



October 29, 2014

Nicole Arceneaux
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Marketing Business Unit

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Mr. Jerry Wickham
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

By Alameda County Environmental Health at 10:23 am, Nov 03, 2014

RE: Third Quarter 2014 Semi-Annual Groundwater Monitoring Report
800, 726, and 706 Harrison Street, Oakland, California 94607
Fuel Leak Case No.: RO0000231, RO0000321, and RO0000484
Comingled Plume Claim No. 6678

Dear Mr. Wickham,

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

If you have any questions or need additional information, please contact me at (925) 790-6463.

Sincerely,

Nicole Arceneaux
Union Oil of California – Project Manager

Attachment
Third Quarter 2014 Semi-Annual Groundwater Monitoring Report

Mr. Jerry Wickham
Senior Hazardous Materials Specialist
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway
Alameda, California 94502-6577

ARCADIS U.S., Inc.
2000 Powell Street
7th Floor
Emeryville
California 94608
Tel 510.652.4500
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www.arcadis-us.com

Subject:
Third Quarter 2014 Semi-Annual Groundwater Monitoring Report Submittal

ENVIRONMENT

Dear Mr. Wickham:

Date:
October 29, 2014

On behalf of Chevron Environmental Management Company's affiliate, Union Oil Company of California ("Union Oil"), ARCADIS is submitting the enclosed Semi-Annual Groundwater Monitoring Report for the following facility:

<u>Facility No.</u>	<u>Case No.</u>	<u>Location</u>
0752/YEE/GIN Comingled Plume	RO0000231	706/726/800 Harrison St Oakland, California

Contact:
Katherine Brandt

Phone:
510.596.9675

Email:
Katherine.Brandt@arcadis-us.com

If you have any questions or comments regarding the contents of this document, please contact Ms. Nicole Arceneaux of Chevron at 925.790.6912 or by e-mail at Nicole.Arceneaux@Chevron.com. Alternatively, you may contact Katherine Brandt of ARCADIS at 510.596.9675 or by e-mail at Katherine.Brandt@arcadis-us.com.

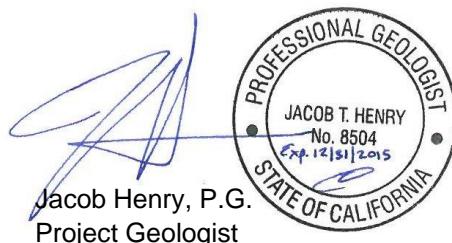
Our ref:
B0047339.2014

Sincerely,

ARCADIS



Katherine Brandt, P.G.
Certified Project Manager



Copies:

Ms. Cherie McCaulou, CRWQCB – San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612 (Geotracker)

Ms. Nicole Arceneaux, Union Oil of California (electronic copy only)

Mr. Muhammad Usman and Mr. Mahmood M. Ali, Property Owners - 800 Harrison Street, Oakland, California

Mr. Peter Yee and Mr. Kin Chan, 726 Harrison Street Property Owners

Mr. Bo Gin, 726 Harrison Street Property Owner – 342 Lester Avenue, Oakland, California 94606

**UNION OIL OF CALIFORNIA
SEMI-ANNUALLY MONITORING REPORT
THIRD QUARTER 2014
OCTOBER 29, 2014**

Facility No.: 0752/Yee/Gin
Comingled Plume Address: 706/726/800 Harrison Street, Oakland, California

Consulting Company/Contact Person/Phone No.: ARCADIS / Katherine Brandt / 510.596.9675

Primary Agency/Contact Person/Regulatory ID No.: Alameda County Environmental Health (ACEH) / Mr. Jerry
Wickham / Case No. RO0000231

WORK PERFORMED DURING THIS REPORTING PERIOD (Third Quarter – 2014) :

1. Gettler-Ryan, Inc. (G-R) conducted groundwater monitoring and sampling on August 14, 2014. Field data sheets and general procedures are included as **Attachment A**. Eight (8) groundwater monitoring wells associated with the former Unocal station no. 0752, six (6) wells associated with 706 Harrison Street (GIN), and nine (9) groundwater monitoring wells associated with 726 Harrison Street (YEE) were gauged and sampled during this monitoring event. Air sparge well AS-1 was neither gauged nor sampled during this monitoring event. MW-1 was neither gauged nor sampled on 706 Harrison Street due to a car accident that was blocking off access to the well.

Groundwater samples were analyzed for total purgeable petroleum hydrocarbons (TPPH) by Environmental Protection Agency (EPA) Method 8015B-GC/MS; benzene, toluene, ethylbenzene, and total xylenes (BTEX, collectively), methyl tert-butyl ether (MTBE) by EPA Method 8260B; monitoring natural attenuation (MNA) parameters methane by RSK-175M; total alkalinity by EPA-310.1; nitrate and sulfate by EPA-300; nitrite by EPA-353.2; and dissolved metals (cadmium, chromium, lead, nickel, and zinc) by EPA Method 6010B.

The site location map, the site plan, and the groundwater contour map are presented on **Figures 1 through 3**. Concentration maps for TPPH, benzene, and MTBE are on **Figures 4 through 6**. Current Groundwater Gauging and Analytical Results are summarized in **Table 1**, Additional Groundwater Analytical Results are summarized in **Tables 1a, 1b, and 1c**, Historical Groundwater Gauging and Analytical Results are summarized in **Table 2**, Additional Historical Groundwater Analytical Results are summarized in **Tables 2a, 2b, and 2c**, and Historical Groundwater Results from TRC are included as **Attachment B**. A copy of the laboratory analytical report and chain-of-custody documentation is included as **Attachment C**.

On August 21, 2013, Muir Consulting, Inc. (Muir) completed a survey of all the well locations for 726 Harrison Street in Oakland, California. The updated survey elevations are presented in Tables 1 and 2. The updated 800 Harrison Street elevations are based on the online conversion calculator presented on the National Geodetic Survey (NGS) website: http://www.ngs.noaa.gov/cgi-bin/VERTCON/vert_con.prl. A survey discrepancy prevented the conversion of the elevations for 706 Harrison Street. Therefore the elevations for 706 Harrison remained the same for this quarter's groundwater contouring and are presented on the groundwater contour map separately.

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

1. Perform groundwater monitoring and related reporting during first quarter 2015.

Current Phase of Project: Groundwater Monitoring/ Remedial Action Implementation

Site Use: Active 76 branded service station/parking lots (YEE/GIN)

Frequency of Sampling: Groundwater – Semi-Annually

Frequency of Monitoring: Groundwater – Semi-Annually

Are Separate-Phase Hydrocarbons (SPH) Present
On-Site: No

Cumulative SPH Recovered to Date: None

SPH Recovered This Quarter: None

Bulk Soil Removed to Date: Unknown

Bulk Soil Removed this Quarter: None

**UNION OIL OF CALIFORNIA
SEMI-ANNUALLY MONITORING REPORT
THIRD QUARTER 2014
OCTOBER 29, 2014**

Facility No.: 0752/Yee/Gin Address: 706/726/800 Harrison Street, Oakland, California
Comingled Plume

Water Wells or Surface Waters within a 2000' Radius and Their Respective Directions:

Groundwater Use Designation: Potential Drinking Water Source – Santa Clara Valley – East Bay Plain

Current Remediation Techniques: Under Evaluation

Permits for Discharge (No.): None

Approximate Depth to Groundwater (at Unocal 0752 and 726 Harrison Street):

18.93 (MW-6) – 20.98 (MW-1) feet below top of casing

Measured X Estimated

Approximate Groundwater Elevation (at Unocal 0752 and 726 Harrison Street):

15.65 (MW-7) – 16.76 (MW-2) feet relative to mean sea level

Measured X Estimated

Approximate Depth to Groundwater (at 706 Harrison Street):

17.01 (MW-5) - 19.17 (MW-4) feet below top of casing

Measured X Estimated

Approximate Groundwater Elevation (at 706 Harrison Street):

10.89 (MW-6) – 12.03 (MW-4) feet relative to mean sea level

Measured X Estimated

Groundwater Gradient (at Unocal 0752 and 726 Harrison Street): 0.008 ft/ft

(Magnitude) Southwest (Direction)

Approximate Depth to Groundwater (at 706 Harrison Street): 0.009 ft/ft

(Magnitude) Southwest (Direction)

**UNION OIL OF CALIFORNIA
SEMI-ANNUALLY MONITORING REPORT
THIRD QUARTER 2014
OCTOBER 29, 2014**

Facility No.: 0752/Yee/Gin Address: 706/726/800 Harrison Street, Oakland, California
Comingled Plume

DISCUSSION:

Groundwater conditions during the third quarter 2014 remained relatively consistent with previous quarters.

706 Harrison Street:

The maximum dissolved concentration of TPPH (31,000 micrograms per liter [$\mu\text{g/L}$]), benzene (1,200 $\mu\text{g/L}$), toluene (1,800 $\mu\text{g/L}$), ethylbenzene (1,000 $\mu\text{g/L}$), total xylenes (4,300 $\mu\text{g/L}$), and MTBE (2,400 $\mu\text{g/L}$) were detected in the samples collected from MW-2. The maximum concentration of MNA parameters methane (18 milligrams per liter [mg/L]) and alkalinity as CaCO_3 (520 mg/L) were collected from MW-2. The maximum concentration of nitrate as NO_3 (38 mg/L) was detected in MW-3. The maximum concentration of sulfate (55 mg/L) was collected from samples taken from MW-5. Nitrite as NO_2 was not detected above laboratory concentrations. The maximum concentration for dissolved iron (3,600 $\mu\text{g/L}$) was detected in the sample collected from MW-2. Dissolved cadmium, chromium, lead, nickel, and zinc were not detected above laboratory concentrations.

726 Harrison Street:

The maximum dissolved concentrations of TPPH (9,100 $\mu\text{g/L}$), benzene (1,700 $\mu\text{g/L}$), ethylbenzene (340 $\mu\text{g/L}$), and MTBE (7,600 $\mu\text{g/L}$) were detected in the samples collected from MW-1. The maximum dissolved concentrations of toluene (150 $\mu\text{g/L}$), and total xylenes (370 $\mu\text{g/L}$) were detected in the sample collected from MW-5. The maximum concentration of the MNA parameter methane (2 mg/L) was collected from MW-1. The maximum concentration of alkalinity as CaCO_3 (440 mg/L) was detected in MW-5. The maximum concentrations of nitrate as NO_3 (47 mg/L) and sulfate (41 mg/L) were detected in MW-2. Nitrite as NO_2 was not detected above laboratory concentrations. The maximum concentration for dissolved iron (2,600 $\mu\text{g/L}$) was detected in the sample collected from EW-1. Dissolved cadmium, chromium, lead, nickel, and zinc were not detected above laboratory concentrations.

800 Harrison Street:

The maximum dissolved concentrations of TPPH (1,800 $\mu\text{g/L}$) and MTBE (490 $\mu\text{g/L}$) were detected in the samples collected from MW-3. The maximum dissolved concentrations of benzene (96 $\mu\text{g/L}$), ethylbenzene (2.5 $\mu\text{g/L}$), and total xylenes (13 $\mu\text{g/L}$) were detected in the samples collected from MW-7. The maximum dissolved concentration of toluene (5.8 $\mu\text{g/L}$) was detected in the sample collected from MW-5. The maximum concentration of MNA parameters methane (17 mg/L) and alkalinity as CaCO_3 (450 mg/L) were collected from MW-3. The maximum concentration of nitrate as NO_3 (4.4 mg/L) was detected in MW-4. The maximum concentration of sulfate (79 mg/L) was detected in the sample collected from MW-2. The maximum concentration for dissolved iron (810 $\mu\text{g/L}$) was detected in the sample collected from MW-3. Dissolved cadmium, chromium, lead, nickel, and zinc were not detected above laboratory concentrations.

Groundwater elevations at the site for 726 and 800 Harrison Street vary by approximately two feet, creating a relatively gentle hydraulic gradient of 0.008 foot per foot (ft/ft) in the southwest direction. Groundwater elevations at the site for 706 Harrison Street vary by approximately 1 foot, creating a relatively gentle hydraulic gradient of 0.009 ft/ft in the southwest direction.

CONCLUSIONS AND RECOMMENDATIONS:

Dissolved constituents of concern concentrations have remained relatively consistent with previous quarters. ARCADIS recommends continued groundwater monitoring. ARCADIS has submitted a Remedial Action Plan (RAP) and RAP Addendum to address the elevated concentrations on 706 and 726 Harrison Street. ARCADIS has begun implementation of the RAP and RAP addendum.

**UNION OIL OF CALIFORNIA
SEMI-ANNUALLY MONITORING REPORT
THIRD QUARTER 2014
OCTOBER 29, 2014**

Facility No.: 0752/Yee/Gin Address: 706/726/800 Harrison Street, Oakland, California
Comingled Plume

ATTACHMENTS:

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Groundwater Contour Map
- Figure 4: TPPH Isoconcentration Map
- Figure 5: Benzene Isoconcentration Map
- Figure 6: MTBE Isoconcentration Map

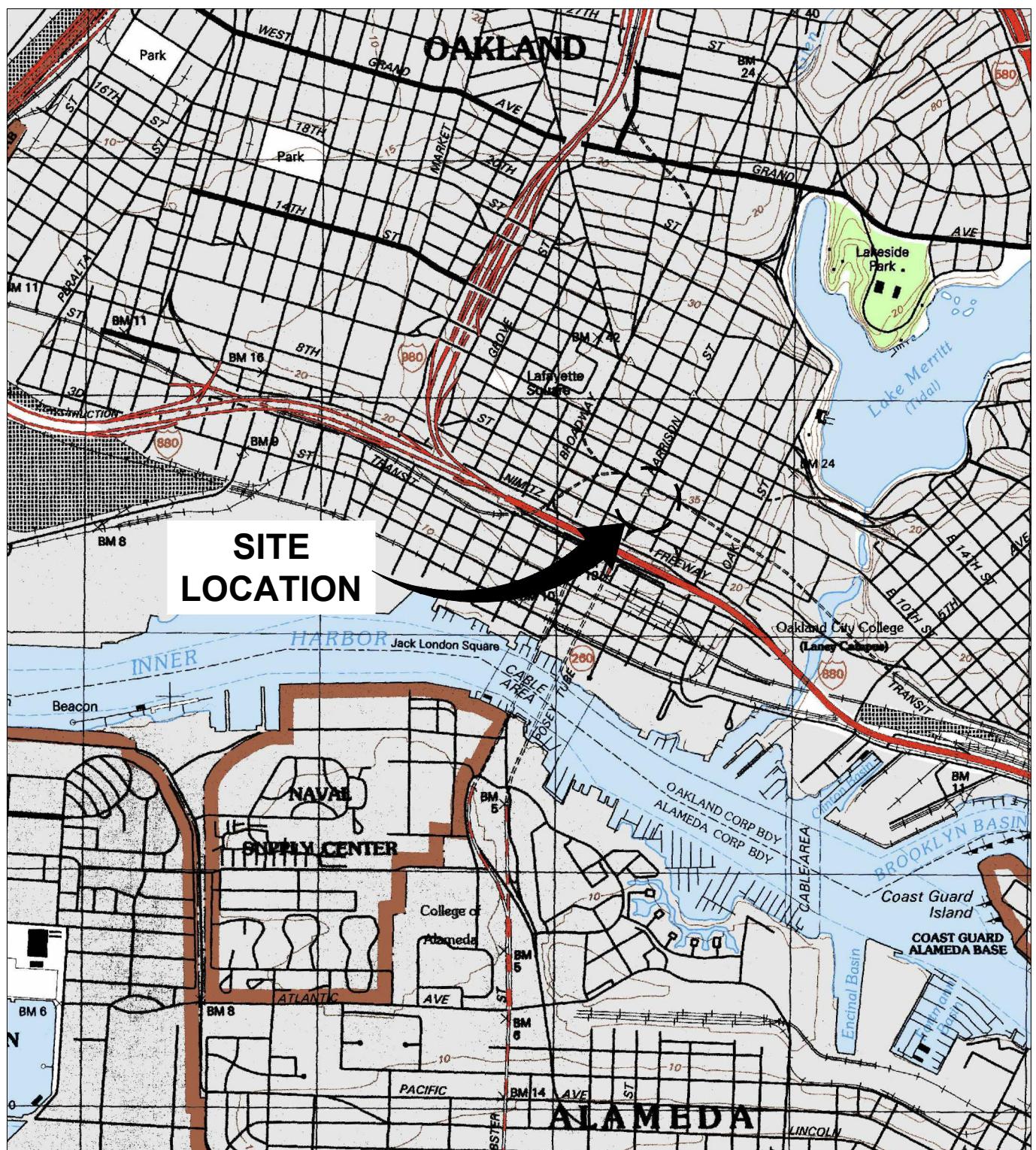
- Table 1: Current Groundwater Gauging and Analytical Results
- Table 1a: Additional Groundwater Analytical Results – MNA Parameters
- Table 1b: Additional Groundwater Analytical Results – Metals
- Table 2: Historical Groundwater Gauging and Analytical Results
- Table 2a: Historical Additional Groundwater Analytical Results – MNA Parameters
- Table 2b: Historical Additional Groundwater Analytical Results – Metals

- Attachment A: Field Data Sheets and General Procedures
- Attachment B: Historical Groundwater Results from TRC
- Attachment C: Laboratory Reports and Chain-of-Custody Documentation

ARCADIS

Figures

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS



REFERENCE: BASE MAP USGS 7.5 MIN. TOPO. □ UAD., OAKLAND WEST, CALIFORNIA, 1993.

2000' 4000'

Approximate Scale: 1 cm = 2000 ft

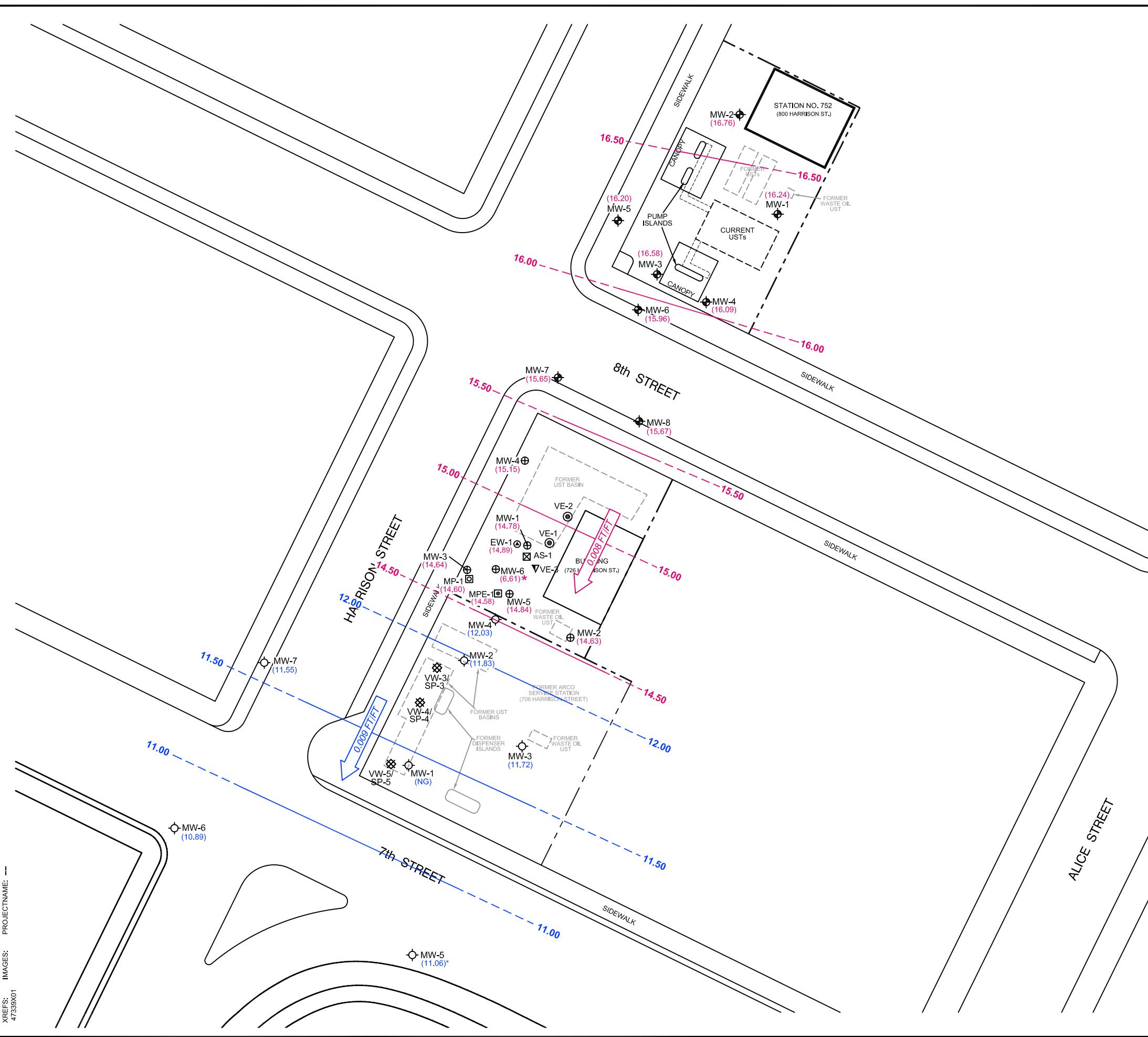
UNION OIL OF CALIFORNIA
STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET
OAKLAND, CALIFORNIA

SITE LOCATION MAP



FIGURE
1



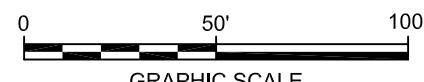


LEGEND

- PROPERTY BOUNDARY
- - - PRODUCT PIPING
- MW-1+ GROUNDWATER MONITORING WELL (UNOCAL SITE)
- MW-1+ GROUNDWATER MONITORING WELL (YEE SITE)
- EW-1○ EXTRACTION WELL (YEE SITE)
- MW-1○ GROUNDWATER MONITORING WELL (GIN SITE)
- VW-3/SP-3☒ SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN SITE)
- MPE-1▣ MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE) (YEE SITE)
- MP-1▣ PILOT TEST MONITORING POINT (YEE SITE)
- VE-1○ VAPOR EXTRACTION WELL (YEE SITE)
- VE-3△ PILOT TEST VAPOR EXTRACTION WELL (YEE SITE)
- AS-1▣ AIR SPARGE WELL (YEE SITE)
- (11.83) GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL (FT MSL)
- 12.00 GROUNDWATER ELEVATION CONTOUR (FT MSL; DASHED WHERE INFERRED)
- 0.009 FT/FT APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT)
- (NG) NOT GAUGED
- * NOT USED IN GROUNDWATER CONTOURING AND GRADIENT CALCULATION

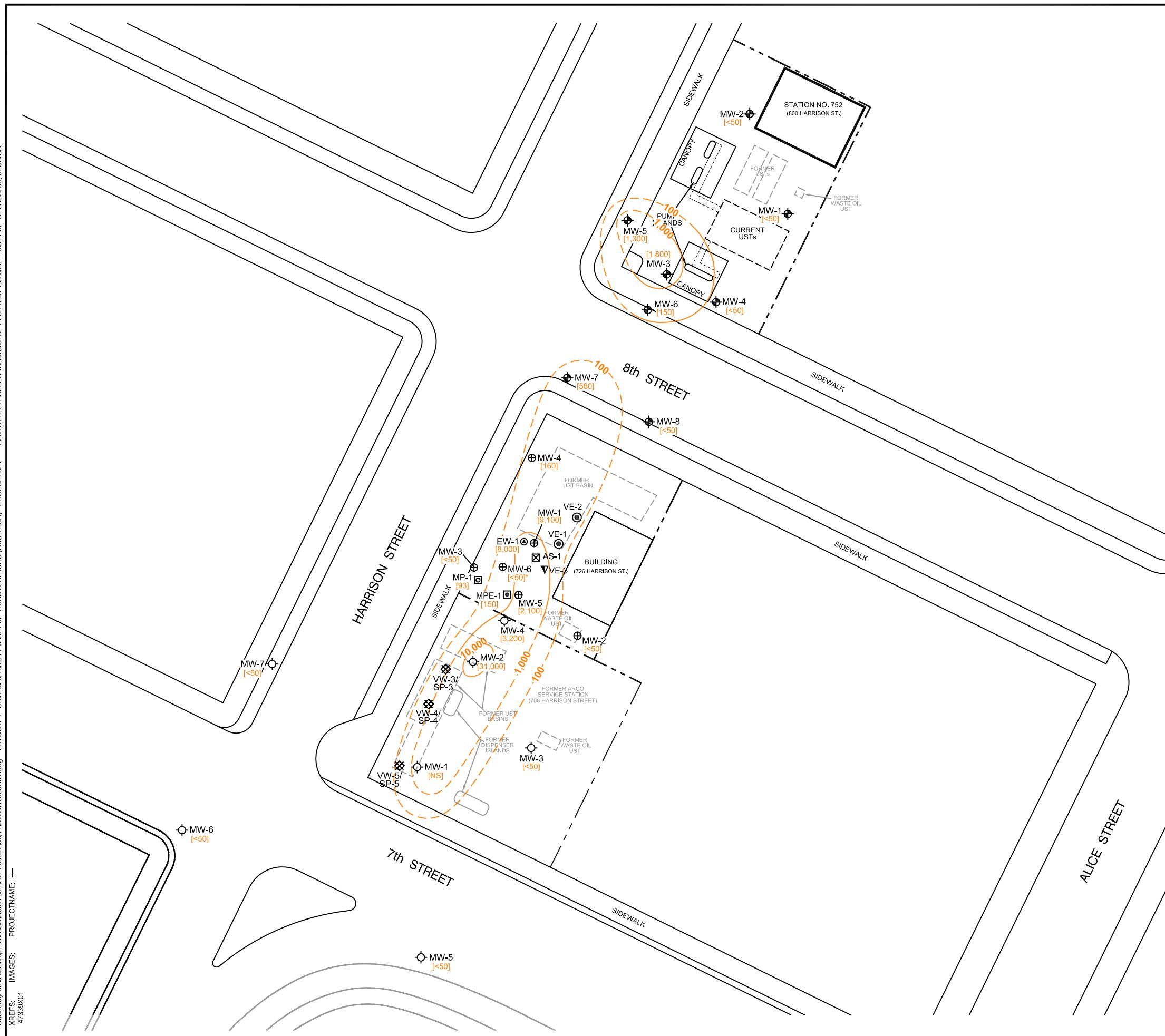
NOTES:

1. BASE MAP PROVIDED BY MID COAST ENGINEERS, DATED 06/29/11, AT A SCALE OF 1"=50'. ADDITIONAL SITE FEATURES PROVIDED BY STANTEC, INC., DATED 03/05/10, AT A SCALE OF 1"=50'. MUIR SURVEY COMPLETED A SURVEY ON 8/21/13.
2. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
3. MW-6 IS NOT USED IN THE GROUNDWATER CONTOURS BECAUSE IT IS LOCATED IN A LOWER WATER BEARING ZONE.
4. GROUNDWATER CONTOURS FOR 800/726 HARRISON STREET SEPARATE FROM 706 HARRISON STREET DUE TO SURVEYING DISCREPANCIES. 706 HARRISON TO BE RE-SURVEYED IN 2014.



