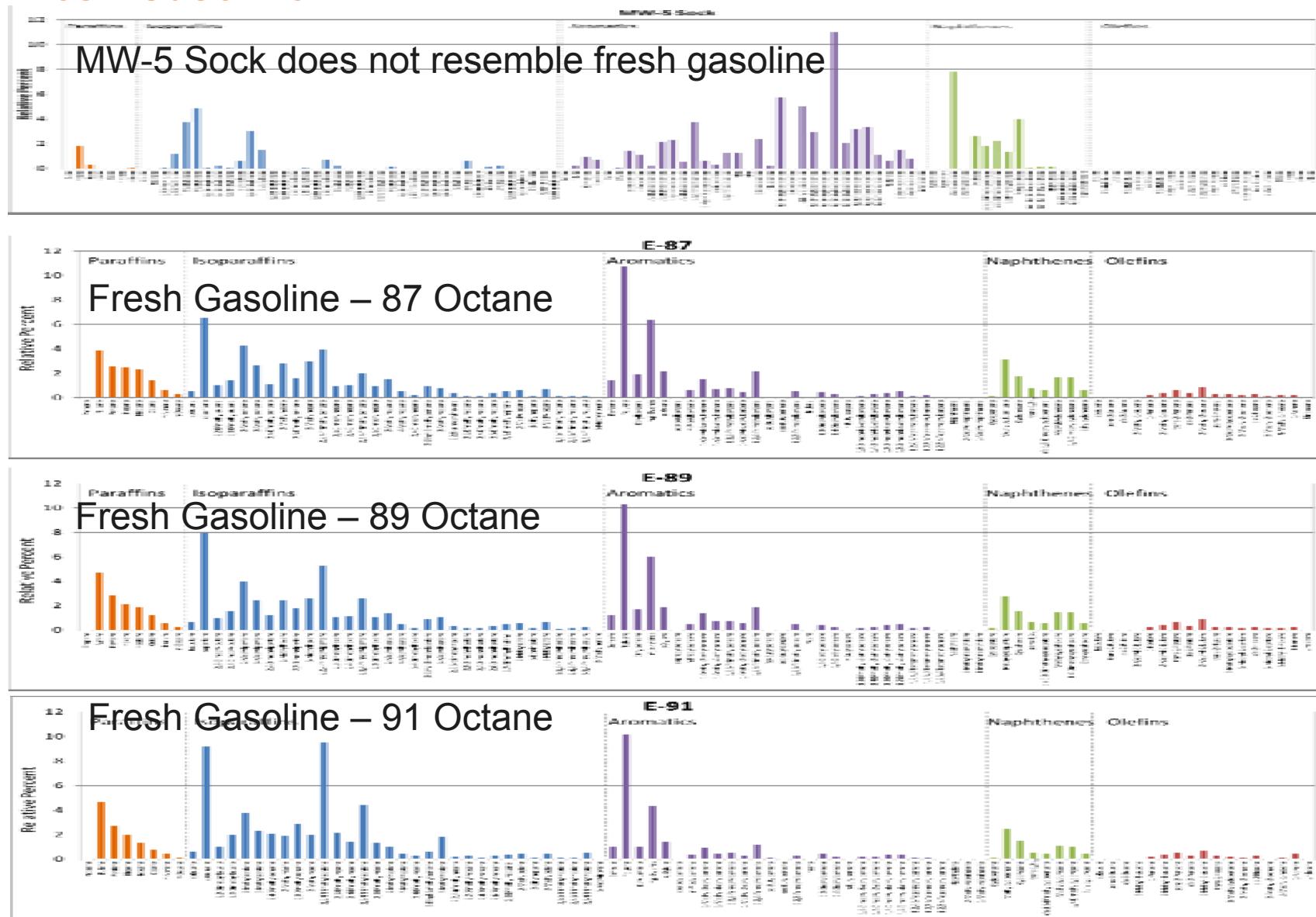
- Resembles weathered gasoline
- Presence of C5 and C6 alkanes and isoalkanes suggests LNAPL is water washed (preferential removal of BTEX)