UNION OIL OF CALIFORNIA
 STATION NO. 0752/YEE/GIN COMMINGLED
 706/726/800 HARRISON STREET
 OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP



UNION OIL OF CALIFORNIA
 STATION NO. 0752/YEE/GIN COMMINGLED
 706/726/800 HARRISON STREET
 OAKLAND, CALIFORNIA

TPPH CONCENTRATION MAP



LEGEND

- PROPERTY BOUNDARY
- - - PRODUCT PIPING
- MW-1+ GROUNDWATER MONITORING WELL (UNOCAL SITE)
- MW-1+ GROUNDWATER MONITORING WELL (YEE SITE)
- EW-1+ EXTRACTION WELL (YEE SITE)
- MW-1+ GROUNDWATER MONITORING WELL (GIN SITE)
- VW-3/SP-3+ SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN SITE)
- MPE-1\s MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE) (YEE SITE)
- MP-1\s PILOT TEST MONITORING POINT (YEE SITE)
- VE-1+ VAPOR EXTRACTION WELL (YEE SITE)
- VE-3 \triangle PILOT TEST VAPOR EXTRACTION WELL (YEE SITE)
- AS-1 \square AIR SPARGE WELL (YEE SITE)
- [63] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 100 — BENZENE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN LABORATORY REPORTING LIMIT
- [NS] NOT SAMPLED
- * WELL NOT USED IN CONCENTRATION CONTOURING

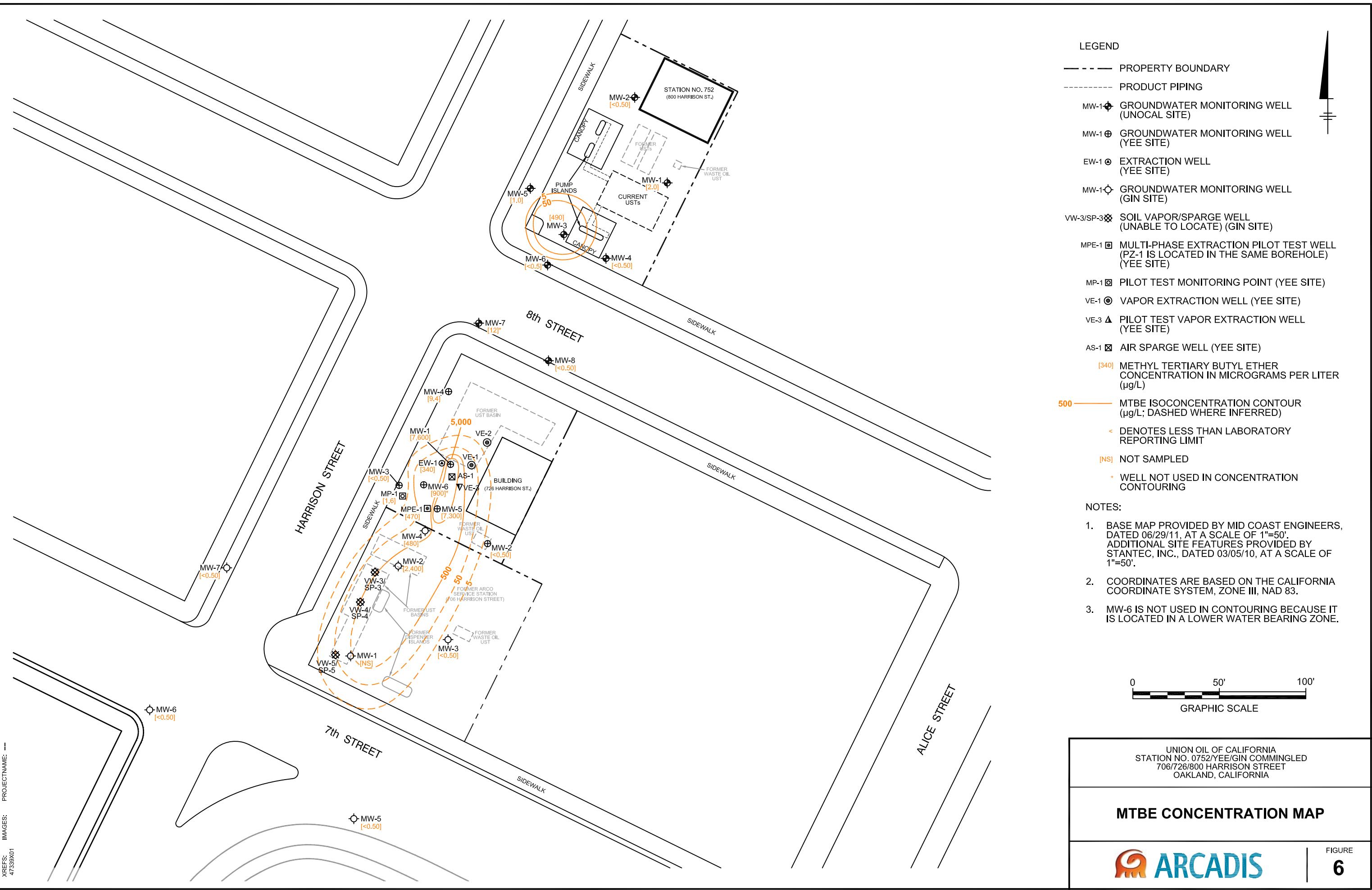
NOTES:

1. BASE MAP PROVIDED BY MID COAST ENGINEERS, DATED 06/29/11, AT A SCALE OF 1"=50'. ADDITIONAL SITE FEATURES PROVIDED BY STANTEC, INC., DATED 03/05/10, AT A SCALE OF 1"=50'.
2. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
3. MW-6 IS NOT USED IN CONTOURING BECAUSE IT IS LOCATED IN A LOWER WATER BEARING ZONE.



UNION OIL OF CALIFORNIA
 STATION NO. 0752/YEE/GIN COMMINGLED
 706/726/800 HARRISON STREET
 OAKLAND, CALIFORNIA

BENZENE CONCENTRATION MAP



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Tables

Table 1
Current Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet)	LPH DTW (feet btoc)	GW Thickness (feet)	TPPH (8015B- GC/MC)	Elevation (feet)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
800 Harrison Street															
MW-1	8/14/2014	37.22	20.98	0.00	16.24	<50	<0.50	<0.50	<0.50	<1.0	2.0	--	--	--	
MW-2	8/14/2014	37.44	20.68	0.00	16.76	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-3	8/14/2014	35.88	19.30	0.00	16.58	1,800	9.8	1.5	2.3	3.7	490	--	--	--	
MW-4	8/14/2014	35.42	19.33	0.00	16.09	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-5	8/14/2014	35.68	19.48	0.00	16.20	1,300	7.2	5.8	2.2	10	1.0	--	--	--	
MW-6	8/14/2014	34.89	18.93	0.00	15.96	150	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-7	8/14/2014	34.92	19.27	0.00	15.65	580	96	5.6	2.5	13	12	--	--	--	
MW-8	8/14/2014	34.73	19.06	0.00	15.67	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
706 Harrison Street															
MW-1	8/14/2014	29.17	--	--	--	--	--	--	--	--	--	--	--	--	Car Accident, location blocked
MW-2	8/14/2014	30.53	18.70	0.00	11.83	31,000	1,200	1,800	1,000	4,300	2,400	--	--	--	
MW-3	8/14/2014	29.79	18.07	0.00	11.72	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-4	8/14/2014	31.20	19.17	0.00	12.03	3,200	210	47	72	100	480	--	--	--	
MW-5	8/14/2014	28.07	17.01	0.00	11.06	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-6	8/14/2014	29.13	18.24	0.00	10.89	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-7	8/14/2014	29.70	18.15	0.00	11.55	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
726 Harrison Street															
AS-1	8/14/2014	34.50	--	--	--	--	--	--	--	--	--	--	--	--	
EW-1	8/14/2014	34.37	19.48	0.00	14.89	8,000	63	7.5	83	57.0	340	--	--	--	
MP-1	8/14/2014	34.16	19.56	0.00	14.60	93	<0.50	<0.50	<0.50	<1.0	1.6	--	--	--	
MPE-1	8/14/2014	34.36	19.78	0.00	14.58	150	24	1.7	3.2	5.5	470	--	--	--	
MW-1	8/14/2014	34.45	19.67	0.00	14.78	9,100	1,700	53	340	320	7,600	--	--	--	
MW-2	8/14/2014	34.91	20.28	0.00	14.63	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-3	8/14/2014	34.12	19.48	0.00	14.64	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-4	8/14/2014	35.05	19.90	0.00	15.15	160	0.7	<0.50	<0.50	<1.0	9.4	--	--	--	
MW-5	8/14/2014	34.76	19.92	0.00	14.84	2,100	720	150	260	370	7,300	--	--	--	
MW-6	8/14/2014	34.53	27.92	0.00	6.61	<50	<0.50	<0.50	<0.50	<1.0	900	--	--	--	

Table 1
Current Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Notes

Analytical results given in micrograms per liter ($\mu\text{g/l}$).

Muir Consulting, Inc. completed a survey of 726 Harrison well locations on August 21, 2013. Elevation data for 800 Harrison Street was converted by using the National Geodetic Survey (NGS) online conversion calculator located from NAV29 to NAV88. The 706 Harrison Street data was not converted due to discrepancies of the data.

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
TOC	top of casing (surveyed reference elevation)
AMSL	above mean sealevel
DTW	depth to water
btoc	below top of casing
LPH	liquid-phase hydrocarbons
GW	groundwater
$\mu\text{g/l}$	micrograms per liter (approx. equivalent to parts per billion, ppb)
A01	PQL's and MDL's are raised due to sample dilution.
PQL	practical quantitation limit
MDL	method detection limit
8260B	EPA Method 8260B for Volatile Organic Compounds
GC/MS	gas chromatography-mass spectrometry for TPPH

Analytes

TPPH	total purgeable petroleum hydrocarbons (C6-C12)
MTBE	methyl tertiary butyl ether
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane (same as ethylene dichloride)

Table 1A
Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane (mg/L)	Alkalinity as CaCO3 (mg/L)	Nitrate as NO3 (mg/L)	Nitrite as NO2 (mg/L)	Sulfate (mg/L)	Comments
800 Harrison Street							
MW-1	8/14/2014	0.0035	37	2.0	<0.17	9.4	
MW-2	8/14/2014	0.0060	120	1.0	<0.17	79	
MW-3	8/14/2014	17	450	0.55	<0.17	2.2	
MW-4	8/14/2014	0.0016	84	4.4	<0.17	24	
MW-5	8/14/2014	0.79	170	<0.44	<0.17	<1.0	
MW-6	8/14/2014	<0.0010	140	<0.44	<0.17	25	
MW-7	8/14/2014	0.44	73	<0.44	<0.17	4.3	
MW-8	8/14/2014	0.0059	200	<0.44	<0.17	28	
706 Harrison Street							
MW-1	8/14/2014	--	--	--	--	--	Car Accident
MW-2	8/14/2014	18.0	520	<0.44	<0.17	<1.0	
MW-3	8/14/2014	0.0018	110	38	<0.17	42	
MW-4	8/14/2014	1.6	480	<0.44	<0.17	3.8	
MW-5	8/14/2014	0.0010	160	16	<0.17	55	
MW-6	8/14/2014	<0.0010	150	<0.44	<0.17	36	
MW-7	8/14/2014	0.023	230	<0.44	<0.17	48	
726 Harrison Street							
AS-1	8/14/2014	--	--	--	--	--	
EW-1	8/14/2014	0.57	220	<0.44	<0.17	2.8	
MW-1	8/14/2014	2.0	380	<0.44	<0.17	<1.0	
MW-2	8/14/2014	0.0016	130	47	<0.17	41	
MW-3	8/14/2014	<0.0010	140	<0.44	<0.17	13	
MW-4	8/14/2014	0.21	300	<0.44	<0.17	17	
MW-5	8/14/2014	1.7	440	<0.44	<0.17	<1.0	
MW-6	8/14/2014	0.0015	170	4.3	<0.17	26	

Notes

Analytical results given in milligrams per liter (mg/L).

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
mg/L	milligrams per liter (approx. equivalent to parts per million, ppm)
A01	PQL's and MDL's are raised due to sample dilution.
PQL	practical quantitation limit
MDL	method detection limit

Analytes

CaCO3	calcium carbonate
NO3	nitrate
NO2	nitrogen dioxide
EDC	1,2-dichloroethane (same as ethylene dichloride)

Table 1B
Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
800 Harrison Street								
MW-1	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	8/14/2014	<10	<10	810	<50	<10	<10	
MW-4	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-5	8/14/2014	<10	<10	160	<50	<10	<10	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-8	8/14/2014	<10	<10	<50	<50	<10	<10	
706 Harrison Street								
MW-1	8/14/2014	--	--	--	--	--	--	Car Accident
MW-2	8/14/2014	<10	<10	3,600	<50	<10	<10	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/14/2014	<10	<10	180	<50	<10	<10	
MW-5	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	8/14/2014	<10	<10	1,200	<50	<10	<10	
726 Harrison Street								
AS-1	8/14/2014	--	--	--	--	--	--	
EW-1	8/14/2014	<10	<10	2,600	<50	<10	<10	
MW-1	8/14/2014	<10	<10	1,900	<50	<10	<10	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/14/2014	<10	<10	380	<50	<10	<10	
MW-5	8/14/2014	<10	<10	1,200	<50	<10	<10	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	

Notes

Analytical results given in micrograms per liter ($\mu\text{g/l}$)

Standard Abbreviations

- not analyzed, measured, or collected
- < not detected at or above laboratory detection limit
- $\mu\text{g/l}$ micrograms per liter (approx. equivalent to parts per billion, ppb)

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
800 Harrison Street																	
MW-1	2/7/2012	34.72	20.00	0.00	14.72	15.22	-0.50	97	<0.50	<0.50	<0.50	<1.0	8.6	<0.50	<0.50	--	
MW-1	8/9/2012	34.72	19.14	0.00	15.58	14.72	0.86	140	<0.50	<0.50	<0.50	<1.0	18	<0.50	<0.50	<250	
MW-1	2/27/2013	34.72	19.41	0.00	15.31	15.58	-0.27	50	<0.50	<0.50	<0.50	<1.0	6.7	<0.50	<0.50	<250	
MW-1	8/15/2013	37.22	20.20	0.00	17.02	15.31	1.71	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-1	2/6/2014	37.22	21.09	0.00	16.13	17.02	-0.89	<50	<0.50	<0.50	<0.50	<1.0	1.6	<0.50	<0.50	<250	
MW-1	8/14/2014	37.22	20.98	0.00	16.24	16.13	0.11	<50	<0.50	<0.50	<0.50	<1.0	2	--	--	--	
MW-2	2/7/2012	34.74	19.77	0.00	14.97	15.42	-0.45	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-2	8/9/2012	34.74	18.89	0.00	15.85	14.97	0.88	<50	<0.50	<0.50	<0.50	<1.0	4.7	<0.50	<0.50	<250	
MW-2	2/27/2013	34.74	19.16	0.00	15.58	15.85	-0.27	<50	<0.50	<0.50	<0.50	<1.0	9.6	<0.50	<0.50	<250	
MW-2	8/15/2013	37.44	19.99	0.00	17.45	15.58	1.87	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	2/6/2014	37.44	20.82	0.00	16.62	17.45	-0.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	8/14/2014	37.44	20.68	0.00	16.76	16.62	0.14	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-3	2/7/2012	33.18	18.88	0.00	14.30	14.88	-0.58	1,800	6.7	<1.0	1.9	<2.0	1,600	<0.50	<0.50	--	A01
MW-3	8/9/2012	33.18	18.02	0.00	15.16	14.30	0.86	1,400	1.8	<0.50	1.5	<1.0	370	<0.50	<0.50	<250	A01
MW-3	2/27/2013	33.18	18.36	0.00	14.82	15.16	-0.34	1,600	4.4	0.69	2.8	<1.0	820	<0.50	<0.50	<250	A01
MW-3	8/15/2013	35.88	19.17	0.00	16.71	14.82	1.89	410	4.0	<0.50	1.4	<1.0	340	<0.50	<0.50	<250	A01
MW-3	2/6/2014	35.88	19.96	0.00	15.92	16.71	-0.79	1,300	7.9 A01	0.87	1.7	5.2	760	<0.50	<0.50	<250	
MW-3	8/14/2014	35.88	19.30	0.00	16.58	15.92	0.66	1,800	9.8	1.5	2.3	3.7	490	--	--	--	
MW-4	2/7/2012	32.72	18.38	0.00	14.34	14.87	-0.53	<50	<0.50	<0.50	<0.50	<1.0	1.5	<0.50	<0.50	--	
MW-4	8/9/2012	32.72	17.55	0.00	15.17	14.34	0.83	<50	<0.50	<0.50	<0.50	<1.0	1.3	<0.50	<0.50	<250	
MW-4	2/27/2013	32.72	17.83	0.00	14.89	15.17	-0.28	<50	<0.50	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<250	
MW-4	8/15/2013	35.42	18.70	0.00	16.72	14.89	1.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-4	2/6/2014	35.42	19.48	0.00	15.94	16.72	-0.78	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-4	8/14/2014	35.42	19.33	0.00	16.09	15.94	0.15	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-5	2/7/2012	32.98	18.59	0.00	14.39	14.93	-0.54	1,600	58	11	3.0	25	10	<0.50	<0.50	--	A01
MW-5	8/9/2012	32.98	17.73	0.00	15.25	14.39	0.86	1,900	81	18	10	22	19	<0.50	<0.50	<250	A01
MW-5	2/27/2013	32.98	17.98	0.00	15.00	15.25	-0.25	1,300	58	11	2.4	13	8.0	<0.50	<0.50	<250	
MW-5	8/15/2013	35.68	18.88	0.00	16.80	15.00	1.80	50	24	6.1	2.0	9.2	6.7	<0.50	<0.50	<250	
MW-5	2/6/2014	35.68	19.63	0.00	16.05	16.80	-0.75	1,400	13	7.4	2.3	13	1.8	<0.50	<0.50	<250	
MW-5	8/14/2014	35.68	19.48	0.00	16.20	16.05	0.15	1,300	7.2	5.8	2.2	10	1.0	--	--	--	
MW-6	2/7/2012	32.19	18.02	0.00	14.17	14.71	-0.54	450	<0.50	<0.50	<0.50	<1.0	29	<0.50	<0.50	--	
MW-6	8/9/2012	32.19	17.17	0.00	15.02	14.17	0.85	180	<0.50	<0.50	<0.50	<1.0	10	<0.50	<0.50	<250	
MW-6	2/27/2013	32.19	17.48	0.00	14.71	15.02	-0.31	77	<0.50	<0.50	<0.50	<1.0	2.4	<0.50	<0.50	<250	
MW-6	8/15/2013	34.89	18.35	0.00	16.54	14.71	1.83	<50	<0.50	<0.50	<0.50	<1.0	0.82	<0.50	<0.50	<250	
MW-6	2/6/2014	34.89	19.10	0.00	15.79	16.54	-0.75	150	<0.50	<0.50	<0.50	<1.0	0.81	<0.50	<0.50	<250	

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MC) 150	Benzene <0.50	Toluene <0.50	Ethylbenzene <0.50	Total Xylenes <1.0	MTBE <0.05	EDB --	EDC --	Ethanol --	Comments
	8/14/2014	34.89	18.93	0.00	15.96	15.79	0.17										
MW-6	2/7/2012	32.22	18.40	0.00	13.82	14.39	-0.57	310	25	2	<0.50	3.2	9.0	<0.50	<0.50	--	
MW-7	8/9/2012	32.22	17.53	0.00	14.69	13.82	0.87	280	11	1.2	<0.50	<1.0	24	<0.50	<0.50	<250	
MW-7	2/27/2013	32.22	17.85	0.00	14.37	14.69	-0.32	<50	<0.50	<0.50	<0.50	<1.0	3.8	<0.50	<0.50	<250	
MW-7	8/15/2013	34.92	18.70	0.00	16.22	14.37	1.85	95	11	1.3	<0.50	<1.0	5.0	<0.50	<0.50	<250	
MW-7	2/6/2014	34.92	19.45	0.00	15.47	16.22	-0.75	790	66 A01	10	2.5	17	47	<0.50	<0.50	<250	
MW-7	8/14/2014	34.92	19.27	0.00	15.65	15.47	0.18	580	96	5.6	2.5	13	12	--	--	--	
MW-8	2/7/2012	32.03	18.15	0.00	13.88	14.50	-0.62	<50	<0.50	<0.50	<0.50	<1.0	0.75	<0.50	<0.50	--	
MW-8	8/9/2012	32.03	17.29	0.00	14.74	13.88	0.86	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	2/27/2013	32.03	17.58	0.00	14.45	14.74	-0.29	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	8/15/2013	34.73	18.46	0.00	16.27	14.45	1.82	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	2/6/2014	34.73	19.24	0.00	15.49	16.27	-0.78	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	8/14/2014	34.73	19.06	0.00	15.67	15.49	0.18	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
706 Harrison Street																	
MW-1	2/7/2012	29.17	17.33	0.00	11.84	15.22	-3.38	8,900	1,000	260	230	610	420	<0.50	<0.50	--	A01
MW-1	8/9/2012	29.17	16.58	0.00	12.59	11.84	0.75	2,200	850	110	42	120	84	<5.0	<5.0	<2,500	A01
MW-1	2/27/2013	29.17	17.03	0.00	12.14	12.59	-0.45	--	--	--	--	--	--	--	--	--	Parked Car
MW-1	8/15/2013	29.17	17.89	0.00	11.28	12.14	-0.86	5,800	840	100	93	160	790	<5.0	<5.0	<2,500	A01
MW-1	2/6/2014	29.17	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-1	8/14/2014	29.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Accident, location bl
MW-2	2/7/2012	30.53	17.90	0.00	12.63	15.42	-2.79	36,000	1,100	3,600	990	4,200	1,600	<5.0	<5.0	--	A01
MW-2	8/9/2012	30.53	16.90	0.00	13.63	12.63	1.00	5,100	810	1,800	440	1,900	4,100	<50	<50	<25,000	A01
MW-2	2/27/2013	30.53	17.36	0.00	13.17	13.63	-0.46	45,000	1,700	2,500	1,200	4,900	2,700	<50	1.0	<250	A01
MW-2	8/15/2013	30.53	18.20	0.00	12.33	13.17	-0.84	1,500	1,200	5,600	820	4,400	1,700	<5.0	<5.0	<2,500	A01
MW-2	2/6/2014	30.53	20.20	0.00	10.33	12.33	-2.00	5200 A01	1400 A01	5200 A01	1300 A01	5000 A01	3000 A01	<0.50	<0.50	<250	A01
MW-2	8/14/2014	30.53	18.70	0.00	11.83	10.33	1.50	31,000	1,200	1,800	1,000	4,300	2,400	--	--	--	
MW-3	2/7/2012	29.79	17.23	0.00	12.56	14.88	-2.32	<50	<0.50	<0.50	<0.50	<1.0	110	<0.50	<0.50	--	A01
MW-3	8/9/2012	29.79	16.32	0.00	13.47	12.56	0.91	<50	<0.50	<0.50	<0.50	<1.0	0.80	<0.50	<0.50	<250	
MW-3	2/27/2013	29.79	16.75	0.00	13.04	13.47	-0.43	<50	<0.50	<0.50	<0.50	<1.0	1.2	<0.50	<0.50	<250	
MW-3	8/15/2013	29.79	17.60	0.00	12.19	13.04	-0.85	86	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-3	2/6/2014	29.79	18.36	0.00	11.43	12.19	-0.76	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-3	8/14/2014	29.79	18.07	0.00	11.72	11.43	0.29	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-4	2/7/2012	31.20	18.43	0.00	12.77	14.87	-2.10	1,800	140	15	21	32	430	<0.50	<0.50	--	A01
MW-4	8/9/2012	31.20	--	--	--	12.77	--	--	--	--	--	--	--	--	--	Parked Car	
MW-4	2/27/2013	31.20	--	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car	
MW-4	8/15/2013	31.20	18.70	0.00	12.50	--	--	1,100	620	38	62	67	1,200	<2.5	<2.5	<1,200	A01

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
MW-4	2/6/2014	31.20	20.68	0.00	10.52	12.50	--	620	850 A01	29	54	62	600 A01	<0.50	<0.50	<0.50	<250
MW-4	8/14/2014	31.20	19.17	0.00	12.03	10.52	--	3,200	210	47	72	100	480	--	--	--	
MW-5	2/7/2012	28.07	16.45	0.00	11.62	14.93	-3.31	<50	<0.50	<0.50	<0.50	1.6	190	<0.50	<0.50	--	A01
MW-5	8/9/2012	28.07	15.22	0.00	12.85	11.62	1.23	<50	<0.50	<0.50	<0.50	<1.0	13	<0.50	<0.50	<0.50	<250
MW-5	2/27/2013	28.07	15.68	0.00	12.39	12.85	-0.46	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-5	8/15/2013	28.07	16.55	0.00	11.52	12.39	-0.87	<50	<0.50	<0.50	<0.50	<1.0	0.72	<0.50	<0.50	<0.50	<250
MW-5	2/6/2014	28.07	17.37	0.00	10.70	11.52	-0.82	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-5	8/14/2014	28.07	17.01	0.00	11.06	10.70	0.36	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-6	2/7/2012	29.13	17.51	0.00	11.62	14.71	-3.09	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-6	8/9/2012	29.13	16.41	0.00	12.72	11.62	1.10	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-6	2/27/2013	29.13	16.93	0.00	12.20	12.72	-0.52	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-6	8/15/2013	29.13	17.78	0.00	11.35	12.20	-0.85	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-6	2/6/2014	29.13	18.48	0.00	10.65	11.35	-0.70	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-6	8/14/2014	29.13	18.24	0.00	10.89	10.65	0.24	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-7	2/7/2012	29.70	17.40	0.00	12.30	14.39	-2.09	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	--
MW-7	8/9/2012	29.70	16.38	0.00	13.32	12.30	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-7	2/27/2013	29.70	16.83	0.00	12.87	13.32	-0.45	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-7	8/15/2013	29.70	17.67	0.00	12.03	12.87	-0.84	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-7	2/6/2014	29.70	18.42	0.00	11.28	12.03	-0.75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<250
MW-7	8/14/2014	29.70	18.15	0.00	11.55	11.28	0.27	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
SP-3	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
726 Harrison Street																	
AS-1	8/15/2013	34.50	18.17	0.00	16.33	--	--	--	--	--	--	--	--	--	--	--	
AS-1	8/14/2014	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-1	2/27/2013	*--	18.17	0.00	*--	--	--	960	180	6.0	3.6	12	170	<0.50	<0.50	<0.50	A01
EW-1	8/15/2013	34.37	18.98	0.00	15.39	--	--	290	67	1.7	1.3	3.3	57	<0.50	<0.50	<0.50	<250
EW-1	2/6/2014	34.37	19.69	0.00	14.68	15.39	-0.71	640	68	1.2	7.9	7.0	180 A01	<0.50	<0.50	<0.50	<250
EW-1	8/14/2014	34.37	19.48	0.00	14.89	14.68	0.21	8,000	63	7.5	83	57.0	340	--	--	--	

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date	TOC Elevation Sampled (feet)	LPH DTW (feet btoc)	GW Thickness (feet)	Previous Elevation (feet)	Change in Quarter GWE (feet AMSL)	TPPH (8015B-GC/MC)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments	
MP-1	8/15/2013	34.16	19.03	0.00	15.13	--	<50	<0.50	<0.50	<0.50	<1.0	2.4	<0.50	<0.50	<250		
MP-1	2/6/2014	34.16	21.07	0.00	13.09	15.13	-2.04	<50	<0.50	<0.50	<1.0	1.8	<0.50	<0.50	<250		
MP-1	8/14/2014	34.16	19.56	0.00	14.60	13.09	1.51	93	<0.50	<0.50	<1.0	1.6	--	--	--		
MPE-1	8/15/2013	34.36	19.24	0.00	15.12	--	--	820	110	23	17	45	610	<0.50	<0.50	<250	A01
MPE-1	2/6/2014	34.36	20.00	0.00	14.36	15.12	-0.76	460	93 A01	24	13	29	410 A01	<0.50	<0.50	<250	
MPE-1	8/14/2014	34.36	19.78	0.00	14.58	14.36	0.22	150	24	1.7	3.2	5.5	470	--	--	--	
MW-1	2/7/2012	31.98	18.77	0.00	13.21	15.22	-2.01	370	46	1.7	4.2	4.5	3,800	<0.50	<0.50	--	A01
MW-1	8/9/2012	31.98	17.82	0.00	14.16	13.21	0.95	6600	760	27	58	60	6,700	<0.50	<0.50	--	A01
MW-1	2/27/2013	31.98	18.21	0.00	13.77	14.16	-0.39	3,000	480	26	52	56	2,600	<0.50	<0.50	<250	A01
MW-1	8/15/2013	34.45	19.03	0.00	15.42	13.77	1.65	7,200	820	50	65	99	7,300	<5.0	<5.0	<2,500	A01
MW-1	2/6/2014	34.45	19.87	0.00	14.58	15.42	-0.84	2600 A01	1800 A01	86	400 A01	250	10000 A01	<0.50	<0.50	<250	
MW-1	8/14/2014	34.45	19.67	0.00	14.78	14.58	0.20	9,100	1700	53	340	320	7,600	--	--	--	
MW-2	2/7/2012	32.44	19.52	0.00	12.92	15.42	-2.50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-2	8/9/2012	32.44	18.55	0.00	13.89	12.92	0.97	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-2	2/27/2013	32.44	18.95	0.00	13.49	13.89	-0.40	<50	<0.50	<0.50	<0.50	<1.0	1.7	<0.50	<0.50	<250	
MW-2	8/15/2013	34.91	19.77	0.00	15.14	13.49	1.65	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	2/6/2014	34.91	21.20	0.00	13.71	15.14	-1.43	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	8/14/2014	34.91	20.28	0.00	14.63	13.71	0.92	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-3	2/7/2012	31.64	18.71	0.00	12.93	14.88	-1.95	25	<0.50	<0.50	<0.50	<1.0	2.1	<0.50	<0.50	--	J
MW-3	8/9/2012	31.64	17.74	0.00	13.90	12.93	0.97	39	<0.50	<0.50	<0.50	<1.0	9.2	<0.50	<0.50	--	J
MW-3	2/27/2013	31.64	18.12	0.00	13.52	13.90	-0.38	<50	<0.50	<0.50	<0.50	<1.0	2.8	<0.50	<0.50	<250	
MW-3	8/15/2013	34.12	18.95	0.00	15.17	13.52	1.65	<50	<0.50	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<250	
MW-3	2/6/2014	34.12	19.70	0.00	14.42	15.17	-0.75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-3	8/14/2014	34.12	19.48	0.00	14.64	14.42	0.22	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-4	2/7/2012	32.56	19.09	0.00	13.47	14.87	-1.40	210	<0.50	<0.50	<0.50	<1.0	17	<0.50	<0.50	--	
MW-4	8/9/2012	32.56	18.16	0.00	14.40	13.47	0.93	280	2	<0.50	<0.50	<1.0	21	<0.50	<0.50	--	
MW-4	2/27/2013	32.56	18.50	0.00	14.06	14.40	-0.34	170	1.8	<0.50	<0.50	<1.0	22	<0.50	<0.50	<250	
MW-4	8/15/2013	35.05	19.34	0.00	15.71	14.06	1.65	98	<0.50	<0.50	<0.50	<1.0	25	<0.50	<0.50	<250	
MW-4	2/6/2014	35.05	20.09	0.00	14.96	15.71	-0.75	<50	<0.50	<0.50	<0.50	<1.0	9.4	<0.50	<0.50	<250	
MW-4	8/14/2014	35.05	19.90	0.00	15.15	14.96	0.19	160	0.7	<0.50	<0.50	<1.0	9.4	--	--	--	
MW-5	2/7/2012	32.06	19.16	0.00	12.90	14.93	-2.03	19,000	890	410	360	990	17,000	<6.2	<6.2	--	A01
MW-5	8/9/2012	32.06	18.24	0.00	13.82	12.90	0.92	16,000	1,400	580	470	960	16,000	<5.0	<5.0	--	A01
MW-5	2/27/2013	32.06	--	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car	
MW-5	8/15/2013	34.76	19.40	0.00	15.36	--	--	8,000	1,900	590	390	1,100	20,000	<0.50	<0.50	<250	A01
MW-5	2/6/2014	34.76	21.45	0.00	13.31	15.36	-2.05	3400 A01	1900 A01	150 A01	240 A01	220	7600 A01	<0.50	<0.50	<250	
MW-5	8/14/2014	34.76	19.92	0.00	14.84	13.31	1.53	2,100	720	150	260	370	7,300	--	--	--	

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet)	LPH DTW (feet btoc)	GW Thickness (feet)	Previous Elevation (feet)	Change in Quarter GWE (feet AMSL)	TPPH (8015B- GC/MC)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments	
MW-6	2/7/2012	32.04	26.53	0.00	5.51	14.71	-9.20	410	<0.50	<0.50	<0.50	<1.0	970	<0.50	0.79	--	A01
MW-6	8/9/2012	32.04	28.27	0.00	3.77	5.51	-1.74	830	<0.50	<0.50	<0.50	<1.0	970	<0.50	1.2	--	A01
MW-6	2/27/2013	32.04	26.48	0.00	5.56	3.77	1.79	<50	<0.50	<0.50	<0.50	<1.0	970	<0.50	0.70	<250	A01
MW-6	8/15/2013	34.53	28.85	0.00	5.68	5.56	0.12	58	<0.50	<0.50	<0.50	<1.0	1,000	<0.50	0.79	<250	A01
MW-6	2/6/2014	34.53	27.50	0.00	7.03	5.68	1.35	<50	<0.50	<0.50	<0.50	<1.0	1100 A01	<0.50	<0.50	<250	
MW-6	8/14/2014	34.53	27.92	0.00	6.61	7.03	-0.42	<50	<0.50	<0.50	<0.50	<1.0	900	--	--	--	

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Notes

Analytical results given in micrograms per liter ($\mu\text{g/L}$).

Muir Consulting, Inc. completed a survey of 726 Harrison well locations on August 21, 2013. Elevation data for 800 Harrison Street was converted by using the National Geodetic Survey (NGS) online conversion calculator located from NAV29 to NAV88. The 706 Harrison Street data was not converted due to discrepancies of the data.

Standard Abbreviations

--	not analyzed, measured, or collected
*--	not surveyed
<	not detected at or above laboratory detection limit
TOC	top of casing (surveyed reference elevation)
AMSL	above mean sealevel
DTW	depth to water
btoc	below top of casing
LPH	liquid-phase hydrocarbons
GW	groundwater
$\mu\text{g/L}$	micrograms per liter (approx. equivalent to parts per billion, ppb)
**	Survey completed 8/21/2013
8260B	EPA Method 8260B for Volatile Organic Compounds
GC/MS	gas chromatography–mass spectrometry for TPPH
A01	PQL's and MDL's are raised due to sample dilution.

Analytes

TPPH	total purgeable petroleum hydrocarbons
MTBE	methyl tertiary butyl ether
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane (same as ethylene dichloride)

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane (mg/l)	Alkalinity as CaCO ₃ (mg/l)	Nitrate as NO ₃ (mg/l)	Nitrite as NO ₂ (mg/l)	Sulfate (mg/l)	Non-Volatile Organic Carbon	Comments
800 Harrison Street								
MW-1	8/9/2012	0.026	69	1.9	<0.17	10	1.6	
MW-1	2/27/2013	0.0019	56	1.2	<0.17	9.0	0.87	
MW-1	8/15/2013	<0.0010	45	1.9	<0.17	12	0.75	
MW-1	2/6/2014	0.010	34	1.6	<0.17	7.9	1.1	
MW-1	8/14/2014	0.0035	37	2.0	<0.17	9.4	--	
MW-2	8/9/2012	0.076	190	19	0.38	130	1.4	
MW-2	2/27/2013	0.055	320	16	0.24	160	2.1	
MW-2	8/15/2013	<0.0010	68	10	<0.17	60	0.88	
MW-2	2/6/2014	0.014	110	6.4	<0.17	110	0.70	
MW-2	8/14/2014	0.0060	120	1.0	<0.17	79	--	
MW-3	8/9/2012	6.3	290	<0.44	<0.17	3.5	2.9	A01, S01
MW-3	2/27/2013	4.4	390	<0.44	<0.17	4.5	4	A01
MW-3	8/15/2013	1.6	230	<0.44	<0.17	11	3.7	A01
MW-3	2/6/2014	8.7	420	<0.44	<0.17	4.6	5.1	
MW-3	8/14/2014	17	450	0.55	<0.17	2.2	--	
MW-4	8/9/2012	0.031	98	4.3	<0.17	22	0.90	
MW-4	2/27/2013	0.0023	130	9.7	<0.17	25	0.89	
MW-4	8/15/2013	0.0017	68	2.2	<0.17	14	1.2	
MW-4	2/6/2014	0.0053	81	3.1	<0.17	17	1.3	
MW-4	8/14/2014	0.0016	84	4.4	<0.17	24	--	
MW-5	8/9/2012	2.9	140	<0.44	<0.17	2.5	1.7	A01
MW-5	2/27/2013	1.9	200	<0.44	<0.17	24	2.1	A01
MW-5	8/15/2013	0.0040	150	<0.44	<0.17	7.4	2.9	
MW-5	2/6/2014	3.3	190	<0.44	<0.17	<1.0	2.4	
MW-5	8/14/2014	0.79	170	<0.44	<0.17	<1.0	--	
MW-6	8/9/2012	0.18	130	<0.44	<0.17	16	1.0	A01
MW-6	2/27/2013	0.19	99	0.45	<0.17	13	0.75	
MW-6	8/15/2013	<0.0010	110	0.71	<0.17	13	2.0	
MW-6	2/6/2014	1.8	170	<0.44	<0.17	26	2.9	
MW-6	8/14/2014	<0.0010	140	<0.44	<0.17	25	--	
MW-7	8/9/2012	0.43	180	<0.44	<0.17	17	2.7	A01
MW-7	2/27/2013	0.13	140	<0.44	<0.17	38	1.1	
MW-7	8/15/2013	<0.0010	100	<0.44	<0.17	17	2.1	
MW-7	2/6/2014	1.3	74	<0.44	<0.17	4.3	1.8	
MW-7	8/14/2014	0.44	73	<0.44	<0.17	4.3	--	
MW-8	8/9/2012	0.0041	130	1.3	<0.17	37	1.6	
MW-8	2/27/2013	0.0027	190	<0.44	<0.17	49	2.7	
MW-8	8/15/2013	<0.0010	98	1.0	<0.17	17	1.9	
MW-8	2/6/2014	0.0035	180	<0.44	<0.17	20	1.5	
MW-8	8/14/2014	0.0059	200	<0.44	<0.17	28	--	

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane (mg/l)	Alkalinity as CaCO ₃ (mg/l)	Nitrate as NO ₃ (mg/l)	Nitrite as NO ₂ (mg/l)	Sulfate (mg/l)	Non-Volatile Organic Carbon	Comments
706 Harrison Street								
MW-1	8/9/2012	0.28	250	<0.44	<0.17	51	7.3	A01
MW-1	2/27/2013	--	--	--	--	--	--	Parked Car
MW-1	8/15/2013	0.32	430	<0.44	<0.17	34	12	A01
MW-1	2/6/2014	--	--	--	--	--	--	Parked Car
MW-1	8/14/2014	--	--	--	--	--	--	Car Accident
MW-2	8/9/2012	6.8	500	<0.44	<0.17	<1.0	15	A01, S01
MW-2	2/27/2013	4.9	530	<0.44	<0.17	4.1	16	A01, A10
MW-2	8/15/2013	3.3	520	<0.44	<0.17	<1.0	24	A01
MW-2	2/6/2014	6.5	490	<0.44	<0.17	<1.0	20	A01
MW-2	8/14/2014	18.0	520	<0.44	<0.17	<1.0	--	
MW-3	8/9/2012	<0.0010	130	43	<0.17	61	1.4	
MW-3	2/27/2013	0.0029	130	39	<0.17	52	1.1	
MW-3	8/15/2013	0.0036	120	34	<0.17	44	1.4	
MW-3	2/6/2014	0.0072	110	33	<0.17	37	1.7	
MW-3	8/14/2014	0.0018	110	38	<0.17	42	--	
MW-4	8/9/2012	--	--	--	--	--	--	Parked Car
MW-4	2/27/2013	--	--	--	--	--	--	Parked Car
MW-4	8/15/2013	0.45	510	<0.44	<0.17	4.0	15	A01
MW-4	2/6/2014	2.1	440	<0.44	<0.17	9.8	12	A01
MW-4	8/14/2014	1.6	480	<0.44	<0.17	3.8	--	
MW-5	8/9/2012	<0.0010	150	19	<0.17	49	2.0	
MW-5	2/27/2013	0.0026	150	17	<0.17	46	2.1	
MW-5	8/15/2013	0.0010	150	19	<0.17	51	2.6	
MW-5	2/6/2014	0.0023	160	15	<0.17	51	2.8	
MW-5	8/14/2014	0.0010	160	16	<0.17	55	--	
MW-6	8/9/2012	0.0082	140	<0.44	<0.17	27	1.9	
MW-6	2/27/2013	0.0019	190	<0.44	<0.17	60	2.4	
MW-6	8/15/2013	<0.0010	180	<0.44	<0.17	62	3.4	
MW-6	2/6/2014	0.0017	150	<0.44	<0.17	38	2.7	
MW-6	8/14/2014	<0.0010	150	<0.44	<0.17	36	--	
MW-7	8/9/2012	0.0045	230	<0.44	<0.17	49	3.0	
MW-7	2/27/2013	0.0012	260	<0.44	<0.17	56	3.4	
MW-7	8/15/2013	<0.0010	250	<0.44	<0.17	58	4.4	
MW-7	2/6/2014	0.030	220	<0.44	<0.17	38	3.6	
MW-7	8/14/2014	0.023	230	<0.44	<0.17	48	--	
SP-3	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-5	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	--	--	--	--	--	--	Unable to Locate

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane (mg/l)	Alkalinity as CaCO ₃ (mg/l)	Nitrate as NO ₃ (mg/l)	Nitrite as NO ₂ (mg/l)	Sulfate (mg/l)	Non-Volatile Organic Carbon	Comments
726 Harrison Street								
AS-1	8/15/2013	--	--	--	--	--	--	
AS-1	8/14/2014	--	--	--	--	--	--	
EW-1	2/27/2013	0.91	210	0.5	<0.17	10	3.2	A01
EW-1	8/15/2013	<0.0010	150	1.1	<0.17	13	2.5	
EW-1	2/6/2014	1.2 A01	230	<0.44	<0.17	12	5.0	
EW-1	8/14/2014	0.57	220	<0.44	<0.17	2.8	--	
MP-1	8/15/2013	0.51	230	<0.44	<0.17	14	6.4	
MP-1	8/14/2014	--	--	--	--	--	--	
MPE-1	8/15/2013	<0.0010	82	66	<0.17	27	1.1	
MPE-1	8/14/2014	--	--	--	--	--	--	
MW-1	8/9/2012	--	--	--	--	--	--	
MW-1	2/27/2013	0.51	230	<0.44	<0.17	14	6.4	
MW-1	8/15/2013	1.7	430	<0.44	<0.17	<1.0	29	A01
MW-1	2/6/2014	6.3	370	<0.44	<0.17	<1.0	33 A01	
MW-1	8/14/2014	2.0	380	<0.44	<0.17	<1.0	--	
MW-2	8/9/2012	--	--	--	--	--	--	
MW-2	2/27/2013	<0.0010	82	66	<0.17	27	1.1	
MW-2	8/15/2013	0.0021	97	62	<0.17	32	2.6	
MW-2	2/6/2014	0.0058	150	38	<0.17	38	1.9	
MW-2	8/14/2014	0.0016	130	47	<0.17	41	--	
MW-3	8/9/2012	--	--	--	--	--	--	
MW-3	2/27/2013	0.0012	160	<0.44	<0.17	22	2.0	
MW-3	8/15/2013	<0.0010	160	<0.44	<0.17	19	1.9	
MW-3	2/6/2014	0.0062	140	<0.44	<0.17	18	1.7	
MW-3	8/14/2014	<0.0010	140	<0.44	<0.17	13	--	
MW-4	8/9/2012	--	--	--	--	--	--	
MW-4	2/27/2013	0.32	400	<0.44	<0.17	13	4.8	
MW-4	8/15/2013	<0.0010	290	<0.44	<0.17	15	3.9	
MW-4	2/6/2014	2.4	310	<0.44	<0.17	17	4.0	
MW-4	8/14/2014	0.21	300	<0.44	<0.17	17	--	
MW-5	8/9/2012	--	--	--	--	--	--	
MW-5	2/27/2013	--	--	--	--	--	--	Parked Car
MW-5	8/15/2013	2.2	670	<0.44	<0.17	<1.0	28	A01
MW-5	2/6/2014	11 A01	430	<0.44	<0.17	<1.0	11 A01	
MW-5	8/14/2014	1.7	440	<0.44	<0.17	<1.0	--	
MW-6	8/9/2012	--	--	--	--	--	--	
MW-6	2/27/2013	0.0033	170	6.2	<0.17	25	0.70	
MW-6	8/15/2013	0.0051	180	6.3	<0.17	26	7.4	A01
MW-6	2/6/2014	0.0019	170	3.9	<0.17	24	0.91	
MW-6	8/14/2014	0.0015	170	4.3	<0.17	26	--	

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane (mg/l)	Alkalinity as CaCO ₃ (mg/l)	Nitrate as NO ₃ (mg/l)	Nitrite as NO ₂ (mg/l)	Sulfate (mg/l)	Non-Volatile Organic Carbon (mg/l)	Comments
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Notes

Analytical results given in milligrams per liter (mg/l)

Standard Abbreviations

- not analyzed, measured, or collected
- < not detected at or above laboratory detection limit
- mg/l milligrams per liter (approx. equivalent to parts per million, ppm)

Analytes

- CaCO₃ calcium carbonate
- NO₃ nitrate
- NO₂ nitrogen dioxide
- EDC 1,2-dichloroethane (same as ethylene dichloride)
- A01 PQL's and MDL's are raised due to sample dilution.
- PQL practical quantitation limit
- MDL method detection limit
- A10 PQL's and MDL's were raised due to matrix interference.
- S01 sample result is not within the quantitation range of the method.