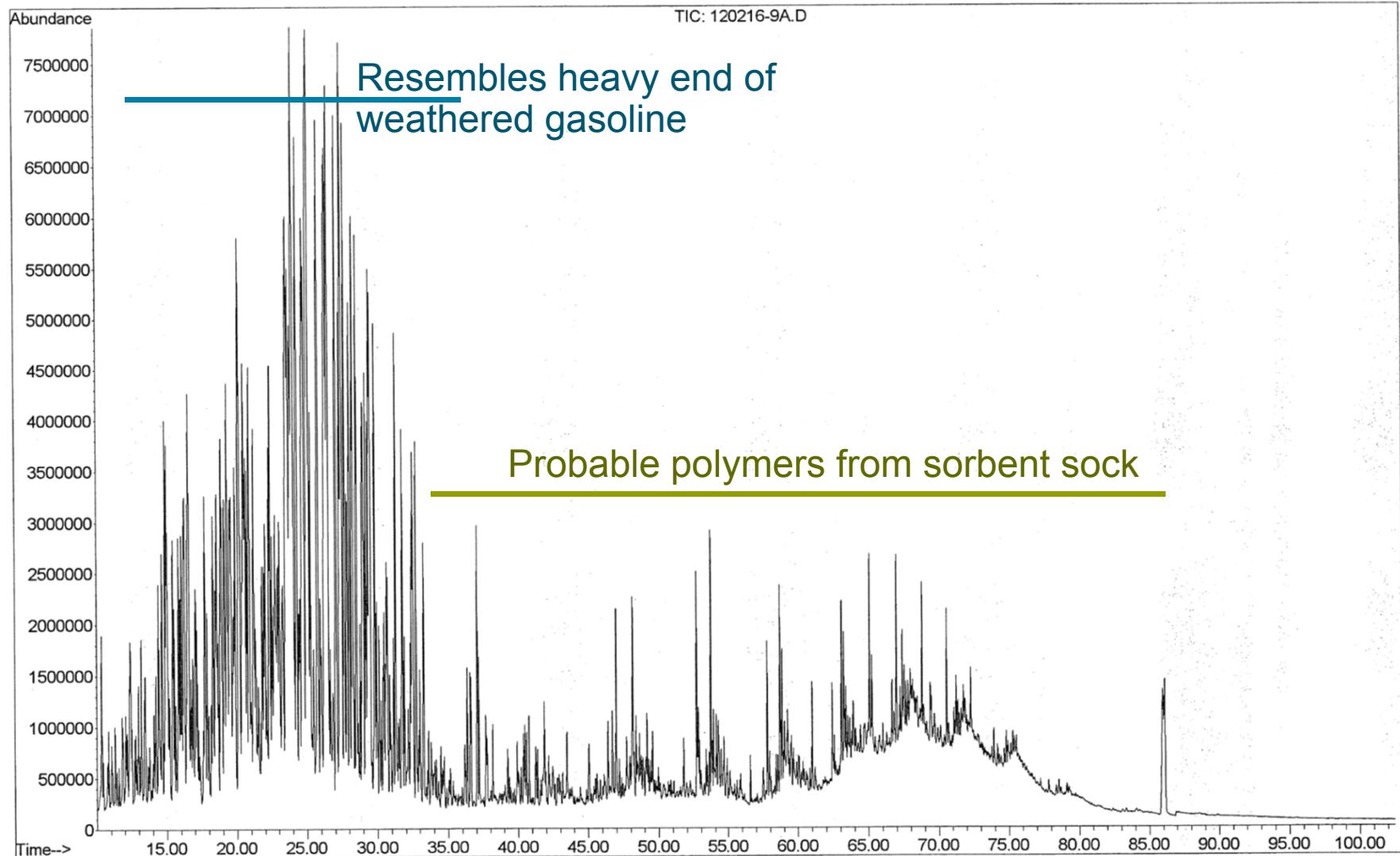
MW-5 PIANO Bar Chart – Comparison to Fresh Gasoline



Design & Consultancy
for natural and built assets



MW-5 Sock – GC/MS Full Scan TIC Chromatogram



MW-5 Sock – GC/MS Full Scan TIC Chromatogram