Table 2C
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
800 Harrison Street								
MW-1	2/7/2012	<10	<10	--	<50	<10	<10	
MW-1	8/9/2012	<10	<10	<50	<50	<10	<10	
MW-1	2/27/2013	<10	<10	<50	<50	<10	<10	
MW-1	8/15/2013	<10	<10	52	<50	<10	<10	
MW-1	2/6/2014	<10	<10	56	<50	<10	14	
MW-1	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-2	2/7/2012	--	--	--	--	--	--	
MW-2	8/9/2012	--	--	2,200	--	--	--	
MW-2	2/27/2013	--	--	56	--	--	--	
MW-2	8/15/2013	--	--	<50	--	--	--	
MW-2	2/6/2014	--	--	<50	--	--	--	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	2/7/2012	--	--	--	--	--	--	
MW-3	8/9/2012	--	--	5,700	--	--	--	
MW-3	2/27/2013	--	--	8,400	--	--	--	
MW-3	8/15/2013	--	--	4,200	--	--	--	
MW-3	2/6/2014	--	--	2,600	--	--	--	
MW-3	8/14/2014	<10	<10	810	<50	<10	<10	
MW-4	2/7/2012	--	--	--	--	--	--	
MW-4	8/9/2012	--	--	<50	--	--	--	
MW-4	2/27/2013	--	--	<50	--	--	--	
MW-4	8/15/2013	--	--	61	--	--	--	
MW-4	2/6/2014	--	--	480	--	--	--	
MW-4	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-5	2/7/2012	--	--	--	--	--	--	
MW-5	8/9/2012	--	--	860	--	--	--	
MW-5	2/27/2013	--	--	860	--	--	--	
MW-5	8/15/2013	--	--	580	--	--	--	
MW-5	2/6/2014	--	--	410	--	--	--	
MW-5	8/14/2014	<10	<10	160	<50	<10	<10	
MW-6	2/7/2012	--	--	--	--	--	--	
MW-6	8/9/2012	--	--	160	--	--	--	
MW-6	2/27/2013	--	--	<50	--	--	--	
MW-6	8/15/2013	--	--	100	--	--	--	
MW-6	2/6/2014	--	--	110	--	--	--	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	2/7/2012	--	--	--	--	--	--	
MW-7	8/9/2012	--	--	670	--	--	--	
MW-7	2/27/2013	--	--	1,000	--	--	--	
MW-7	8/15/2013	--	--	260	--	--	--	
MW-7	2/6/2014	--	--	480	--	--	--	
MW-7	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-8	2/7/2012	--	--	--	--	--	--	
MW-8	8/9/2012	--	--	680	--	--	--	
MW-8	2/27/2013	--	--	1,400	--	--	--	

Table 2C
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
MW-8	8/15/2013	--	--	71	--	--	--	
MW-8	2/6/2014	--	--	130	--	--	--	
MW-8	8/14/2014	<10	<10	<50	<50	<10	<10	
706 Harrison Street								
MW-1	8/9/2012	--	--	830	--	--	--	
MW-1	2/27/2013	--	--	--	--	--	--	Parked Car
MW-1	8/15/2013	--	--	3,100	--	--	--	
MW-1	2/6/2014	--	--	--	--	--	--	Parked Car
MW-1	8/14/2014	--	--	--	--	--	--	
MW-2	8/9/2012	--	--	6,900	--	--	--	
MW-2	2/27/2013	--	--	9,500	--	--	--	
MW-2	8/15/2013	--	--	7,800	--	--	--	
MW-2	2/6/2014	--	--	4,600	--	--	--	
MW-2	8/14/2014	<10	<10	3,600	<50	<10	<10	
MW-3	8/9/2012	--	--	<50	--	--	--	
MW-3	2/27/2013	--	--	<50	--	--	--	
MW-3	8/15/2013	--	--	<50	--	--	--	
MW-3	2/6/2014	--	--	<50	--	--	--	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/9/2012	--	--	--	--	--	--	
MW-4	2/27/2013	--	--	--	--	--	--	Parked Car
MW-4	8/15/2013	--	--	3,300	--	--	--	
MW-4	2/6/2014	--	--	340	--	--	--	
MW-4	8/14/2014	<10	<10	180	<50	<10	<10	
MW-5	8/9/2012	--	--	<50	--	--	--	
MW-5	2/27/2013	--	--	<50	--	--	--	
MW-5	8/15/2013	--	--	<50	--	--	--	
MW-5	2/6/2014	--	--	<50	--	--	--	
MW-5	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-6	8/9/2012	--	--	<50	--	--	--	
MW-6	2/27/2013	--	--	94	--	--	--	
MW-6	8/15/2013	--	--	120	--	--	--	
MW-6	2/6/2014	--	--	75	--	--	--	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	8/9/2012	--	--	860	--	--	--	
MW-7	2/27/2013	--	--	2,600	--	--	--	
MW-7	8/15/2013	--	--	340	--	--	--	
MW-7	2/6/2014	--	--	760	--	--	--	
MW-7	8/14/2014	<10	<10	1,200	<50	<10	<10	
SP-3	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	--	--	--	--	--	--	Unable to Locate

Table 2C
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
SP-5	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	--	--	--	--	--	--	Unable to Locate
726 Harrison Street								
AS-1	8/15/2013	--	--	--	--	--	--	
AS-1	8/14/2014	--	--	--	--	--	--	
EW-1	2/27/2013	--	--	3,100	--	--	--	
EW-1	8/15/2013	--	--	1,300	--	--	--	
EW-1	2/6/2014	--	--	1,700	--	--	--	
EW-1	8/14/2014	<10	<10	2,600	<50	<10	<10	
MP-1	8/15/2013	--	--	3,500	--	--	--	
MP-1	8/14/2014	<10	<10	--	<50	<10	<10	
MPE-1	8/15/2013	--	--	<50	--	--	--	
MPE-1	8/14/2014	<10	<10	--	<50	<10	<10	
MW-1	8/9/2012	--	--	--	--	--	--	
MW-1	2/27/2013	--	--	2,000	--	--	--	
MW-1	8/15/2013	--	--	3,500	--	--	--	
MW-1	2/6/2014	--	--	950	--	--	--	
MW-1	8/14/2014	<10	<10	1,900	<50	<10	<10	
MW-2	8/9/2012	--	--	--	--	--	--	
MW-2	2/27/2013	--	--	<50	--	--	--	
MW-2	8/15/2013	--	--	<50	--	--	--	
MW-2	2/6/2014	--	--	<50	--	--	--	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	8/9/2012	--	--	--	--	--	--	
MW-3	2/27/2013	--	--	<50	--	--	--	
MW-3	8/15/2013	--	--	110	--	--	--	
MW-3	2/6/2014	--	--	<50	--	--	--	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/9/2012	--	--	--	--	--	--	
MW-4	2/27/2013	--	--	4,300	--	--	--	
MW-4	8/15/2013	--	--	1,300	--	--	--	
MW-4	2/6/2014	--	--	<50	--	--	--	
MW-4	8/14/2014	<10	<10	380	<50	<10	<10	
MW-5	8/9/2012	--	--	--	--	--	--	
MW-5	2/27/2013	--	--	--	--	--	--	Parked Car
MW-5	8/15/2013	--	--	7,300	--	--	--	
MW-5	2/6/2014	--	--	4,200	--	--	--	
MW-5	8/14/2014	<10	<10	1,200	<50	<10	<10	
MW-6	8/9/2012	--	--	--	--	--	--	
MW-6	2/27/2013	--	--	<50	--	--	--	
MW-6	8/15/2013	--	--	<50	--	--	--	
MW-6	2/6/2014	--	--	<50	--	--	--	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	

Table 2C
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
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Notes

Analytical results given in micrograms per liter ($\mu\text{g/l}$)

Standard Abbreviations

$\mu\text{g/l}$ micrograms per liter (approx. equivalent to parts per billion, ppb)

ARCADIS

Attachment A

Field Data Sheets and General Procedures



GETTLER-RYAN INC.

TRANSMITTAL

August 18, 2014
G-R #385647

TO: Ms. Katherine Brandt
Arcadis
2000 Powell Street, 7th Floor
Emeryville, CA 94608

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

RE: Chevron Facility
#351646/0752
800 Harrison Street
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Second Semi-Annual Event of August 14, 2014

COMMENTS:

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

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

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

trans/351646 0752

WELL CONDITION STATUS SHEET

1 of 4

Client

Facility #: **Chevron #351646 / 0752**

Job #: 385647

Site Address: **800 Harrison Street**

Event Date: 8/14/14

City: **Oakland, CA**

Sampler: An

Comments A-new - unable to access - area curtailed off with wrecked cars and skeletons..

WELL CONDITION STATUS SHEET

2 of 4

**Client/
Facility #:** **Chevron #351646 / 0752**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job #: **385647**
Event Date: **8-14-14**
Sampler: **ET**

Comments _____

WELL CONDITION STATUS SHEET

3 of 4

**Client/
Facility #:** **Chevron #351646 / 0752**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job #: **385647**
Event Date: *8/14/14*
Sampler: *JP*

Comments _____

WELL CONDITION STATUS SHEET

4 of 4

**Client/
Facility #:** **Chevron #351646 / 0752**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job #: 385647
Event Date: 3/17/14
Sampler: GWS

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 #351646 / 0752Site Address: 800 Harrison StreetCity: Oakland, CAJob Number: 385647Event Date: 8.14.14 (inclusive)Sampler: FT

Well ID

MW-1

Date Monitored:

8.14.14

Well Diameter

1 1/2" 4 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
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Total Depth

33.48 ft.

Depth to Water

20.98 ft. Check if water column is less than 0.50 ft.12.50xVF .17= 2.12x3 case volume = Estimated Purge Volume: 6.0 gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.48**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): 0937

Weather Conditions:

FOLSample Time/Date: 1000 / 8.14.14Water Color: LT. BROWN Odor: Y NOApprox. Flow Rate: 1 gpm.Sediment Description: S-SILTYDid well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 21.06

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (<u>us</u> mS µmhos/cm)	Temperature (<u>°C</u> / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0941</u>	<u>2.0</u>	<u>8.06</u>	<u>795</u>	<u>19.5</u>	<u>PRE: 1.9</u>	<u>PRE: 115</u>	<u>PRE: 172</u>
<u>0945</u>	<u>4.0</u>	<u>8.02</u>	<u>789</u>	<u>19.0</u>			
<u>0949</u>	<u>6.0</u>	<u>7.97</u>	<u>782</u>	<u>18.6</u>	<u>POST: 1.8</u>	<u>POST: 128</u>	<u>POST: 186</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>6 x voa vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)</u>
	<u>1 x 500ml poly</u>	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>DISSOVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)</u>
	<u>1 x 1 liter poly</u>	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>NITRATE/SULFATE/ALKALINITY</u>
	<u>3 x voa vial</u>	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>METHANE</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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8.14.14 (inclusive)
 Sampler: FT

Well ID: MW-2
 Well Diameter: 110/416 in.
 Total Depth: 30.78 ft.
 Depth to Water: 20.68 ft.

Date Monitored: 8.14.14

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.

10.10 xVF .7 = 1.71 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.70

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

Start Time (purge): 0615
 Sample Time/Date: 0635 / 8.14.14
 Approx. Flow Rate: / gpm.
 Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.75

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>µS/mS</u> <u>µmhos/cm</u>	Temperature <u>°C</u> / <u>F</u>	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0618</u>	<u>1.5</u>	<u>7.92</u>	<u>686</u>	<u>19.2</u>	<u>PRE: 2.5</u>	<u>PRE: 136</u>	<u>PRE: 62</u>
<u>0621</u>	<u>3.0</u>	<u>7.89</u>	<u>681</u>	<u>18.9</u>			
<u>0625</u>	<u>5.0</u>	<u>7.86</u>	<u>677</u>	<u>18.6</u>	<u>POST: 2.3</u>	<u>POST: 143</u>	<u>POST: 70</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>6</u> x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	<u>1</u> x 500ml poly	YES	NP	BC LABS	DISSOVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	<u>1</u> x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	<u>3</u> x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8.14.14 (inclusive)
 Sampler: Fr

Well ID: MW-3
 Well Diameter: 1 1/2 / 4 / 6 in.
 Total Depth: 30.49 ft.
 Depth to Water: 19.30 ft.

Date Monitored: 8.14.14

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.

11.19 xVF .17 = 1.90 x3 case volume = Estimated Purge Volume: 5.70 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.53

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): 0855
 Sample Time/Date: 0917 / 8.14.14
 Approx. Flow Rate: / gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 19.38

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>15</u> / mS μmhos/cm)	Temperature (<u>65</u> / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0859</u>	<u>2.0</u>	<u>7.78</u>	<u>1026</u>	<u>19.4</u>	<u>PRE: 1.7</u>	<u>PRE: -75</u>	<u>PRE: 58</u>
<u>0903</u>	<u>4.0</u>	<u>7.75</u>	<u>1035</u>	<u>18.9</u>			
<u>0907</u>	<u>6.0</u>	<u>7.72</u>	<u>1041</u>	<u>18.7</u>	<u>POST: 1.6</u>	<u>POST: -69</u>	<u>POST: 67</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</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)</u>
	<u>1</u> x 500ml poly	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)</u>
	<u>1</u> x 1 liter poly	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>NITRATE/SULFATE/ALKALINITY</u>
	<u>3</u> x voa vial	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>METHANE</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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8-14-14** (inclusive)
 Sampler: **Fr**

Well ID: **MW-4**
 Well Diameter: **1 1/2 / 4 / 6 in.**
 Total Depth: **32.03 ft.**
 Depth to Water: **19.33 ft.**

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

12.70 xVF **.17** = **2.15** x3 case volume = Estimated Purge Volume: **6.0** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **21.87**

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

Start Time (purge): **0812**
 Sample Time/Date: **0835 / 8.14.14**
 Approx. Flow Rate: **/** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.40**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (US / mS μmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0816	2.0	8.13	670	19.3	PRE: 2.4	PRE: 197	PRE: 186
0820	4.0	8.09	667	18.9			
0824	6.0	8.06	662	18.5	POST: 2.2	POST: 189	POST: 197

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8.14.14 (inclusive)
 Sampler: FR

Well ID: MW-5
 Well Diameter: 1 1/2 / 4 / 6 in.
 Total Depth: 31.60 ft.
 Depth to Water: 19.48 ft.

Date Monitored: 8.14.14

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.

12.12 xVF .17 = 2.06 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.90

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): 0732
 Sample Time/Date: 0754 / 8.14.14
 Approx. Flow Rate: / gpm.
 Did well de-water? No If yes, Time: _____

Weather Conditions: FOL
 Water Color: 6mg Odor: OD/N MODERATE
 Sediment Description: S. SILTY
 Volume: _____ gal. DTW @ Sampling: 19.54

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)	TURBIDITY
<u>0736</u>	<u>2.0</u>	<u>7.97</u>	<u>892</u>	<u>19.4</u>	<u>1.8</u>	<u>41</u>	<u>162</u>
<u>0740</u>	<u>4.0</u>	<u>7.94</u>	<u>895</u>	<u>19.0</u>			
<u>0744</u>	<u>6.0</u>	<u>7.91</u>	<u>906</u>	<u>18.7</u>	<u>1.7</u>	<u>30</u>	<u>181</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>6</u> x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	<u>1</u> x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	<u>1</u> x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	<u>2</u> x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8.14.14 (inclusive)
 Sampler: FT

Well ID: MW-6
 Well Diameter: 1 1/2" 4 1/2 in.
 Total Depth: 30.86 ft.
 Depth to Water: 18.93 ft.

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

11.93 x VF .17 = 2.02 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.31

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): 0650
 Sample Time/Date: 0712 / 8.14.14
 Approx. Flow Rate: — gpm.
 Did well de-water? No If yes, Time: _____

Weather Conditions: Foul
 Water Color: Green Odor: Y / AD
 Sediment Description: S. SILTY
 Volume: _____ gal. DTW @ Sampling: 19.02

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>US</u> / mS μmhos/cm	Temperature <u>0</u> / F	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0654</u>	<u>2.0</u>	<u>7.82</u>	<u>723</u>	<u>19.5</u>	<u>PRE: 2.3</u>	<u>PRE: 146</u>	<u>PRE: 175</u>
<u>0658</u>	<u>4.0</u>	<u>7.79</u>	<u>718</u>	<u>19.2</u>			
<u>0702</u>	<u>6.0</u>	<u>7.76</u>	<u>711</u>	<u>19.0</u>	<u>POST: 2.1</u>	<u>POST: 157</u>	<u>POST: 162</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>6</u> x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	<u>1</u> x 500ml poly	YES	NP	BC LABS	DISSOVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	<u>1</u> x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	<u>3</u> x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 3/14/14 (inclusive)
 Sampler: Gm

Well ID: MW-7
 Well Diameter: 1 1/2" 4/6 in.
 Total Depth: 31.40 ft.
 Depth to Water: 19.27 ft.

Date Monitored: 3/14/14

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.

17.13 xVF 0.17 = 2.06 x3 case volume = Estimated Purge Volume: 6.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.69

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

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

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

Start Time (purge): 0700
 Sample Time/Date: 0743 / 3/14/14
 Approx. Flow Rate: — gpm.
 Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 21.14

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0705</u>	<u>2.25</u>	<u>6.93</u>	<u>707</u>	<u>13.5</u>	<u>PRE: 1.3</u>	<u>PRE: -27</u>	<u>PRE: 226</u>
<u>0710</u>	<u>4.5</u>	<u>6.89</u>	<u>714</u>	<u>15.5</u>			
<u>0715</u>	<u>6.5</u>	<u>6.84</u>	<u>722</u>	<u>18.5</u>	<u>POST: 2.0</u>	<u>POST: -10</u>	<u>POST: 530</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>6x voa vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)</u>
	<u>1 x 500ml poly</u>	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)</u>
	<u>1 x 1 liter poly</u>	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>NITRATE/SULFATE/ALKALINITY</u>
	<u>3 x voa vial</u>	<u>YES</u>	<u>NP</u>	<u>BC LABS</u>	<u>METHANE</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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **GM**

Well ID: **MW-8**
 Well Diameter: **1 1/4 / 6 in.**
 Total Depth: **23.41 ft.**
 Depth to Water: **19.06 ft.**

Date Monitored: **6/14**

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.

9.35 xVF **0.17** = **1.58** x3 case volume = Estimated Purge Volume: **5** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.93**

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

Start Time (purge): **0600**
 Sample Time/Date: **0640 / 8/14/14**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **19.93**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0604	2	6.90	371	13.6	PRE: 1.0	PRE: 163	PRE: 99.8
0607	3.5	6.71	879	13.5			
0611	5	6.67	887	13.5	POST: 1.1	POST: 186	POST: 404

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
1	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
1	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
3	x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job Number: 385647
Event Date: 8-14-14
Sampler: Aw

Well ID	A-MW-1
Well Diameter	1 / 2 / 4 / 6 in.
Total Depth	ft.
Depth to Water	ft.

Date Monitored:

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:

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

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. RTW @ Sampling:

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)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

LABORATORY INFORMATION					
SAMPLE ID	CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: Unable to access area cushioned off due to
a car accident. Area filled with three wrecked cars
8 debris.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock:

Add/Replaced Plug:



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8-14-14 (inclusive)
 Sampler: AW

Well ID: A-MW-2
 Well Diameter: 1 1/2 4 / 6 in.
 Total Depth: 24.84 ft.
 Depth to Water: 18.70 ft.

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

Check if water column is less than 0.50 ft.

$$6.14 \text{ xVF } 1.7 = 1.04 \quad \times 3 \text{ case volume} = \text{Estimated Purge Volume: } 3.5 \text{ gal.}$$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.92

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): 0935
 Sample Time/Date: 1015 / 8-14-14
 Approx. Flow Rate: 1 gpm.
 Did well de-water? N If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 19.55

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (ms mS umhos/cm)	Temperature (°F / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0940	1.5	7.08	896	19.4	PRE: 1.1	PRE: 59	PRE: L. L6
0945	2.5	7.14	928	19.7			
0950	3.5	7.19	969	19.9	POST: 1.2	POST: 83	POST: L. L0

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A-MW-2</u>	<u>6</u> x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
<u>1</u>	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
<u>1</u>	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
<u>3</u>	x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: Low light - unable to read turbidity, water too turbid.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **BW**

Well ID **A-Mw-3**Date Monitored: **8-14-14**Well Diameter **11 1/4 / 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 **27.28 ft.**Depth to Water **18.07 ft.** Check if water column is less than 0.50 ft.**9.21** xVF **.17** = **1.56** x3 case volume = Estimated Purge Volume: **5.0** gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **19.01****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): **0840**Weather Conditions: **Cloudy**Sample Time/Date: **0920 / 8-14-14**Water Color: **Cloudy** Odor: **Oil N** **moderab**Approx. Flow Rate: **—** gpm.Sediment Description: **Cloudy**Did well de-water? **N** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.29**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity 100 mS umhos/cm)	Temperature 20 / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0845	1.5	7.12	411	19.0	PRE: 1.1	PRE: 65	PRE: L-L6
0850	3.0	7.19	455	19.2			
0855	5.0	7.22	468	19.5	POST: 1.3	POST: 104	POST: L-L6

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-mw-3	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: *** Unable to read turbidity. Low light, water too turbid.**

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752**

Site Address: **800 Harrison Street**

City: **Oakland, CA**

Job Number: **385647**

Event Date: **8-14-14** (inclusive)

Sampler: **AW**

Well ID: **A-MW-4**
 Well Diameter: **11 1/4 / 6 in.**
 Total Depth: **25.58 ft.**
 Depth to Water: **19.17 ft.**

Date Monitored: **8-14-14**

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.

6.41 xVF **.17** = **1.08** x3 case volume = Estimated Purge Volume: **3.5** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.45**

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): **0750**

Weather Conditions:

Sample Time/Date: **0825 / 8-14-14**

Water Color: **Cloudy** Odor: **N** Moderate

Approx. Flow Rate: **—** gpm.

Sediment Description: **slight**

Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **20.06**

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)	TURBIDITY NTU
0755	1.5	7.22	627	18.6	PRE: 1.2	PRE: 155	PRE: 468
0800	2.5	7.29	665	19.0			
0805	3.5	7.31	682	19.1	POST: 1.4	POST: 189	POST: 504

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-mw-4	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **JH**

Well ID **AMW-5**

Well Diameter **11 1/4 / 6 in.**

Total Depth **28.19 ft.**

Depth to Water **17.01 ft.**

11.18

xVF **.17**

Date Monitored: **8/14/14**
 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.

1.90 x3 case volume = Estimated Purge Volume: **5.70** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **19.24**

Purge Equipment:

Disposable Bailer **X**

Stainless Steel Bailer _____

Stack Pump _____

Peristaltic Pump _____

QED Bladder Pump _____

Other: _____

Sampling Equipment:

Disposable Bailer **X**

Pressure Bailer _____

Metal Filters _____

Peristaltic Pump _____

QED Bladder Pump _____

Other: _____

Time Started: _____ (2400 hrs)

Time Completed: _____ (2400 hrs)

Depth to Product: _____ ft

Depth to Water: _____ ft

Hydrocarbon Thickness: _____ ft

Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)

Amt Removed from Skimmer: _____ ltr

Amt Removed from Well: _____ ltr

Water Removed: _____ ltr

Start Time (purge): **0520**

Weather Conditions: **Dark / Foggy**

Sample Time/Date: **0550 / 8/14/14**

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

Approx. Flow Rate: **—** gpm.

Sediment Description: **LsHr**

Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **17.26**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/mS µmhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0525	2	7.04	523	22.4	PRE: 1.4	PRE: 47	PRE: 107
0530	4	7.01	509	22.1			
0535	6	6.92	487	22.0	POST: 1.6	POST: 52	POST: 132

LABORATORY INFORMATION

SAMPLE ID	CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
AMW-5	6 x vba vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **JH**

Well ID: **AMW-6**
 Well Diameter: **10 1/4 / 6 in.**
 Total Depth: **25.95 ft.**
 Depth to Water: **18.24 ft.**

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

7.71 xVF **.17** = **1.31** x3 case volume = Estimated Purge Volume: **3.93** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **19.78**

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): **0615**
 Sample Time/Date: **0655 / 8/14/14**
 Approx. Flow Rate: **— gpm.**
 Did well de-water? **no** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.61**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS mmhos/cm)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0619	1.5	7.09	505	22.1	PRE: 1.0	PRE: 29	PRE: 88
0623	3.0	7.02	486	22.0			
0627	4.0	6.94	472	21.9	POST: 1.3	POST: 41	POST: 106

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
6	x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
1	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
1	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
3	x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **JH**

Well ID: **AMW-7**
 Well Diameter: **11 1/4 / 6 in.**
 Total Depth: **27.70 ft.**
 Depth to Water: **18.15 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.

$$9.55 \text{ xVF } .17 = 1.62 \quad \times 3 \text{ case volume} = \text{Estimated Purge Volume: } 4.87 \text{ gal.}$$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.06**

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

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

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

Start Time (purge): **0715**
 Sample Time/Date: **0755 / 8/14/14**
 Approx. Flow Rate: **— gpm.**
 Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.70**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/mS µmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
0715	1.5	6.91	566	22.4	PRE: 1.3	PRE: 39	PRE: 143
0724	3.0	6.84	540	22.2			
0729	5.0	6.75	527	22.1	POST: 1.6	POST: 52	POST: 162

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<i>AMW-7</i>	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8-14-14** (inclusive)
 Sampler: **AW**

Well ID **SP-3**

Date Monitored:

Well Diameter **1 1/2 / 4 / 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 **ft.**Depth to Water **ft.** 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 (μS / mS μmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
_____	_____	_____	_____	_____	PRE:	PRE:	PRE:
_____	_____	_____	_____	_____	POST:	POST:	POST:
_____	_____	_____	_____	_____			
_____	_____	_____	_____	_____			

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: UTL - unable to locate.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8-14-14** (inclusive)
 Sampler: **AW**

Well ID **SP-4**

Date Monitored:

Well Diameter **1 1/2 / 4 / 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 **ft.**Depth to Water **ft.** 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 (μS / mS μmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
_____	_____	_____	_____	_____	PRE:	PRE:	PRE:
_____	_____	_____	_____	_____	POST:	POST:	POST:
_____	_____	_____	_____	_____			
_____	_____	_____	_____	_____			
_____	_____	_____	_____	_____			
_____	_____	_____	_____	_____			
_____	_____	_____	_____	_____			

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)	
x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)	
x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY	
x voa vial	YES	NP	BC LABS	METHANE	

COMMENTS: unable to locate

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility#: **Chevron #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8-14-14** (inclusive)
 Sampler: **BW**

Well ID: **SP-5**
 Well Diameter: **1 1/2 / 4 / 6 in.**
 Total Depth: **ft.**
 Depth to Water: **ft.**

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

Check if water column is less 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)	TURBIDITY
_____	_____	_____	_____	_____	PRE: _____	PRE: _____	PRE: _____
_____	_____	_____	_____	_____	POST: _____	POST: _____	POST: _____
_____	_____	_____	_____	_____			
_____	_____	_____	_____	_____			

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: Unable to locate.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility#: **Chevron #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **JH**

Well ID: **SMW-1**
 Well Diameter: **11 1/4 x 6 in.**
 Total Depth: **27.49 ft.**
 Depth to Water: **19.67 ft.**

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

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.

7.82 xVF **.17** = **1.32** x3 case volume = Estimated Purge Volume: **3.98** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **21.23**

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): **0915**

Weather Conditions:

Sample Time/Date: **0950 / 8/14/14**

Water Color: **cloudy** Odor: **④ N strong**

Approx. Flow Rate: **—** gpm.

Sediment Description: **Liq**

Did well de-water? **no**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **20.38**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/mS mmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0919	1.5	7.27	369	21.7	PRE: .7	PRE: 84	PRE: 275
0923	3.0	7.19	382	21.4			
0927	4.0	7.11	427	21.2	POST: 1.3	POST: 101	POST: 319

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
SMW-1	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8-14-14** (inclusive)
 Sampler: **aw**

Well ID: **S-MW-2**
 Well Diameter: **11 1/4 / 6 in.**
 Total Depth: **28.00 ft.**
 Depth to Water: **20.28 ft.**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
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Check if water column is less than 0.50 ft.
 $7.72 \text{ xVF } .17 = 1.31$ x3 case volume = Estimated Purge Volume: **4.0 gal.**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **21.82**

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

Start Time (purge): **0700**
 Sample Time/Date: **0735 / 8-14-14**
 Approx. Flow Rate: **— gpm.**
 Did well de-water? **N** If yes, Time: **—** Volume: **— gal.** DTW @ Sampling: **21.33**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0705	1.5	7.09	444	18.7	PRE: 1.2	PRE: 168	PRE: LL0
0710	3.0	7.14	469	18.9			
0715	4.0	7.15	475	18.9	POST: 1.4	POST: 207	POST: LL0

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-2	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: *** turbidity meter unable to read thru sample. Low Light error.**

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **GM**

Well ID: **S-MW-3**
 Well Diameter: **11 1/4" 6 in.**
 Total Depth: **26.79 ft.**
 Depth to Water: **19.48 ft.**

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

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.

7.31 xVF **0.17** = **1.24** x3 case volume = Estimated Purge Volume: **4** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.94**

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: **4** 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): **1040**

Weather Conditions: **Cloudy**

Sample Time/Date: **11/18/13/14/14**

Water Color: **Brown** Odor: **CPIN** Sludge: **SLUDGE**

Approx. Flow Rate: **—** gpm.

Sediment Description: **SILT**

Did well de-water? **NO**

If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **20.22**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
1043	1.5	6.91	547	13.6	PRE: 1.8	PRE: 47	PRE: 120 FT
1046	3	6.85	551	13.3			
1049	4	6.83	558	13.2	POST: 2.1	POST: 59	POST: 120 FT

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-3	0 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)	
1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY	
3 x voa vial	YES	NP	BC LABS	METHANE	

COMMENTS: *** L CO READING TURBIDITY, WATER TO DIRTY TO GET
READING LIGHT UNABLE TO PASS THRU.**

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **34**

Well ID: **SMW-4**
 Well Diameter: **11 3/4 in.**
 Total Depth: **29.31 ft.**
 Depth to Water: **19.90 ft.**

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

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.

9.41 xVF **.17** = **1.59** x3 case volume = Estimated Purge Volume: **4.79** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **21.78**

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

Sampling Equipment:

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

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

Start Time (purge): **1010**
 Sample Time/Date: **1040 / 8/14/14**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **No** If yes, Time: _____

Weather Conditions: **Cloudy**
 Water Color: **Cloudy** Odor: **Oil & Gas**
 Sediment Description: **Light**

Volume: _____ gal. DTW @ Sampling: **21.30**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
1014	1.5	6.94	680	21.8	PRE: 1.0	PRE: 92	PRE: 270
1019	3.0	6.87	661	21.6			
1023	5.0	6.82	627	21.1	POST: 1.7	POST: 107	POST: 402

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
SMW-4	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8/14/14 (inclusive)
 Sampler: GM

Well ID: S-MW-5
 Well Diameter: 1 1/2" 4 1/2 in.
 Total Depth: 28.50 ft.
 Depth to Water: 19.92 ft.

Date Monitored: 8/14/14

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.

$$8.58 \text{ xVF } 0.17 = 1.45 \quad \text{x3 case volume} = \text{Estimated Purge Volume: } 4.5 \text{ gal.}$$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.67

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): 0805

Weather Conditions: Cloudy

Sample Time/Date: 0845 / 8/14/14

Water Color: cloudy Odor: Y/N STRONG

Approx. Flow Rate: _____ gpm.

Sediment Description: SL SILT

Did well de-water? ND If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 21.19

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\Omega$ / mS umhos/cm)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0809	1.5	6.79	875	13.6	PRE: 1.1	PRE: 63	PRE: 38.4
0912	3	6.74	381	13.5			
0816	4.5	6.67	887	10.4	POST: 1.6	POST: 51	POST: 250

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-5	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **3/14/14** (inclusive)
 Sampler: **G.M**

Well ID: **S-mw-6**
 Well Diameter: **1 1/2** in.
 Total Depth: **49.29** ft.
 Depth to Water: **27.92** ft.

Date Monitored: **3/14/14**

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.

21.37 xVF **0.17** = **3.63** x3 case volume = Estimated Purge Volume: **11** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **32.19**

Purge Equipment:

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

Sampling Equipment:

Disposable Bailer **V**
 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): **0855**

Weather Conditions: **Cloudy**

Sample Time/Date: **0935 / 3/14/14**

Water Color: **clear**

Odor: **YDN** **SLIGHT**

Approx. Flow Rate: **—** gpm.

Sediment Description: **SLIGHT**

Did well de-water? **NO** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **30.15**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μs / mS umhos/cm)	Temperature (C F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0901	4	7.01	423	13.3	PRE: 1.4	PRE: 39	PRE: 33.9
0907	3	6.94	435	13.3			
0911	11	6.89	435	13.2	POST: 1.7	POST: 51	POST: 37.3

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-mw-6	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8/14/14** (inclusive)
 Sampler: **34**

Well ID: **SEW-1**
 Well Diameter: **1121416 in.**
 Total Depth: **28.67 ft.**
 Depth to Water: **19.48 ft.**

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

Check if water column is less than 0.50 ft.

xVF **7.50** = **13.70** x3 case volume = Estimated Purge Volume: **41.35** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **21.31**

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

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

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

Start Time (purge): **0820**
 Sample Time/Date: **0900 / 8/14/14**
 Approx. Flow Rate: **2** gpm.
 Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **21.20**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity µS / mS mmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY ntu
0827	14	7.19	583	21.8	PRE: 1.3	PRE: 11	PRE: 170
0834	28	7.05	560	21.7			
0841	42	6.82	537	21.4	POST: 1.0	POST: 29	POST: 202

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
SEW-1	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	1 x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	1 x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	3 x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **385647**
 Event Date: **8-14-14** (inclusive)
 Sampler: **AN**

Well ID: **MPE-1**
 Well Diameter: **1 1/2** in.
 Total Depth: **32.13** ft.
 Depth to Water: **19.78** ft.

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

Check if water column is less than 0.50 ft.
 $12.35 \times VF - .66 = 8.15$ x3 case volume = Estimated Purge Volume: **24.5** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **22.25**

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)	
Amnt Removed from Skimmer:	litr
Amnt Removed from Well:	litr
Water Removed:	litr

Start Time (purge): **0615**
 Sample Time/Date: **0645 / 8-14-14**
 Approx. Flow Rate: **2.0** gpm.
 Did well de-water? **N** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **21.88**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity PS / mS μmhos/cm)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0619	8.0	7.05	286	18.6	PRE: 1.2	PRE: 169	PRE: 189
0623	16.0	7.11	314	19.0			
0628	24.5	7.20	377	19.3	POST: 1.4	POST: 214	POST: 286

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MPE-1	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	x voa vial	YES	NP	BC LABS	METHANE

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 #351646 / 0752
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 385647
 Event Date: 8/14/14 (inclusive)
 Sampler: GM

Well ID: MP-1
 Well Diameter: 12 1/4 / 6 in.
 Total Depth: 30.00 ft.
 Depth to Water: 19.56 ft.

Date Monitored: 8/14/14

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.
 $10.44 \times VF \ 0.04 = 0.41$ x3 case volume = Estimated Purge Volume: 1.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.64

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

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

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

Start Time (purge): 0943
 Sample Time/Date: 1030 / 3/14/14
 Approx. Flow Rate: _____ gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.12

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>0.89</u> μS/mS μmhos/cm	Temperature <u>62.4</u> C / F	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0952</u>	<u>.5</u>	<u>6.89</u>	<u>624</u>	<u>63.4</u>	<u>1.5</u>	<u>79</u>	<u>LLO*</u>
<u>0957</u>	<u>1.0</u>	<u>6.83</u>	<u>676</u>	<u>63.4</u>			
<u>1003</u>	<u>1.5</u>	<u>6.86</u>	<u>679</u>	<u>63.4</u>	<u>1.4</u>	<u>84</u>	<u>LLO*</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MP-1</u>	<u>6</u> x voa vial	YES	HCL	BC LABS	TPH-GRO(C6-C12)(8015)/BTEX+MTBE(8260)
	<u>1</u> x 500ml poly	YES	NP	BC LABS	DISSOLVED METALS (Cd, Cr, Pb, Ni, Zn, Fe)(6010)
	<u>1</u> x 1 liter poly	YES	NP	BC LABS	NITRATE/SULFATE/ALKALINITY
	<u>3</u> x voa vial	YES	NP	BC LABS	METHANE

COMMENTS: * LLO TURBIDITY, WATER TOO DIRTY TO GET READING
LIGHT UNABLE TO PASS THRU.

Add/Replaced Gasket: _____

Add/Replaced Bolt: _____

Add/Replaced Lock: _____

Add/Replaced Plug: _____

CHAIN OF CUSTODY FORM

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

COC _____ of _____

Union Oil Site ID: 751646				Union Oil Consultant: Arcadis				ANALYSES REQUIRED			
Site Global ID: T100011486				Consultant Contact: Katherine Brandt							
Site Address: 100 Harrison St. Bakersfield, CA				Consultant Phone No.: 408-276-9675							
Union Oil PM: Tom Blalock				Sampling Company: TECO Gettler Inc.							
Union Oil PM Phone No.: 705-793-6463				Sampled By (PRINT): Alex Wong							
Charge Code: NWRTB-0 751646-0-LAB				Sampler Signature:							
<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			
Field Point Name	Matrix	DTW	Date (yymmdd)								
A	W-S-A		14/8/14	—	—	—	—	X	TPH - Diesel by EPA 8015	TPH - G by EPA 8015	TPH - Diesel by EPA 8015
	W-S-A			1000	11	11	11	X	TPH - G by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
	W-S-A				11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
	W-S-A			217	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
4	W-S-A			225	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
	W-S-A			254	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
5	W-S-A			2712	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
6	W-S-A			2743	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
7	W-S-A			0640	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
8	W-S-A			1015	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
9	W-S-A			0920	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
A - NW - 4	W-S-A			0825	11	11	11	X	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015	TPH - Diesel by EPA 8015
Relinquished By	Company	Date / Time:		Relinquished By	Company	Date / Time:		Relinquished By	Company	Date / Time:	
<i>GRANIC</i>	<i>8-14-14 1300</i>			<i>Office</i>	<i>08-14-14 1300</i>						
Received By	Company	Date / Time:		Received By	Company	Date / Time:		Received By	Company	Date / Time:	

CHAIN OF CUSTODY FORM

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

COC 2 of 2

Union Oil Site ID: <u>0752</u>				Union Oil Consultant: <u>Airadis</u>				ANALYSES REQUIRED			
Site Global ID: <u>TU00101486</u>				Consultant Contact: <u>Katherine Brant</u>							
Site Address: <u>500 Harrison Ct.</u> <u>Oakland CA</u>				Consultant Phone No.: <u>510-596-9675</u>							
Union Oil PM: <u>Tina Bishop</u>				Sampling Company: <u>Tec G-Har-Ryan</u>							
Union Oil PM Phone No.: <u>510-740-1463</u>				Sampled By (PRINT): <u>H-X Wong</u>							
Charge Code: NWRTB-0 <u>351646</u> -0-LAB				Sampler Signature: <u>[Signature]</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	DTW	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015	TPH - G by [REDACTED] (SOLVENT)	BTEX/MTBE/[REDACTED] by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXY'S	DISSOLVED (A, I, Pb, Ni, Zn, Fe) METALS /VOLATILE ORGANIC ALKALINITY PENTANE
A-MW-5	W-S-A		14-04-14	0550	11	X	X	X	X	X	
A-MW-6	W-S-A			0655	11						
A-MW-7	W-S-A			0755	11						
S-MW-1	W-S-A			0950	11						
S-MW-2	W-S-A			0735	11						
S-MW-3	W-S-A			1118	11						
S-MW-4	W-S-A			1040	11						
S-MW-5	W-S-A			1845	11						
S-MW-6	W-S-A			0935	11						
S-EW-1	W-S-A			0900	11						
MPE-1	W-S-A			0645	6	X	X				
MP-1	W-S-A			1030	6	X	X				
Relinquished By	Company	Date / Time:		Relinquished By	Company	Date / Time:		Relinquished By	Company	Date / Time:	
<u>GRINC</u>		<u>8-14-14 1300</u>		<u>PER OFFICE</u>		<u>8/14/14 1530</u>					
Received By	Company	Date / Time:		Received By	Company	Date / Time:		Received By	Company	Date / Time:	
<u>SETTLE-RYAN FIDGE</u>		<u>8-14-14 1300</u>		<u>Stan Hogan BC Lab</u>		<u>8-14-14 1530</u>					

ARCADIS

Attachment B

Historical Groundwater Results from TRC

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
MW-1														
6/5/1991	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
9/30/1991	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
12/30/1991	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
4/2/1992	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
6/30/1992	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
9/15/1992	34.94	--	--	--	--	76	--	1.0	ND	ND	ND	--	--	--
12/21/1992	34.94	21.17	0.00	13.77	--	95	--	0.69	ND	ND	1.0	--	--	--
4/28/1993	34.94	--	--	--	--	920	--	3.1	2.3	1.2	9.7	--	--	--
7/23/1993	34.94	20.13	0.00	14.81	--	ND	--	0.5	0.66	ND	ND	--	--	--
10/5/1993	34.69	20.30	0.00	14.39	-0.42	92	--	1.5	ND	ND	0.72	--	--	--
1/3/1994	34.69	20.52	0.00	14.17	-0.22	ND	--	ND	ND	ND	ND	--	--	--
4/2/1994	34.69	20.16	0.00	14.53	0.36	ND	--	ND	ND	ND	ND	--	--	--
7/5/1994	34.69	19.27	0.00	15.42	0.89	250	--	4.8	13	1.2	7.3	--	--	--
10/6/1994	34.69	20.87	0.00	13.82	-1.60	540	--	1.4	ND	0.66	11	--	--	--
1/2/1995	34.69	19.67	0.00	15.02	1.20	140	--	ND	ND	ND	ND	--	--	--
4/3/1995	34.69	17.61	0.00	17.08	2.06	580	--	3.6	0.8	ND	4.0	--	--	--
7/14/1995	34.69	18.58	0.00	16.11	-0.97	260	--	2.1	ND	ND	1.2	--	--	--
10/10/1995	34.69	19.60	0.00	15.09	-1.02	220	--	2.0	ND	25	5.6	29	--	--
1/3/1996	34.69	19.69	0.00	15.00	-0.09	190	--	2.4	ND	0.71	1.2	--	--	--
4/10/1996	34.69	17.65	0.00	17.04	2.04	540	--	8.9	1.7	1.5	7.4	50	--	--
7/9/1996	34.69	18.52	0.00	16.17	-0.87	490	--	3.0	1.4	1.3	2.5	150	--	--
1/24/1997	34.69	17.72	0.00	16.97	0.80	760	--	27	0.89	5.2	10	510	--	--
7/23/1997	34.69	19.42	0.00	15.27	-1.70	ND	--	ND	ND	ND	ND	550	--	--
1/26/1998	34.69	17.46	0.00	17.23	1.96	1800	--	ND	ND	ND	ND	4800	--	--
7/3/1998	34.69	18.61	0.00	16.08	-1.15	ND	--	ND	ND	ND	ND	1800	--	--
1/14/1999	34.69	18.92	0.00	15.77	-0.31	83	--	ND	ND	ND	ND	230	--	--
7/15/1999	34.69	17.84	0.00	16.85	1.08	110	--	ND	ND	ND	1.0	290	--	--
1/7/2000	34.69	19.13	0.00	15.56	-1.29	ND	--	ND	ND	ND	ND	260	--	--
7/19/2000	34.69	20.27	0.00	14.42	-1.14	ND	--	ND	ND	ND	ND	648	--	--
1/2/2001	34.69	20.04	0.00	14.65	0.23	ND	--	ND	ND	ND	ND	119	--	--
5/23/2001	34.69	18.27	0.00	16.42	1.77	84	--	ND	ND	ND	ND	760	--	--
7/30/2001	34.69	18.56	0.00	16.13	-0.29	<50	--	<0.50	<0.50	<0.50	<0.50	350	--	--
10/15/2001	34.69	18.72	0.00	15.97	-0.16	96	--	<0.50	<0.50	<0.50	<0.50	160	--	--

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
1/14/2002	34.69	16.78	0.00	17.91	1.94	450	--	<2.5	<2.5	<2.5	3.3	4100	--	
4/15/2002	34.69	17.35	0.00	17.34	-0.57	<1000	--	<10	<10	<10	<10	10000	--	
7/15/2002	34.69	17.63	0.00	17.06	-0.28	2100	--	<10	<10	<10	<20	--	2100	
1/18/2003	34.69	17.04	0.00	17.65	0.59	<25000	--	<250	<250	<250	<500	--	29000	
7/11/2003	34.69	17.91	0.00	16.78	-0.87	4000	--	<25	<25	<25	<50	--	6300	
2/4/2004	34.69	17.98	0.00	16.71	-0.07	--	8000	<50	<50	<50	<100	--	8500	
8/11/2004	34.69	17.84	0.00	16.85	0.14	--	1100	<10	<10	<10	<20	--	1500	
3/31/2005	34.69	15.71	0.00	18.98	2.13	--	<2000	<0.50	<0.50	0.54	2.2	--	4900	
9/30/2005	34.69	17.65	0.00	17.04	-1.94	--	190	<0.50	<0.50	<0.50	<1.0	--	160	
3/27/2006	34.69	15.03	0.00	19.66	2.62	--	760	<0.50	<0.50	<0.50	<1.0	--	1000	
9/27/2006	34.69	18.45	0.00	16.24	-3.42	--	170	<0.50	<0.50	<0.50	0.61	--	73	
3/27/2007	34.69	18.84	0.00	15.85	-0.39	--	120	<0.50	<0.50	<0.50	<0.50	--	99	
9/28/2007	34.69	19.73	0.00	14.96	-0.89	--	68	<0.50	<0.50	<0.50	<0.50	--	15	
3/26/2008	34.69	19.32	0.00	15.37	0.41	--	200	<0.50	<0.50	<0.50	1.0	--	47	
7/28/2008	34.69	20.15	0.00	14.54	-0.83	--	<50	<0.50	<0.50	<0.50	<1.0	--	8.7	
1/26/2009	34.69	20.74	0.00	13.95	-0.59	--	<50	<0.50	<0.50	<0.50	<1.0	--	5.2	
8/3/2009	34.72	20.10	0.00	14.62	0.67	--	76	<0.50	<0.50	<0.50	<1.0	--	12	
1/25/2010	34.72	19.78	0.00	14.94	0.32	--	<50	<0.50	<0.50	<0.50	<1.0	--	14	
8/3/2010	34.72	19.47	0.00	15.25	0.31	--	210	<0.50	<0.50	<0.50	<1.0	--	37	
2/17/2011	34.72	19.50	0.00	15.22	-0.03	--	150	<0.50	<0.50	<0.50	<1.0	--	17	
8/3/2011	34.72	18.96	0.00	15.76	0.54	--	230	<0.50	<0.50	<0.50	<1.0	--	44	
MW-2														
6/5/1991	34.97	--	--	--	--	49	--	ND	ND	ND	ND	--	--	
9/30/1991	34.97	--	--	--	--	130	--	18	0.53	14	9.6	--	--	
12/30/1991	34.97	--	--	--	--	91	--	16	0.89	11	1.9	--	--	
4/2/1992	34.97	--	--	--	--	88	--	12	0.32	6.3	7.2	--	--	
6/30/1992	34.97	--	--	--	--	76	--	9.3	0.76	4.8	6.9	--	--	
9/15/1992	34.97	--	--	--	--	1300	--	91	5.7	80	110	--	--	
12/21/1992	34.97	20.85	0.00	14.12	--	960	--	97	3.2	74	96	--	--	
4/28/1993	34.97	--	--	--	--	1300	--	76	1.9	130	87	--	--	
7/23/1993	34.97	19.81	0.00	15.16	--	66	--	1.8	ND	2.5	2.0	--	--	
10/5/1993	34.72	19.95	0.00	14.77	-0.39	120	--	12	ND	2.1	12	--	--	
1/3/1994	34.72	20.21	0.00	14.51	-0.26	260	--	25	ND	5.5	26	--	--	
4/2/1994	34.72	19.88	0.00	14.84	0.33	ND	--	0.65	ND	ND	0.99	--	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	TPH-G 8015 (µg/l)									
7/5/1994	34.72	19.07	0.00	15.65	0.81	160	--	16	ND	0.73	10	--	--	--
10/6/1994	34.72	20.55	0.00	14.17	-1.48	170	--	15	ND	1.4	11	--	--	--
1/2/1995	34.72	19.25	0.00	15.47	1.30	190	--	27	ND	0.95	11	--	--	--
4/3/1995	34.72	17.49	0.00	17.23	1.76	2400	--	65	6.6	19	63	--	--	--
7/14/1995	34.72	18.30	0.00	16.42	-0.81	750	--	270	ND	ND	13	--	--	--
10/10/1995	34.72	19.25	0.00	15.47	-0.95	50	--	1.6	ND	ND	ND	200	--	--
1/3/1996	34.72	19.40	0.00	15.32	-0.15	ND	--	ND	ND	ND	ND	--	--	--
4/10/1996	34.72	17.35	0.00	17.37	2.05	300	--	42	ND	2.4	9	620	--	--
7/9/1996	34.72	18.22	0.00	16.50	-0.87	760	--	230	ND	1.3	2.4	1500	--	--
1/24/1997	34.72	17.59	0.00	17.13	0.63	2900	--	400	350	190	720	1300	--	--
7/23/1997	34.72	19.13	0.00	15.59	-1.54	ND	--	ND	ND	ND	ND	65	--	--
1/26/1998	34.72	17.12	0.00	17.60	2.01	ND	--	ND	ND	ND	0.58	13	--	--
7/3/1998	34.72	18.20	0.00	16.52	-1.08	140	--	26	ND	0.95	5.0	330	--	--
1/14/1999	34.72	18.56	0.00	16.16	-0.36	ND	--	0.54	ND	ND	ND	350	--	--
7/15/1999	34.72	17.39	0.00	17.33	1.17	ND	--	0.88	ND	ND	ND	39	--	--
1/7/2000	34.72	18.78	0.00	15.94	-1.39	ND	--	ND	ND	ND	ND	24	--	--
7/19/2000	34.72	19.68	0.00	15.04	-0.90	ND	--	1.45	ND	ND	ND	117	--	--
1/2/2001	34.72	19.73	0.00	14.99	-0.05	ND	--	ND	ND	ND	ND	11.4	--	--
5/23/2001	34.72	18.16	0.00	16.56	1.57	ND	--	ND	ND	ND	ND	33	--	--
7/30/2001	34.72	18.34	0.00	16.38	-0.18	<50	--	<0.50	<0.50	<0.50	<0.50	67	--	--
10/15/2001	34.72	18.52	0.00	16.20	-0.18	<50	--	<0.50	<0.50	<0.50	<0.50	31	--	--
1/14/2002	34.72	16.72	0.00	18.00	1.80	<50	--	<0.50	<0.50	<0.50	0.56	11	--	--
4/15/2002	34.72	17.26	0.00	17.46	-0.54	<50	--	<0.50	<0.50	<0.50	<0.50	110	--	--
7/15/2002	34.72	17.46	0.00	17.26	-0.20	270	--	21	<0.50	3.8	4.0	--	73	--
1/18/2003	34.72	16.93	0.00	17.79	0.53	<50	--	<0.50	<0.50	<0.50	<1.0	--	22	--
7/11/2003	34.72	17.68	0.00	17.04	-0.75	130	--	3.0	<0.50	<0.50	<1.0	--	89	--
2/4/2004	34.72	17.36	0.00	17.36	0.32	--	61	2.9	<0.50	<0.50	<1.0	--	22	--
8/11/2004	34.72	17.61	0.00	17.11	-0.25	--	140	<0.50	0.60	<0.50	<1.0	--	94	--
3/31/2005	34.72	15.56	0.00	19.16	2.05	--	<50	<0.50	<0.50	<0.50	<1.0	--	14	--
9/30/2005	34.72	17.31	0.00	17.41	-1.75	--	<50	<0.50	<0.50	<0.50	<1.0	--	9.1	--
3/27/2006	34.72	14.91	0.00	19.81	2.40	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.7	--
9/27/2006	34.72	18.15	0.00	16.57	-3.24	--	<50	<0.50	<0.50	<0.50	<0.50	--	7.7	--
3/27/2007	34.72	18.57	0.00	16.15	-0.42	--	<50	<0.50	<0.50	<0.50	<0.50	--	1.4	--
9/28/2007	34.72	18.38	0.00	16.34	0.19	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2008	34.72	19.06	0.00	15.66	-0.68	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
7/28/2008	34.72	19.90	0.00	14.82	-0.84	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
1/26/2009	34.72	20.50	0.00	14.22	-0.60	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
8/3/2009	34.74	19.92	0.00	14.82	0.60	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
1/25/2010	34.74	19.70	0.00	15.04	0.22	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
8/3/2010	34.74	19.26	0.00	15.48	0.44	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
2/17/2011	34.74	19.32	0.00	15.42	-0.06	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
8/3/2011	34.74	18.74	0.00	16.00	0.58	--	77	6.7	<0.50	<0.50	<1.0	--	14	
MW-3														
6/5/1991	33.39	--	--	--	--	5800	--	1200	40	140	97	--	--	
9/30/1991	33.39	--	--	--	--	6800	--	1400	130	290	240	--	--	
12/30/1991	33.39	--	--	--	--	7200	--	2100	690	410	550	--	--	
4/2/1992	33.39	--	--	--	--	8000	--	1400	200	300	310	--	--	
6/30/1992	33.39	--	--	--	--	8900	--	1900	210	430	550	--	--	
9/15/1992	33.39	--	--	--	--	10000	--	1900	330	400	580	--	--	
12/21/1992	33.39	20.02	0.00	13.37	--	8500	--	1500	150	310	330	--	--	
4/28/1993	33.39	--	--	--	--	2600	--	220	7.6	41	27	--	--	
7/23/1993	33.39	19.00	0.00	14.39	--	4400	--	660	26	160	82	--	--	
10/5/1993	33.14	19.20	0.00	13.94	-0.45	9200	--	720	88	140	140	--	--	
1/3/1994	33.14	19.40	0.00	13.74	-0.20	4900	--	830	100	170	150	--	--	
4/2/1994	33.14	19.01	0.00	14.13	0.39	6000	--	800	30	140	110	--	--	
7/5/1994	33.14	18.14	0.00	15.00	0.87	25000	--	ND	ND	ND	ND	--	--	
10/6/1994	33.14	19.73	0.00	13.41	-1.59	49000	--	1300	200	280	300	--	--	
1/2/1995	33.14	18.36	0.00	14.78	1.37	480	--	1.6	ND	1.4	ND	--	--	
4/3/1995	33.14	16.38	0.00	16.76	1.98	8100	--	65	ND	ND	ND	--	--	
7/14/1995	33.14	17.49	0.00	15.65	-1.11	ND	--	1300	ND	ND	ND	--	--	
10/10/1995	33.14	18.50	0.00	14.64	-1.01	3100	--	1400	36	50	53	190000	--	
1/3/1996	33.14	18.54	0.00	14.60	-0.04	ND	--	2300	110	150	140	--	--	
7/9/1996	33.14	17.43	0.00	15.71	1.11	ND	--	2000	ND	150	160	140000	--	
1/24/1997	33.14	16.57	0.00	16.57	0.86	540	--	8.0	ND	11	9.9	45	--	
7/23/1997	33.14	18.38	0.00	14.76	-1.81	7400	--	1900	180	140	340	45000	--	
1/26/1998	33.14	16.22	0.00	16.92	2.16	250	--	2.2	1.9	0.87	1.9	4.0	--	
7/3/1998	33.14	17.46	--	15.68	-1.24	230	--	1.8	2.5	1.5	3.4	6.3	--	
1/14/1999	33.14	17.73	--	15.41	-0.27	400	--	8.2	2.7	0.90	5.9	140	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
7/15/1999	33.14	16.58	--	16.56	1.15	290	--	3.3	3.6	1.7	2.5	13	--	
1/7/2000	33.14	17.84	--	15.30	-1.26	ND	--	890	91	100	480	20000	--	
7/19/2000	33.14	18.92	--	14.22	-1.08	354	--	3.87	2.61	0.646	ND	13.7	--	
1/2/2001	33.14	19.07	--	14.07	-0.15	464	--	ND	3.69	3.91	ND	21.1	--	
5/23/2001	33.14	17.12	--	16.02	1.95	420	--	7.6	3.1	3.0	5.1	1900	--	
7/30/2001	33.14	17.38	--	15.76	-0.26	290	--	4.6	4.1	<0.50	3.4	23	--	
10/15/2001	33.14	17.61	--	15.53	-0.23	400	--	<0.50	<0.50	<0.50	<0.50	13	--	
1/14/2002	33.14	15.53	--	17.61	2.08	130	--	0.50	0.61	1.1	<0.50	9.9	--	
4/15/2002	33.14	16.12	--	17.02	-0.59	280	--	9.9	1.6	3.3	6.8	1400	--	
7/15/2002	33.14	16.48	--	16.66	-0.36	64	--	<0.50	<0.50	<0.50	<1.0	33	--	
1/18/2003	33.14	15.81	--	17.33	0.67	420	--	0.54	<0.50	<0.50	<1.0	130	--	
7/11/2003	33.14	16.74	--	16.40	-0.93	--	300	2.3	<0.50	<0.50	<1.0	--	31	
2/4/2004	33.14	16.15	0.00	16.99	0.59	--	130	7.9	<0.50	<0.50	<1.0	--	63	
8/11/2004	33.14	16.64	0.00	16.50	-0.49	--	<20000	<200	<200	<200	<400	--	20000	
3/31/2005	33.14	14.53	0.00	18.61	2.11	--	<20000	330	<200	<200	<400	--	78000	
9/30/2005	33.14	16.55	0.00	16.59	-2.02	--	12000	360	40	<25	50	--	20000	
3/27/2006	33.14	13.66	0.00	19.48	2.89	--	10000	150	<25	53	99	--	15000	
9/27/2006	33.14	17.40	0.00	15.74	-3.74	--	<12000	<120	<120	<120	<120	--	12000	
3/27/2007	33.14	17.55	0.00	15.59	-0.15	--	8700	180	<12	60	57	--	8900	
9/28/2007	33.14	18.59	0.00	14.55	-1.04	--	9000	55	<50	<50	<50	--	11000	
3/26/2008	33.14	18.19	0.00	14.95	0.40	--	450	13	1.3	0.84	1.4	--	7200	
7/28/2008	33.14	19.00	0.00	14.14	-0.81	--	8300	<50	<50	<50	<100	--	13000	
1/26/2009	33.14	19.54	0.00	13.60	-0.54	--	8800	27	<12	<12	<25	--	13000	
8/3/2009	33.18	18.90	0.00	14.28	0.68	--	9300	56	<50	<50	<100	--	8000	
1/25/2010	33.18	18.54	0.00	14.64	0.36	--	4900	79	7.3	5.4	13	--	8100	
8/3/2010	33.18	18.35	0.00	14.83	0.19	--	2500	30	<12	<12	<25	--	4600	
2/17/2011	33.18	18.30	0.00	14.88	0.05	--	3800	11	<5.0	<5.0	<10	--	4700	
8/3/2011	33.18	17.87	0.00	15.31	0.43	--	2,600	9.7	0.8	3.1	1.4	--	2,000	
MW-4														
10/19/1992	--	--	--	--	--	480	--	0.51	2.1	2.8	6.8	--	--	
12/21/1992	33.12	19.73	--	13.39	--	220	--	ND	ND	0.97	0.74	--	--	
4/28/1993	33.12	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
7/23/1993	33.12	18.72	--	14.40	--	85	--	ND	ND	ND	ND	--	--	
10/5/1993	32.71	18.74	--	13.97	-0.43	130	--	ND	ND	ND	ND	--	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)									
1/3/1994	32.71	18.93	--	13.78	-0.19	210	--	ND	ND	0.76	1.6	--	--	--
4/2/1994	32.71	18.53	--	14.18	0.40	89	--	ND	ND	ND	ND	--	--	--
7/5/1994	32.71	17.67	--	15.04	0.86	190	--	ND	ND	ND	ND	--	--	--
10/6/1994	32.71	19.25	--	13.46	-1.58	170	--	0.85	ND	ND	0.74	--	--	--
1/2/1995	32.71	17.75	--	14.96	1.50	ND	--	ND	ND	ND	ND	--	--	--
4/3/1995	32.71	15.87	--	16.84	1.88	98	--	ND	ND	ND	ND	--	--	--
7/14/1995	32.71	17.01	--	15.70	-1.14	ND	--	ND	ND	ND	ND	--	--	--
10/10/1995	32.71	18.03	--	14.68	-1.02	ND	--	ND	ND	ND	ND	120	--	--
1/3/1996	32.71	18.05	--	14.66	-0.02	ND	--	ND	ND	ND	ND	--	--	--
4/10/1996	32.71	16.00	--	16.71	2.05	ND	--	ND	ND	ND	ND	240	--	--
7/9/1996	32.71	16.96	--	15.75	-0.96	ND	--	ND	ND	ND	ND	480	--	--
1/24/1997	32.71	16.04	0.00	16.67	0.92	ND	--	ND	ND	ND	ND	270	--	--
7/23/1997	32.71	17.87	0.00	14.84	-1.83	ND	--	ND	ND	ND	ND	460	--	--
1/26/1998	32.71	16.05	--	16.66	1.82	ND	--	ND	ND	ND	ND	17	--	--
7/3/1998	32.71	16.95	--	15.76	-0.90	ND	--	ND	ND	ND	ND	3.8	--	--
1/14/1999	32.71	17.34	--	15.37	-0.39	ND	--	ND	ND	ND	ND	4600	--	--
7/15/1999	32.71	16.36	--	16.35	0.98	ND	--	ND	ND	ND	ND	ND	--	--
1/7/2000	32.71	17.81	--	14.90	-1.45	ND	--	ND	ND	ND	ND	450	--	--
7/19/2000	32.71	18.94	--	13.77	-1.13	ND	--	ND	ND	ND	ND	ND	--	--
1/2/2001	32.71	18.85	--	13.86	0.09	ND	--	ND	ND	ND	ND	ND	--	--
5/23/2001	32.71	16.82	--	15.89	2.03	ND	--	ND	ND	ND	ND	ND	--	--
7/30/2001	32.71	16.88	--	15.83	-0.06	<50	--	<0.50	<0.50	<0.50	<0.50	4.9	--	--
10/15/2001	32.71	17.08	--	15.63	-0.20	<50	--	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
1/14/2002	32.71	14.97	--	17.74	2.11	<50	--	<0.50	<0.50	<0.50	<0.50	30	--	--
4/15/2002	32.71	15.48	--	17.23	-0.51	<50	--	<0.50	<0.50	<0.50	<0.50	180	--	--
7/15/2002	32.71	15.90	--	16.81	-0.42	<50	--	<0.50	<0.50	<0.50	<1.0	50	--	--
1/18/2003	32.71	15.39	--	17.32	0.51	<50	--	<0.50	<0.50	<0.50	<1.0	<2.0	--	--
7/11/2003	32.71	16.17	--	16.54	-0.78	--	200	<0.50	<0.50	<0.50	<1.0	--	52	--
2/4/2004	32.71	16.12	0.00	16.59	0.05	--	1300	<10	<10	<10	<20	--	1700	--
8/11/2004	32.71	16.16	0.00	16.55	-0.04	--	<5000	<50	<50	<50	<100	--	6400	--
3/31/2005	32.71	14.15	0.00	18.56	2.01	--	<1300	<0.50	<0.50	<0.50	<1.0	--	1600	--
9/30/2005	32.71	16.91	0.00	15.80	-2.76	--	900	<0.50	<0.50	<0.50	<1.0	--	3800	--
3/27/2006	32.71	13.94	0.00	18.77	2.97	--	870	<0.50	<0.50	<0.50	<1.0	--	2000	--
9/27/2006	32.71	16.91	0.00	15.80	-2.97	--	<1000	<10	<10	<10	<10	--	1600	--

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/27/2007	32.71	17.15	0.00	15.56	-0.24	--	1500	<2.5	<2.5	<2.5	<2.5	--	1700	
9/28/2007	32.71	18.13	0.00	14.58	-0.98	--	590	<5.0	<5.0	<5.0	<5.0	--	1400	
3/26/2008	32.71	17.66	0.00	15.05	0.47	--	390	<0.50	<0.50	<0.50	<1.0	--	1400	
7/28/2008	32.71	18.34	0.00	14.37	-0.68	--	480	<1.0	<1.0	<1.0	<2.0	--	950	
1/26/2009	32.71	18.80	0.00	13.91	-0.46	--	500	<0.50	<0.50	<0.50	<1.0	--	830	
8/3/2009	32.72	18.43	0.00	14.29	0.38	--	640	<5.0	6.6	<5.0	<10	--	570	
1/25/2010	32.72	18.02	0.00	14.70	0.41	--	190	<0.50	<0.50	<0.50	<1.0	--	400	
8/3/2010	32.72	17.83	0.00	14.89	0.19	--	58	<0.50	<0.50	<0.50	<1.0	--	110	
2/17/2011	32.72	17.85	0.00	14.87	-0.02	--	<50	<0.50	<0.50	<0.50	<1.0	--	12	
8/3/2011	32.72	17.36	0.00	15.36	0.49	--	<50	<0.50	<0.50	<0.50	<1.0	--	12	
MW-5														
10/19/1992	--	--	--	--	--	2700	--	61	5.0	100	61	--	--	
12/21/1992	33.25	19.75	--	13.50	--	1700	--	51	4.7	83	34	--	--	
4/28/1993	33.25	--	--	--	--	6700	--	200	190	250	430	--	--	
7/23/1993	33.25	18.74	--	14.51	--	2000	--	122	8.0	68	47	--	--	
10/5/1993	32.95	18.83	--	14.12	-0.39	1700	--	70	6.2	54	40	--	--	
1/3/1994	32.95	19.05	--	13.90	-0.22	1500	--	44	ND	42	46	--	--	
4/2/1994	32.95	18.68	--	14.27	0.37	1800	--	46	5.1	38	35	--	--	
7/5/1994	32.95	17.90	--	15.05	0.78	2200	--	97	8.4	37	36	--	--	
10/6/1994	32.95	19.37	--	13.58	-1.47	1600	--	79	5.7	28	22	--	--	
1/2/1995	32.95	17.92	--	15.03	1.45	1700	--	50	8.6	30	28	--	--	
4/3/1995	32.95	16.15	--	16.80	1.77	5400	--	190	240	170	420	--	--	
7/14/1995	32.95	17.18	--	15.77	-1.03	3800	--	210	100	130	190	--	--	
10/10/1995	32.95	18.15	--	14.80	-0.97	1300	--	92	14	15	39	1100	--	
1/3/1996	32.95	18.20	--	14.75	-0.05	630	--	53	4.4	8.3	13	--	--	
4/10/1996	32.95	16.05	--	16.90	2.15	500	--	25	18	7.0	20	640	--	
7/9/1996	32.95	17.11	--	15.84	-1.06	1000	--	44	20	10	34	150	--	
1/24/1997	32.95	16.36	0.00	16.59	0.75	4000	--	190	400	160	430	600	--	
7/23/1997	32.95	18.08	0.00	14.87	-1.72	1700	--	200	23	18	45	2500	--	
1/26/1998	32.95	16.27	--	16.68	1.81	ND	--	ND	ND	ND	ND	ND	--	
7/3/1998	32.95	17.27	--	15.68	-1.00	ND	--	ND	ND	ND	ND	ND	--	
1/14/1999	32.95	17.55	--	15.40	-0.28	330	--	61	4.1	2.2	2.9	560	--	
7/15/1999	32.95	16.41	--	16.54	1.14	1100	--	170	ND	ND	27	660	--	
1/7/2000	32.95	17.85	--	15.10	-1.44	1000	--	180	6.3	ND	14	430	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)										
7/19/2000	32.95	18.87	--	14.08	-1.02	2980	--	289	57.3	65.3	43.4	976	--	--	
1/2/2001	32.95	18.47	--	14.48	0.40	1150	--	87.2	17.8	7.97	9.32	368	--	--	
5/23/2001	32.95	17.38	--	15.57	1.09	840	--	42	10	13	7.1	130	--	--	
7/30/2001	32.95	17.12	--	15.83	0.26	1900	--	82	24	6.9	13	370	--	--	
10/15/2001	32.95	17.33	--	15.62	-0.21	26000	--	390	230	58	1300	<500	--	--	
1/14/2002	32.95	15.33	--	17.62	2.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	
4/15/2002	32.95	15.89	--	17.06	-0.56	310	--	20	6.7	11	7.7	77	--	--	
7/15/2002	32.95	16.21	--	16.74	-0.32	1500	--	40	22	60	28	170	--	--	
1/18/2003	32.95	15.68	--	17.27	0.53	<50	--	0.75	<0.50	<0.50	<1.0	81	--	--	
7/11/2003	32.95	16.29	--	16.66	-0.61	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.6	--	
2/4/2004	32.95	16.08	0.00	16.87	0.21	--	82	16	1.6	0.65	<1.0	--	16	--	
8/11/2004	32.95	16.38	0.00	16.57	-0.30	--	900	81	14	2.8	11	--	120	--	
3/31/2005	32.95	14.30	0.00	18.65	2.08	--	5000	160	84	65	72	--	140	--	
9/30/2005	32.95	16.19	0.00	16.76	-1.89	--	1200	26	5.8	2.4	9.2	--	38	--	
3/27/2006	32.95	13.90	0.00	19.05	2.29	--	1100	13	12	4.7	16	--	8.8	--	
9/27/2006	32.95	17.06	0.00	15.89	-3.16	--	1300	20	11	2.3	15	--	21	--	
3/27/2007	32.95	17.43	0.00	15.52	-0.37	--	960	15	7.8	2.2	11	--	14	--	
9/28/2007	32.95	18.25	0.00	14.70	-0.82	--	1300	13	6.0	2.3	15	--	8.4	--	
3/26/2008	32.95	17.82	0.00	15.13	0.43	--	1200	7.6	3.3	1.8	11	--	2.7	--	
7/28/2008	32.95	18.70	0.00	14.25	-0.88	--	2000	12	4.9	3.2	17	--	<0.50	--	
1/26/2009	32.95	19.25	0.00	13.70	-0.55	--	1400	7.4	3.3	2.5	11	--	3.3	--	
8/3/2009	32.98	18.62	0.00	14.36	0.66	--	1500	17	9.0	3.5	22	--	7.3	--	
1/25/2010	32.98	18.34	0.00	14.64	0.28	--	1600	7.6	3.6	2.4	15	--	1.7	--	
8/3/2010	32.98	18.07	0.00	14.91	0.27	--	2200	32	32	10	48	--	10	--	
2/17/2011	32.98	18.05	0.00	14.93	0.02	--	1800	33	7.4	<0.50	11	--	15	--	
8/3/2011	32.98	17.57	0.00	15.41	0.48	--	2,500	58	23	12	34	--	40	--	
MW-6															
10/19/1992	--	--	--	--	--	3900	--	420	12	60	28	--	--	--	
12/21/1992	32.42	19.17	--	13.25	--	2300	--	370	11	39	15	--	--	--	
4/28/1993	32.42	--	--	--	--	1200	--	54	1.5	11	5.3	--	--	--	
7/23/1993	32.42	18.17	--	14.25	--	580	--	19	0.99	3.4	2.7	--	--	--	
10/5/1993	32.16	18.35	--	13.81	-0.44	1400	--	34	ND	5.3	7.3	--	--	--	
1/3/1994	32.16	18.54	--	13.62	-0.19	1400	--	57	ND	8.5	11	--	--	--	
4/2/1994	32.16	18.15	--	14.01	0.39	5300	--	ND	ND	ND	ND	--	--	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
7/5/1994	32.16	17.25	--	14.91	0.90	ND	--	ND	ND	ND	ND	--	--	--
10/6/1994	32.16	18.85	--	13.31	-1.60	11000	--	ND	ND	ND	ND	--	--	--
1/2/1995	32.16	17.51	--	14.65	1.34	550	--	18	0.92	2.0	1.8	--	--	--
4/3/1995	32.16	15.48	--	16.68	2.03	6600	--	ND	ND	ND	ND	--	--	--
7/14/1995	32.16	16.63	--	15.53	-1.15	ND	--	ND	ND	ND	ND	--	--	--
10/10/1995	32.16	17.68	--	14.48	-1.05	ND	--	81	ND	ND	ND	75000	--	--
1/3/1996	32.16	17.66	--	14.50	0.02	70	--	9.9	0.58	ND	0.81	--	--	--
4/10/1996	32.16	15.56	--	16.60	2.10	300	--	258	4.7	0.94	2.7	53000	--	--
7/9/1996	32.16	16.59	--	15.57	-1.03	1800	--	410	ND	12	ND	76000	--	--
1/24/1997	32.16	15.69	0.00	16.47	0.90	ND	--	0.80	ND	ND	ND	390	--	--
7/23/1997	32.16	17.53	0.00	14.63	-1.84	5700	--	1100	240	240	700	16000	--	--
1/26/1998	32.16	15.44	--	16.72	2.09	ND	--	ND	ND	ND	ND	ND	--	--
7/3/1998	32.16	16.58	--	15.58	-1.14	ND	--	ND	ND	ND	ND	ND	--	--
1/14/1999	32.16	17.02	--	15.14	-0.44	ND	--	ND	ND	ND	ND	14	--	--
7/15/1999	32.16	15.95	--	16.21	1.07	ND	--	ND	ND	ND	ND	2.8	--	--
1/7/2000	32.16	16.96	--	15.20	-1.01	78	--	24	ND	0.66	17	280	--	--
7/19/2000	32.16	18.04	--	14.12	-1.08	ND	--	ND	1.32	ND	0.974	ND	--	--
1/2/2001	32.16	18.10	--	14.06	-0.06	ND	--	ND	ND	ND	ND	ND	--	--
5/23/2001	32.16	16.42	--	15.74	1.68	ND	--	ND	ND	ND	ND	ND	--	--
7/30/2001	32.16	16.49	--	15.67	-0.07	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
10/15/2001	32.16	16.67	--	15.49	-0.18	<50	--	<0.50	0.62	<0.50	<0.50	<5.0	--	--
1/14/2002	32.16	14.60	--	17.56	2.07	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
4/15/2002	32.16	15.07	--	17.09	-0.47	<50	--	<0.50	<0.50	<0.50	0.73	<5.0	--	--
7/15/2002	32.16	15.56	--	16.60	-0.49	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
1/18/2003	32.16	15.80	--	16.36	-0.24	<50	--	<0.50	<0.50	<0.50	<1.0	<2.0	--	--
7/11/2003	32.16	15.74	--	16.42	0.06	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--
2/4/2004	32.16	15.49	0.00	16.67	0.25	--	<50	2.6	<0.50	<0.50	<1.0	--	2.4	--
8/11/2004	32.16	15.81	0.00	16.35	-0.32	--	7900	95	<50	<50	<100	--	9100	--
3/31/2005	32.16	13.70	0.00	18.46	2.11	--	<5000	2.5	<0.50	<0.50	<1.0	--	7600	--
9/30/2005	32.16	15.48	0.00	16.68	-1.78	--	4300	140	37	28	41	--	5800	--
3/27/2006	32.16	13.02	0.00	19.14	2.46	--	7200	34	0.66	0.96	18	--	9900	--
9/27/2006	32.16	16.56	0.00	15.60	-3.54	--	1800	<12	<12	<12	<12	--	3300	--
3/27/2007	32.16	16.73	0.00	15.43	-0.17	--	1600	2.8	<2.5	<2.5	<2.5	--	1800	--
9/28/2007	32.16	17.75	0.00	14.41	-1.02	--	830	<5.0	<5.0	<5.0	<5.0	--	1600	--

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2008	32.16	17.31	0.00	14.85	0.44	--	940	45	5.9	2.0	5.3	--	1300	
7/28/2008	32.16	18.50	0.00	13.66	-1.19	--	500	<1.0	<1.0	<1.0	<2.0	--	750	
1/26/2009	32.16	18.46	0.00	13.70	0.04	--	570	<0.50	<0.50	<0.50	<1.0	--	500	
8/3/2009	32.19	18.01	0.00	14.18	0.48	--	800	<5.0	<5.0	<5.0	<10	--	690	
1/25/2010	32.19	17.64	0.00	14.55	0.37	--	410	4.8	0.63	<0.50	1.4	--	390	
8/3/2010	32.19	17.48	0.00	14.71	0.16	--	480	2.0	<0.50	<0.50	<1.0	--	520	
2/17/2011	32.19	17.48	0.00	14.71	0.00	--	290	<0.50	<0.50	<0.50	<1.0	--	130	
8/3/2011	32.19	17.02	0.00	15.17	0.46	--	330	<0.50	<0.50	<0.50	<1.0	--	89	
MW-7														
10/19/1992	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/28/1993	32.49	--	--	--	--	110	--	2.8	1.3	1.4	1.7	--	--	
7/23/1993	32.49	18.60	--	13.89	--	790	--	23	3.3	28	5.4	--	--	
10/5/1993	32.20	18.76	--	13.44	-0.45	360	--	10	1.2	0.91	0.99	--	--	
1/3/1994	32.20	18.91	--	13.29	-0.15	ND	--	0.93	ND	0.75	1.9	--	--	
4/2/1994	32.20	18.50	--	13.70	0.41	360	--	2.0	ND	ND	0.8	--	--	
7/5/1994	32.20	17.52	--	14.68	0.98	ND	--	ND	ND	ND	ND	--	--	
10/6/1994	32.20	19.25	--	12.95	-1.73	340	--	5.6	0.85	ND	1.2	--	--	
1/2/1995	32.20	17.67	--	14.53	1.58	ND	--	ND	ND	ND	ND	--	--	
4/3/1995	32.20	15.81	--	16.39	1.86	570	--	24	ND	3.4	5.8	--	--	
7/14/1995	32.20	17.05	--	15.15	-1.24	ND	--	14	ND	ND	ND	--	--	
10/10/1995	32.20	18.08	--	14.12	-1.03	740	--	170	ND	ND	ND	13000	--	
1/3/1996	32.20	18.02	--	14.18	0.06	360	--	16	1.3	2.7	1.4	--	--	
4/10/1996	32.20	15.81	--	16.39	2.21	120	--	4.1	1.5	ND	0.88	3200	--	
7/9/1996	32.20	16.99	--	15.21	-1.18	ND	--	ND	ND	ND	ND	3400	--	
1/24/1997	32.20	16.08	0.00	16.12	0.91	ND	--	16	ND	ND	ND	6600	--	
7/23/1997	32.20	17.99	0.00	14.21	-1.91	ND	--	16	ND	ND	0.62	10000	--	
1/26/1998	32.20	15.56	--	16.64	2.43	ND	--	ND	ND	ND	0.56	ND	--	
7/3/1998	32.20	17.04	--	15.16	-1.48	ND	--	ND	ND	ND	ND	ND	--	
1/14/1999	32.20	--	--	--	--	--	--	--	--	--	--	--	--	essible-parke
7/15/1999	32.20	15.72	--	16.48	--	ND	--	ND	ND	ND	ND	290	--	
1/7/2000	32.20	16.80	--	15.40	-1.08	ND	--	7.7	ND	ND	4.4	98	--	
7/19/2000	32.20	17.88	--	14.32	-1.08	ND	--	ND	1.27	ND	0.979	ND	--	
1/2/2001	32.20	17.97	--	14.23	-0.09	ND	--	ND	ND	ND	ND	ND	--	
5/23/2001	32.20	16.81	--	15.39	1.16	ND	--	ND	ND	ND	ND	ND	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)										
7/30/2001	32.20	16.79	--	15.41	0.02	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--	
10/15/2001	32.20	16.98	--	15.22	-0.19	<50	--	<0.50	0.58	<0.50	<0.50	<0.50	<5.0	--	
1/14/2002	32.20	14.85	--	17.35	2.13	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--	
4/15/2002	32.20	15.29	--	16.91	-0.44	<50	--	<0.50	<0.50	<0.50	<0.50	0.70	<5.0	--	
7/15/2002	32.20	15.92	--	16.28	-0.63	<50	--	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--	
1/18/2003	32.20	15.11	--	17.09	0.81	<50	--	<0.50	<0.50	<0.50	<0.50	<1.0	<2.0	--	
7/11/2003	32.20	15.89	--	16.31	-0.78	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	19	
2/4/2004	32.20	15.90	0.00	16.30	-0.01	--	<50	3.6	<0.50	<0.50	<0.50	<1.0	--	3.2	
8/11/2004	32.20	16.12	0.00	16.08	-0.22	--	<5000	120	<50	<50	<100	--	5100		
3/31/2005	32.20	13.99	0.00	18.21	2.13	--	<5000	190	<50	<50	<100	--	8400		
9/30/2005	32.20	15.93	0.00	16.27	-1.94	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50		
3/27/2006	32.20	13.40	0.00	18.80	2.53	--	2500	160	10	11	26	--	5600		
9/27/2006	32.20	16.96	0.00	15.24	-3.56	--	2800	180	<12	15	44	--	4200		
3/27/2007	32.20	17.30	0.00	14.90	-0.34	--	920	66	2.9	3.4	4.5	--	970		
9/28/2007	32.20	18.10	0.00	14.10	-0.80	--	4000	440	15	17	59	--	3300		
3/26/2008	32.20	17.64	0.00	14.56	0.46	--	390	39	3.3	0.85	7.5	--	96		
7/28/2008	32.20	18.50	0.00	13.70	-0.86	--	64	3.3	<0.50	<0.50	<1.0	--	8.7		
1/26/2009	32.20	18.90	0.00	13.30	-0.40	--	80	7.9	0.58	<0.50	<1.0	--	10		
8/3/2009	32.22	18.29	0.00	13.93	0.63	--	2100	220	14	10	31	--	750		
1/25/2010	32.22	17.49	0.00	14.73	0.80	--	490	25	3.5	0.54	6.9	--	16		
8/3/2010	32.22	17.84	0.00	14.38	-0.35	--	240	45	1.8	1.2	1.7	--	290		
2/17/2011	32.22	17.83	0.00	14.39	0.01	--	370	53	2.0	<0.50	2.1	--	12		
8/3/2011	32.22	17.42	0.00	14.80	0.41	--	390	20	1.8	<0.50	1.6	--	27		
MW-8															
4/28/1993	32.33	--	--	--	--	450	--	18	1.8	1.8	1.4	--	--		
7/23/1993	32.33	18.45	--	13.88	--	260	--	5.1	ND	0.6	ND	--	--		
10/5/1993	32.00	18.57	--	13.43	-0.45	120	--	1.7	ND	ND	ND	--	--		
1/3/1994	32.00	18.73	--	13.27	-0.16	ND	--	ND	ND	ND	ND	51	--		
4/2/1994	32.00	18.30	--	13.70	0.43	150	--	1.2	ND	ND	ND	--	--		
7/5/1994	32.00	17.41	--	14.59	0.89	730	--	17	ND	1.6	ND	--	--		
10/6/1994	32.00	18.98	--	13.02	-1.57	140	--	ND	ND	ND	ND	--	--		
1/2/1995	32.00	17.58	--	14.42	1.40	440	--	18	0.72	2.0	1.8	--	--		
4/3/1995	32.00	15.54	--	16.46	2.04	960	--	11	ND	ND	ND	--	--		
7/14/1995	32.00	16.81	--	15.19	-1.27	280	--	4.2	2.6	1.1	3.3	--	--		

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
10/10/1995	32.00	17.85	--	14.15	-1.04	110	--	1.3	0.62	0.67	ND	170	--	--
1/3/1996	32.00	17.82	--	14.18	0.03	63	--	ND	0.51	ND	1.8	--	--	--
4/10/1996	32.00	15.70	--	16.30	2.12	ND	--	1.1	0.61	ND	ND	60	--	--
7/9/1996	32.00	16.78	--	15.22	-1.08	72	--	1.0	ND	ND	ND	140	--	--
1/24/1997	32.00	15.79	0.00	16.21	0.99	ND	--	ND	ND	ND	ND	76	--	--
7/23/1997	32.00	17.69	0.00	14.31	-1.90	ND	--	ND	ND	ND	ND	270	--	--
1/26/1998	32.00	15.50	--	16.50	2.19	ND	--	ND	ND	ND	0.76	2.9	--	--
7/3/1998	32.00	16.80	--	15.20	-1.30	ND	--	ND	ND	ND	ND	ND	--	--
1/14/1999	32.00	17.13	--	14.87	-0.33	ND	--	ND	ND	ND	ND	11	--	--
7/15/1999	32.00	15.85	--	16.15	1.28	ND	--	ND	ND	ND	ND	ND	--	--
1/7/2000	32.00	16.94	--	15.06	-1.09	ND	--	ND	ND	ND	ND	11	--	--
7/19/2000	32.00	18.06	--	13.94	-1.12	ND	--	ND	2.99	0.521	ND	ND	--	--
1/2/2001	32.00	18.12	--	13.88	-0.06	ND	--	ND	ND	ND	ND	ND	--	--
5/23/2001	32.00	16.96	--	15.04	1.16	ND	--	ND	ND	ND	ND	ND	--	--
7/30/2001	32.00	16.52	--	15.48	0.44	<50	--	<0.50	<0.50	<0.50	<0.50	2.7	--	--
10/15/2001	32.00	16.72	--	15.28	-0.20	<50	--	<0.50	0.65	<0.50	<0.50	<5.0	--	--
1/14/2002	32.00	14.53	--	17.47	2.19	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
4/15/2002	32.00	14.96	--	17.04	-0.43	<50	--	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
7/15/2002	32.00	15.60	--	16.40	-0.64	<50	--	<0.50	<0.50	<0.50	<1.0	11	--	--
1/18/2003	32.00	14.78	--	17.22	0.82	<50	--	<0.50	<0.50	<0.50	<1.0	<2.0	--	--
2/4/2004	32.00	15.65	0.00	16.35	-0.87	--	52	2.3	<0.50	<0.50	<1.0	--	2.4	
8/11/2004	32.00	15.86	0.00	16.14	-0.21	--	350	<2.5	<2.5	<2.5	<5.0	--	310	
3/31/2005	32.00	13.73	0.00	18.27	2.13	--	<2000	<0.50	<0.50	<0.50	<1.0	--	2100	
9/30/2005	32.00	15.94	0.00	16.06	-2.21	--	1200	<0.50	0.50	<0.50	<1.0	--	6900	
3/27/2006	32.00	13.13	0.00	18.87	2.81	--	460	<0.50	<0.50	<0.50	<1.0	--	820	
9/27/2006	32.00	16.75	0.00	15.25	-3.62	--	520	<5.0	<5.0	<5.0	8.2	--	870	
3/27/2007	32.00	16.87	0.00	15.13	-0.12	--	1400	<0.50	<0.50	<0.50	<0.50	--	3600	
9/28/2007	32.00	17.91	0.00	14.09	-1.04	--	280	<2.5	<2.5	<2.5	<2.5	--	670	
3/26/2008	32.00	17.45	0.00	14.55	0.46	--	110	<0.50	<0.50	<0.50	<1.0	--	210	
7/28/2008	32.00	18.50	0.00	13.50	-1.05	--	<50	<0.50	<0.50	<0.50	<1.0	--	11	
1/26/2009	32.00	18.65	0.00	13.35	-0.15	--	<50	<0.50	<0.50	<0.50	<1.0	--	22	
8/3/2009	32.03	18.11	0.00	13.92	0.57	--	67	<0.50	<0.50	<0.50	<1.0	--	64	
1/25/2010	32.03	17.67	0.00	14.36	0.44	--	<50	<0.50	<0.50	<0.50	<1.0	--	10	
8/3/2010	32.03	17.58	0.00	14.45	0.09	--	<50	<0.50	<0.50	<0.50	<1.0	--	10	

Table 2
HISTORICAL GROUNDWATER RESULTS

**August 3, 2011
76 Station 0752**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
2/17/2011	32.03	17.53	0.00	14.50	0.05	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.5	
8/3/2011	32.03	17.18	0.00	14.85	0.35	--	<50	<0.50	<0.50	<0.50	<1.0	--	1.6	

ARCADIS

Attachment C

Laboratory Reports and Chain-of-Custody Documentation



Date of Report: 08/25/2014

Kathy Brandt

Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Client Project: 351646
BCL Project: 0752
BCL Work Order: 1418836
Invoice ID: B181483

Enclosed are the results of analyses for samples received by the laboratory on 8/14/2014. 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

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1418836 Page 1 of 7

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

Union Oil Site ID:	0752	Union Oil Consultant:	Arcalis	COC	1 of 2
Site Global ID:	T0600101486	Consultant Contact:	Katherine Brant	Turnaround Time (TAT):	
Site Address:	800 Harris St.	Consultant Phone No.:	510-596-9675	Standard	24 Hours <input type="checkbox"/>
Union Oil P/N:	DAKland CA	Sampling Company:	Gettler Ryan	48 Hours <input type="checkbox"/>	72 Hours <input type="checkbox"/>
Union Oil P/M Phone No.:	925-791-6463	Sampled By (PRINT):	Alex Wong	Special Instructions	
Charge Code: NWRTB-0351646-0-LAB		Sampler Signature:			
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.					
14.18836 SAMPLE ID					
Field Point Name	Matrix	DTW	Date (mmdd)	Sample Time	# of Containers
-1 QA	W-S-A	140814	1000	—	2
-2 MW-1	W-S-A		0635	11	
-3 MW-2	W-S-A		0917	11	
-4 MW-3	W-S-A		0835	11	
-5 MW-4	W-S-A		0754	11	
-6 MW-5	W-S-A		0712	11	
-7 MW-6	W-S-A		0743	11	
-8 MW-7	W-S-A		0640	11	
-9 MW-8	W-S-A		1015	11	
-10 A-MW-2	W-S-A		0920	11	
-11 A-MW-3	W-S-A		0825	11	
-12 A-MW-4	W-S-A				
Relinquished By	Company	Date / Time:	Carrie	Company	Date / Time:
Received By	Company	Date / Time:	GETTLER-RYAN FENCE 08-14-14 BCLAB	Company	Date / Time:
Rel. 07/20 8/14/14 0300 Hwy 8/14/14 0300					

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Chain of Custody and Cooler Receipt Form for 1418836 Page 3 of 7

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 17	06/05/14	Page 1 Of 2
Submission #: 1A.18836						
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			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"/>
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 type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <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: 0.97	Container: PE	Thermometer ID: 207	Date/Time: 8-14-14 2300	Analyst Init: N
Temperature: (A) 1.7 °C / (C) 1.9 °C						
SAMPLE CONTAINERS		SAMPLE NUMBERS				
		13	14	15	16	17
QT GENERAL MINERAL/ GENERAL		C	C	C	C	C
PT PE UNPRESERVED		D	D	D	D	D
QT INORGANIC CHEMICAL METALS						
PT INORGANIC CHEMICAL METALS						
PT CYANIDE						
PT NITROGEN FORMS						
PT TOTAL SULFIDE						
2oz. NITRATE / NITRITE						
PT TOTAL ORGANIC CARBON						
PT TOX						
PT CHEMICAL OXYGEN DEMAND						
PTA PHENOLICS						
40ml VOA VIAL TRAVEL BLANK						
40ml VOA VIAL		A(6)	A(6)	A(6)	A(6)	A(6)
QT EPA 413.1, 413.2, 418.1		A(6)	A(6)	A(6)	A(6)	A(6)
PT ODOR						
RADIOLOGICAL						
BACTERIOLOGICAL						
40 ml VOA VIAL- 504		B3	B3	B3	B3	B3
QT EPA 508/608/8080		B3	B3	B3	B3	B3
QT EPA 515.1/8150						
QT EPA 525						
QT EPA 525 TRAVEL BLANK						
40ml EPA 547						
40ml EPA 531.1						
8oz Amber EPA 548						
QT EPA 549						
QT EPA 632						
QT EPA 8015M						
QT AMBER						
8 OZ. JAR						
32 OZ. JAR						
SOIL SLEEVE						
PCB VIAL						
PLASTIC BAG						
FERROUS IRON						
ENCORE						
SMART KIT						
Summa Canister						
Comments: _____						
Sample Numbering Completed By: M Date/Time: 8/15/14 0110 (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16)						
A = Actual / C = Corrected						

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Chain of Custody and Cooler Receipt Form for 1418836 Page 4 of 7

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 17	06/05/14	Page 2 of 5		
Submission #: 14-18836										
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <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"/>		
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 type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
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: 0.97 Container: PC Thermometer ID: 207		Date/Time: 6/14/14 23:00 Analyst Init: M						
Temperature: (A) 1.7 °C / (C) 1.9 °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-6	A-6	A-6	()	()	()	()	()	()	
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504	B-3	B-3	B-3							
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 Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: _____

Sample Numbering Completed By: M Date/Time: 6/15/14 02:40 (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16)

A = Actual / C = Corrected

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BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 17	06/05/14	Page <u>3</u> Of <u>5</u>			
Submission #: <u>14-18836</u>											
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <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"/>				
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 type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Emissivity: <u>0.97</u> Container: <u>VOA</u> Thermometer ID: <u>207</u> Temperature: (A) <u>1.4</u> °C / (C) <u>1.7</u> °C				Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date/Time <u>8/14/14 2300</u> Analyst Init <u>7</u>					
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	#10	#11	#12
QT GENERAL MINERAL/GENERAL											
PT PE UNPRESERVED											
OT INORGANIC CHEMICAL METALS											
PT INORGANIC CHEMICAL METALS											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT TOX											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK		<u>A2</u>	<u>A14</u>	<u>A16</u>	<u>A10</u>	<u>A15</u>	<u>A14</u>	<u>A16</u>	<u>A16</u>	<u>A16</u>	<u>A16</u>
40ml VOA VIAL											
QT EPA 413.1, 413.2, 418.1											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504		<u>B2</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>	<u>B3</u>
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 Amber EPA 548											
QT EPA 549											
QT EPA 632											
QT EPA 8015M											
QT AMBER											
8 OZ. JAR											
32 OZ. JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
Summa Canister											
Comments: _____											
Sample Numbering Completed By: _____ Date/Time: <u>8/14/14 0230</u> S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16											
A = Actual / C = Corrected											

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Chain of Custody and Cooler Receipt Form for 1418836 Page 6 of 7

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 17	06/05/14	Page <u>4</u> Of <u>5</u>			
Submission #: <u>14-18836</u>											
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <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"/>				
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 type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>											
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>0.97</u> Container: <u>PE</u> Thermometer ID: <u>207</u>				Date/Time: <u>8-14-14</u> <u>2300</u>					
		Temperature: (A) <u>1.3</u> °C / (C) <u>1.5</u> °C						Analyst Init: <u>N</u>			
SAMPLE CONTAINERS		SAMPLE NUMBERS									
QT GENERAL MINERAL/ GENERAL		<u>1-2</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>110</u>	<u>111</u>	<u>112</u>	<u>117</u>
PT PE UNPRESERVED		<u>C</u>	<u>S</u>	<u>S</u>	<u>S</u>	<u>C</u>	<u>S</u>	<u>S</u>	<u>S</u>	<u>S</u>	<u>S</u>
QT INORGANIC CHEMICAL METALS		<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>
PT INORGANIC CHEMICAL METALS											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT TOX											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL		()	()	()	()	()	()	()	()	()	()
QT EPA 413.1, 413.2, 418.1											
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 Amber EPA 548											
QT EPA 549											
QT EPA 632											
QT EPA 8015M											
QT AMBER											
8 OZ. JAR											
32 OZ. JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
Summa Canister											
Comments: _____											
Sample Numbering Completed By: <u>M</u> Date/Time: <u>8-15-14 0220</u> [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16]											
A = Actual / C = Corrected											

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Chain of Custody and Cooler Receipt Form for 1418836 Page 7 of 7

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 17	06/05/14	Page 2 Of 5				
Submission #: 1418836										
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID					
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			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"/>					
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 type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <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: 0.97 Container: PC Thermometer ID: 207		Date/Time 8-14-14 2300 Analyst Init N						
Temperature: (A) 1.6 °C / (C) 1.8 °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	18	29	18	20	21	24	7	8	9	10
	5	6	8	6	5	5				
	QT GENERAL MINERAL/ GENERAL									
	PT PE UNPRESERVED									
	QT INORGANIC CHEMICAL METALS									
	PT INORGANIC CHEMICAL METALS									
	PT CYANIDE									
	PT NITROGEN FORMS									
	PT TOTAL SULFIDE									
	2oz NITRATE / NITRITE									
	PT TOTAL ORGANIC CARBON									
	PT TOX									
	PT CHEMICAL OXYGEN DEMAND									
	PTA PHENOLICS									
	40ml VOA VIAL TRAVEL BLANK									
	40ml VOA VIAL	()	()	()	()	()	()	()	()	()
	QT EPA 413.1, 413.2, 418.1									
	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 Amber EPA 548									
	QT EPA 549									
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments: _____										
Sample Numbering Completed By: _____	Date/Time: 8-14-14 20:00	(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16)								
A = Actual / C = Corrected										

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1418836-01	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: QA-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/17/2014 00:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): QA Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418836-02	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-1-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 10:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418836-03	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-2-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 06:35 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:

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2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1418836-04	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-3-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 09:17 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-05	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-4-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 08:35 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-06	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-5-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 07:54 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1418836-07	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-6-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 07:12 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-08	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-7-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 07:43 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-09	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-8-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 06:40 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-8 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

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Arcadis
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Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1418836-10	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-2-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 10:15 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418836-11	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-3-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 09:20 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418836-12	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-4-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 08:25 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1418836-13	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-5-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 05:50 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1418836-14	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-6-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 06:55 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1418836-15	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-7-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 07:55 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:		

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2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1418836-16	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-1-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 09:50 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418836-17	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-2-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 07:35 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418836-18	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-3-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 11:18 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1418836-19	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-4-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 10:40 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-20	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-5-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 08:45 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-21	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-6-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 09:35 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1418836-22	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-EW-1-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 09:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-EW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-23	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MPE-1-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 06:45 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MPE-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1418836-24	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MP-1-W-140814 Sampled By: GRD	Receive Date: 08/14/2014 23:00 Sampling Date: 08/14/2014 10:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MP-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-01	Client Sample Name:	0752, QA-W-140814, 8/17/2014 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	91.0	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 12:56	JMS	MS-V12	1	BXH0972

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-01	Client Sample Name:	0752, QA-W-140814, 8/17/2014 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)	88.7	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 18:12	jjh	GC-V9	1	BXH1709



Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-02	Client Sample Name: 0752, MW-1-W-140814, 8/14/2014 10:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	2.0	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
1,2-Dichloroethane-d4 (Surrogate)	97.3	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	95.1	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 15:52	JMS	MS-V12	1	BXH0972

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-02	Client Sample Name:	0752, MW-1-W-140814, 8/14/2014 10:00:00AM					
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)	97.9	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 18:33	jjh	GC-V9	1	BXH1709



Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-02	Client Sample Name: 0752, MW-1-W-140814, 8/14/2014 10:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0035	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run			Dilution	QC	Batch ID
			Date/Time	Analyst	Instrument			
1	RSK-175M	08/20/14	08/20/14 12:47	JMS	GC-V1	1		BXH1795

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-02	Client Sample Name: 0752, MW-1-W-140814, 8/14/2014 10:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	37	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	2.0	mg/L	0.44		EPA-300.0	ND		2
Sulfate	9.4	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 11:54	RML	MET-1	1	BXH1580
2	EPA-300.0	08/15/14	08/16/14 10:31	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 08:29	TDC	KONE-1	1	BXH1530

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-02	Client Sample Name:	0752, MW-1-W-140814, 8/14/2014 10:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 10:42	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-03	Client Sample Name: 0752, MW-2-W-140814, 8/14/2014 6:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	94.5	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	96.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 13:13	JMS	MS-V12	1	BXH0972

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-03	Client Sample Name: 0752, MW-2-W-140814, 8/14/2014 6:35:00AM						
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)	110	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 18:53	jjh	GC-V9	1	BXH1709



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-03	Client Sample Name: 0752, MW-2-W-140814, 8/14/2014 6:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0060	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Run				QC	
		Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	RSK-175M	08/20/14	08/20/14 12:51	JMS	GC-V1	1	BXH1795

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-03	Client Sample Name: 0752, MW-2-W-140814, 8/14/2014 6:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	120	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	1.0	mg/L	0.44		EPA-300.0	ND		2
Sulfate	79	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 12:00	RML	MET-1	1	BXH1580
2	EPA-300.0	08/15/14	08/15/14 22:23	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 08:29	TDC	KONE-1	1	BXH1530

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-03	Client Sample Name: 0752, MW-2-W-140814, 8/14/2014 6:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 10:58	ARD	PE-OP1	1	BXH1782



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2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-04	Client Sample Name: 0752, MW-3-W-140814, 8/14/2014 9:17:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	9.8	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	2.3	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	490	ug/L	5.0		EPA-8260B	ND	A01	2
Toluene	1.5	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	3.7	ug/L	1.0		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	94.8	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	126	%	80 - 120 (LCL - UCL)		EPA-8260B		S09	1
4-Bromofluorobenzene (Surrogate)	97.4	%	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	08/15/14	08/16/14	03:46	JMS	MS-V12	1	BXH0972
2	EPA-8260B	08/15/14	08/18/14	13:24	JMS	MS-V12	10	BXH0972

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-04	Client Sample Name: 0752, MW-3-W-140814, 8/14/2014 9:17:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	1800	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	114	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 19:13	jjh	GC-V9	10	BXH1709

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-04	Client Sample Name: 0752, MW-3-W-140814, 8/14/2014 9:17:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	17	mg/L	0.050		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	RSK-175M	08/20/14	08/20/14	13:19	JMS	GC-V1	50	BXH1795

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-04	Client Sample Name: 0752, MW-3-W-140814, 8/14/2014 9:17:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	450	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	0.55	mg/L	0.44		EPA-300.0	ND		2
Sulfate	2.2	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 12:07	RML	MET-1	1	BXH1580
2	EPA-300.0	08/15/14	08/16/14 08:55	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:11	TDC	KONE-1	1	BXH1530

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-04	Client Sample Name:	0752, MW-3-W-140814, 8/14/2014 9:17:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	810	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 10:59	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-05	Client Sample Name: 0752, MW-4-W-140814, 8/14/2014 8:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	95.2	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 13:31	JMS	MS-V12	1	BXH0972

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-05	Client Sample Name: 0752, MW-4-W-140814, 8/14/2014 8:35:00AM						
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	08/18/14	08/18/14 19:34	jjh	GC-V9	1	BXH1709



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-05	Client Sample Name: 0752, MW-4-W-140814, 8/14/2014 8:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0016	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/20/14	08/20/14 13:09	JMS	GC-V1	1		BXH1795

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-05	Client Sample Name: 0752, MW-4-W-140814, 8/14/2014 8:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	84	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	4.4	mg/L	0.44		EPA-300.0	ND		2
Sulfate	24	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 12:15	RML	MET-1	1	BXH1580
2	EPA-300.0	08/15/14	08/16/14 08:24	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:11	TDC	KONE-1	1	BXH1530

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-05	Client Sample Name:	0752, MW-4-W-140814, 8/14/2014 8:35:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	08/19/14	08/20/14 11:01	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-06	Client Sample Name: 0752, MW-5-W-140814, 8/14/2014 7:54:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	7.2	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	2.2	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	1.0	ug/L	0.50		EPA-8260B	ND		1
Toluene	5.8	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	10	ug/L	1.0		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.4	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	110	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 16:46	JMS	MS-V12	1	BXH0972

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-06	Client Sample Name: 0752, MW-5-W-140814, 8/14/2014 7:54:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	1300	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	98.6	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 19:54	jjh	GC-V9	10	BXH1709

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2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-06	Client Sample Name: 0752, MW-5-W-140814, 8/14/2014 7:54:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.79	mg/L	0.0050		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/20/14	08/20/14 13:26	JMS	GC-V1	5	BXH1795

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-06	Client Sample Name: 0752, MW-5-W-140814, 8/14/2014 7:54:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	170	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 12:21	RML	MET-1	1	BXH1580
2	EPA-300.0	08/15/14	08/16/14 07:20	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:12	TDC	KONE-1	1	BXH1530

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-06	Client Sample Name:	0752, MW-5-W-140814, 8/14/2014 7:54:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	160	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:03	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-07	Client Sample Name: 0752, MW-6-W-140814, 8/14/2014 7:12:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.5	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	108	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 16:10	JMS	MS-V12	1	BXH0972

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-07	Client Sample Name: 0752, MW-6-W-140814, 8/14/2014 7:12:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	150	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	08/18/14	08/18/14 20:15	jjh	GC-V9	1	BXH1709



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-07	Client Sample Name: 0752, MW-6-W-140814, 8/14/2014 7:12:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	ND	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	RSK-175M	08/20/14	08/20/14	13:32	JMS	GC-V1	1	BXH1796



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-07	Client Sample Name: 0752, MW-6-W-140814, 8/14/2014 7:12:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	140	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	25	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 12:28	RML	MET-1	1	BXH1580
2	EPA-300.0	08/15/14	08/16/14 06:32	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:12	TDC	KONE-1	1	BXH1530

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-07	Client Sample Name: 0752, MW-6-W-140814, 8/14/2014 7:12:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:05	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-08	Client Sample Name: 0752, MW-7-W-140814, 8/14/2014 7:43:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	96	ug/L	1.0	EPA-8260B	ND	A01		1
Ethylbenzene	2.5	ug/L	0.50	EPA-8260B	ND			2
Methyl t-butyl ether	12	ug/L	0.50	EPA-8260B	ND			2
Toluene	5.6	ug/L	0.50	EPA-8260B	ND			2
Total Xylenes	13	ug/L	1.0	EPA-8260B	ND			2
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B				1
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)	EPA-8260B				2
Toluene-d8 (Surrogate)	91.4	%	80 - 120 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	95.9	%	80 - 120 (LCL - UCL)	EPA-8260B				2
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260B				2

Run #	Method	Prep Date	Run Date/Time			Analyst	Instrument	Dilution	QC Batch ID
			Date	Time	Duration				
1	EPA-8260B	08/15/14	08/18/14	12:49		JMS	MS-V12	2	BXH1317
2	EPA-8260B	08/15/14	08/16/14	03:11		JMS	MS-V12	1	BXH1317



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-08	Client Sample Name: 0752, MW-7-W-140814, 8/14/2014 7:43:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	580	ug/L	50		EPA-8015B	ND		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	08/18/14	08/18/14 20:35	jjh	GC-V9	1	BXH1709



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-08	Client Sample Name: 0752, MW-7-W-140814, 8/14/2014 7:43:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.44	mg/L	0.0050		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/20/14	08/21/14 14:52	JMS	GC-V1	5		BXH1796

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-08	Client Sample Name: 0752, MW-7-W-140814, 8/14/2014 7:43:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	73	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	4.3	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 12:51	RML	MET-1	1	BXH1581
2	EPA-300.0	08/15/14	08/16/14 07:04	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:12	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-08	Client Sample Name:	0752, MW-7-W-140814, 8/14/2014 7:43:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	08/19/14	08/20/14 11:06	ARD	PE-OP1	1	BXH1782

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-09	Client Sample Name: 0752, MW-8-W-140814, 8/14/2014 6:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	96.9	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	91.6	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 13:48	JMS	MS-V12	1	BXH1450

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-09	Client Sample Name: 0752, MW-8-W-140814, 8/14/2014 6:40:00AM						
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)	97.4	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 20:55	jjh	GC-V9	1	BXH1709



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-09	Client Sample Name: 0752, MW-8-W-140814, 8/14/2014 6:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0059	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/20/14	08/21/14 14:57	JMS	GC-V1	1		BXH1796

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-09	Client Sample Name: 0752, MW-8-W-140814, 8/14/2014 6:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	200	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	28	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:04	RML	MET-1	1	BXH1581
2	EPA-300.0	08/15/14	08/15/14 22:39	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-09	Client Sample Name:	0752, MW-8-W-140814, 8/14/2014 6:40:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	08/19/14	08/20/14 11:08	ARD	PE-OP1	1	BXH1782

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-10	Client Sample Name: 0752, A-MW-2-W-140814, 8/14/2014 10:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1200	ug/L	12		EPA-8260B	ND	A01	1
Ethylbenzene	1000	ug/L	12		EPA-8260B	ND	A01	1
Methyl t-butyl ether	2400	ug/L	50		EPA-8260B	ND	A01	2
Toluene	1800	ug/L	50		EPA-8260B	ND	A01	2
Total Xylenes	4300	ug/L	25		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	95.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time			Instrument	Dilution	QC Batch ID
			Date	Time	Analyst			
1	EPA-8260B	08/15/14	08/16/14	05:31	JMS	MS-V12	25	BXH1317
2	EPA-8260B	08/15/14	08/18/14	15:09	JMS	MS-V12	100	BXH1317

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-10	Client Sample Name: 0752, A-MW-2-W-140814, 8/14/2014 10:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	31000	ug/L	1000		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	97.4	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 03:41	jjh	GC-V9	20	BXH1709

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-10	Client Sample Name: 0752, A-MW-2-W-140814, 8/14/2014 10:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	18	mg/L	0.050		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	RSK-175M	08/20/14	08/21/14	15:02	JMS	GC-V1	50	BXH1796



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-10	Client Sample Name: 0752, A-MW-2-W-140814, 8/14/2014 10:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	520	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:11	RML	MET-1	1	BXH1581
2	EPA-300.0	08/15/14	08/16/14 10:47	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-10	Client Sample Name:	0752, A-MW-2-W-140814, 8/14/2014 10:15:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	3600	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:10	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-11	Client Sample Name: 0752, A-MW-3-W-140814, 8/14/2014 9:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.2	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 14:06	JMS	MS-V12	1	BXH1450

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-11	Client Sample Name: 0752, A-MW-3-W-140814, 8/14/2014 9:20:00AM						
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)	97.1	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 21:15	jjh	GC-V9	1	BXH1709

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-11	Client Sample Name: 0752, A-MW-3-W-140814, 8/14/2014 9:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0018	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/20/14	08/21/14 15:17	JMS	GC-V1	1		BXH1796

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-11	Client Sample Name: 0752, A-MW-3-W-140814, 8/14/2014 9:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	110	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	38	mg/L	0.44		EPA-300.0	ND		2
Sulfate	42	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:19	RML	MET-1	1	BXH1581
2	EPA-300.0	08/15/14	08/16/14 09:43	LD1	IC5	1	BXH1597
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-11	Client Sample Name: 0752, A-MW-3-W-140814, 8/14/2014 9:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND			1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND			1
Dissolved Iron	ND	ug/L	50	EPA-6010B	ND			1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND			1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND			1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:12	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-12	Client Sample Name: 0752, A-MW-4-W-140814, 8/14/2014 8:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	210	ug/L	5.0		EPA-8260B	ND	A01	1
Ethylbenzene	72	ug/L	0.50		EPA-8260B	ND		2
Methyl t-butyl ether	480	ug/L	5.0		EPA-8260B	ND	A01	1
Toluene	47	ug/L	0.50		EPA-8260B	ND		2
Total Xylenes	100	ug/L	1.0		EPA-8260B	ND		2
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	91.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	106	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	110	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time			Instrument	Dilution	QC Batch ID
			Date	Time	Analyst			
1	EPA-8260B	08/15/14	08/18/14	14:17	JMS	MS-V12	10	BXH1317
2	EPA-8260B	08/15/14	08/16/14	04:38	JMS	MS-V12	1	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-12	Client Sample Name: 0752, A-MW-4-W-140814, 8/14/2014 8:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	3200	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	90.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 04:02	jjh	GC-V9	10	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-12	Client Sample Name: 0752, A-MW-4-W-140814, 8/14/2014 8:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	1.6	mg/L	0.010		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/20/14	08/21/14 15:28	JMS	GC-V1	10	BXH1796

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-12	Client Sample Name:	0752, A-MW-4-W-140814, 8/14/2014 8:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	480	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	3.8	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:25	RML	MET-1	1	BXH1581
2	EPA-300.0	08/16/14	08/16/14 07:52	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-12	Client Sample Name:	0752, A-MW-4-W-140814, 8/14/2014 8:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	180	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:17	ARD	PE-OP1	1	BXH1782



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2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-13	Client Sample Name: 0752, A-MW-5-W-140814, 8/14/2014 5:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/15/14	08/15/14 14:24	JMS	MS-V12	1	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-13	Client Sample Name: 0752, A-MW-5-W-140814, 8/14/2014 5:50:00AM						
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)	95.9	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 22:56	jjh	GC-V9	1	BXH1709



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-13	Client Sample Name: 0752, A-MW-5-W-140814, 8/14/2014 5:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0010	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/20/14	08/21/14 15:34	JMS	GC-V1	1		BXH1796



Arcadis
2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-13	Client Sample Name: 0752, A-MW-5-W-140814, 8/14/2014 5:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	160	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	16	mg/L	0.44		EPA-300.0	ND		2
Sulfate	55	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:33	RML	MET-1	1	BXH1581
2	EPA-300.0	08/15/14	08/15/14 22:08	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-13	Client Sample Name:	0752, A-MW-5-W-140814, 8/14/2014 5:50:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:19	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-14	Client Sample Name: 0752, A-MW-6-W-140814, 8/14/2014 6:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/15/14	08/15/14 14:41	JMS	MS-V12	1	BXH1317

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-14	Client Sample Name: 0752, A-MW-6-W-140814, 8/14/2014 6:55:00AM						
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)	91.5	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 23:16	jjh	GC-V9	1	BXH1709



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2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-14	Client Sample Name: 0752, A-MW-6-W-140814, 8/14/2014 6:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	ND	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run			Dilution	QC	Batch ID
			Date/Time	Analyst	Instrument			
1	RSK-175M	08/20/14	08/21/14 15:38	JMS	GC-V1	1		BXH1796

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-14	Client Sample Name: 0752, A-MW-6-W-140814, 8/14/2014 6:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	150	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND	S05	2
Sulfate	36	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:40	RML	MET-1	1	BXH1581
2	EPA-300.0	08/18/14	08/18/14 02:47	LD1	IC5	1	BXH1593
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-14	Client Sample Name:	0752, A-MW-6-W-140814, 8/14/2014 6:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	08/19/14	08/20/14 11:21	ARD	PE-OP1	1	BXH1782

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-15	Client Sample Name:	0752, A-MW-7-W-140814, 8/14/2014 7:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	91.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run			Dilution	QC	Batch ID
			Date/Time	Analyst	Instrument			
1	EPA-8260B	08/15/14	08/15/14 14:59	JMS	MS-V12	1		BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-15	Client Sample Name: 0752, A-MW-7-W-140814, 8/14/2014 7:55:00AM						
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)	88.4	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 23:36	jjh	GC-V9	1	BXH1710



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2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-15	Client Sample Name: 0752, A-MW-7-W-140814, 8/14/2014 7:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.023	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/20/14	08/22/14 15:11	JMS	GC-V1	1		BXH1796



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-15	Client Sample Name: 0752, A-MW-7-W-140814, 8/14/2014 7:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	230	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	48	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:47	RML	MET-1	1	BXH1581
2	EPA-300.0	08/16/14	08/16/14 07:36	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-15	Client Sample Name:	0752, A-MW-7-W-140814, 8/14/2014 7:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	1200	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:23	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-16	Client Sample Name: 0752, S-MW-1-W-140814, 8/14/2014 9:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1700	ug/L	10		EPA-8260B	ND	A01	1
Ethylbenzene	340	ug/L	10		EPA-8260B	ND	A01	1
Methyl t-butyl ether	7600	ug/L	50		EPA-8260B	ND	A01	2
Toluene	53	ug/L	10		EPA-8260B	ND	A01	1
Total Xylenes	320	ug/L	20		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	98.3	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	93.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time			Instrument	Dilution	QC Batch ID
			Date	Time	Analyst			
1	EPA-8260B	08/15/14	08/16/14	05:13	JMS	MS-V12	20	BXH1317
2	EPA-8260B	08/15/14	08/18/14	14:52	JMS	MS-V12	100	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-16	Client Sample Name: 0752, S-MW-1-W-140814, 8/14/2014 9:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	9100	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	98.7	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 04:22	jjh	GC-V9	10	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-16	Client Sample Name: 0752, S-MW-1-W-140814, 8/14/2014 9:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	2.0	mg/L	0.010		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/20/14	08/22/14 15:16	JMS	GC-V1	10	BXH1796

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-16	Client Sample Name: 0752, S-MW-1-W-140814, 8/14/2014 9:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	380	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 13:55	RML	MET-1	1	BXH1581
2	EPA-300.0	08/16/14	08/16/14 10:15	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-16	Client Sample Name:	0752, S-MW-1-W-140814, 8/14/2014 9:50:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	1900	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:25	ARD	PE-OP1	1	BXH1782

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-17	Client Sample Name: 0752, S-MW-2-W-140814, 8/14/2014 7:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	99.1	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	97.6	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	97.0	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 15:16	JMS	MS-V12	1	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-17	Client Sample Name:	0752, S-MW-2-W-140814, 8/14/2014 7:35:00AM					
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)	85.5	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/18/14 23:57	jjh	GC-V9	1	BXH1710



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2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-17	Client Sample Name: 0752, S-MW-2-W-140814, 8/14/2014 7:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0016	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/22/14	08/22/14 15:22	JMS	GC-V1	1		BXH1797

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-17	Client Sample Name: 0752, S-MW-2-W-140814, 8/14/2014 7:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	130	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	47	mg/L	0.44		EPA-300.0	ND		2
Sulfate	41	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 14:02	RML	MET-1	1	BXH1581
2	EPA-300.0	08/16/14	08/16/14 06:48	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:17	TDC	KONE-1	1	BXH1531

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-17	Client Sample Name: 0752, S-MW-2-W-140814, 8/14/2014 7:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND			1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND			1
Dissolved Iron	ND	ug/L	50	EPA-6010B	ND			1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND			1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND			1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:26	ARD	PE-OP1	1	BXH1782



Arcadis
2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-18	Client Sample Name: 0752, S-MW-3-W-140814, 8/14/2014 11:18:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	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
1,2-Dichloroethane-d4 (Surrogate)	99.9	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	93.2	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 16:28	JMS	MS-V12	1	BXH1317

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-18	Client Sample Name: 0752, S-MW-3-W-140814, 8/14/2014 11:18:00AM						
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)	84.5	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 00:17	jjh	GC-V9	1	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-18	Client Sample Name: 0752, S-MW-3-W-140814, 8/14/2014 11:18:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	ND	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	RSK-175M	08/22/14	08/22/14	15:26	JMS	GC-V1	1	BXH1797

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-18	Client Sample Name: 0752, S-MW-3-W-140814, 8/14/2014 11:18:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	140	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	13	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 14:25	RML	MET-1	1	BXH1582
2	EPA-300.0	08/16/14	08/16/14 11:19	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:22	TDC	KONE-1	1	BXH1533

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-18	Client Sample Name:	0752, S-MW-3-W-140814, 8/14/2014 11:18:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:28	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-19	Client Sample Name: 0752, S-MW-4-W-140814, 8/14/2014 10:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.70	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	9.4	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
1,2-Dichloroethane-d4 (Surrogate)	97.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	93.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 19:43	JMS	MS-V12	1	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-19	Client Sample Name: 0752, S-MW-4-W-140814, 8/14/2014 10:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	160	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	106	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 00:38	jjh	GC-V9	1	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-19	Client Sample Name: 0752, S-MW-4-W-140814, 8/14/2014 10:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.21	mg/L	0.0050		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/22/14	08/22/14 15:31	JMS	GC-V1	5	BXH1797

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-19	Client Sample Name: 0752, S-MW-4-W-140814, 8/14/2014 10:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	300	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	17	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 14:39	RML	MET-1	1	BXH1582
2	EPA-300.0	08/16/14	08/16/14 11:03	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:22	TDC	KONE-1	1	BXH1533

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-19	Client Sample Name:	0752, S-MW-4-W-140814, 8/14/2014 10:40:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	380	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:30	ARD	PE-OP1	1	BXH1782



Arcadis
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-20	Client Sample Name: 0752, S-MW-5-W-140814, 8/14/2014 8:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	720	ug/L	50	EPA-8260B	ND	A01		1
Ethylbenzene	260	ug/L	5.0	EPA-8260B	ND	A01		2
Methyl t-butyl ether	7300	ug/L	50	EPA-8260B	ND	A01		1
Toluene	150	ug/L	5.0	EPA-8260B	ND	A01		2
Total Xylenes	370	ug/L	10	EPA-8260B	ND	A01		2
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)	EPA-8260B				1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)	EPA-8260B				2
Toluene-d8 (Surrogate)	96.2	%	80 - 120 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	95.2	%	80 - 120 (LCL - UCL)	EPA-8260B				2
4-Bromofluorobenzene (Surrogate)	98.6	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	99.0	%	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	08/15/14	08/18/14	14:34	JMS	MS-V12	100	BXH1317
2	EPA-8260B	08/15/14	08/16/14	04:56	JMS	MS-V12	10	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-20	Client Sample Name: 0752, S-MW-5-W-140814, 8/14/2014 8:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	2100	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	89.5	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 05:03	jjh	GC-V9	10	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-20	Client Sample Name: 0752, S-MW-5-W-140814, 8/14/2014 8:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	1.7	mg/L	0.025		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/22/14	08/22/14 15:36	JMS	GC-V1	25	BXH1797

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-20	Client Sample Name: 0752, S-MW-5-W-140814, 8/14/2014 8:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	440	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 14:46	RML	MET-1	1	BXH1582
2	EPA-300.0	08/16/14	08/16/14 08:08	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:22	TDC	KONE-1	1	BXH1533

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-20	Client Sample Name:	0752, S-MW-5-W-140814, 8/14/2014 8:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	1200	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:32	ARD	PE-OP1	1	BXH1782

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-21	Client Sample Name: 0752, S-MW-6-W-140814, 8/14/2014 9:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	900	ug/L	10	EPA-8260B	ND	A01		2
Toluene	ND	ug/L	0.50	EPA-8260B	ND			1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND			1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B				1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)	EPA-8260B				2
Toluene-d8 (Surrogate)	97.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	94.6	%	80 - 120 (LCL - UCL)	EPA-8260B				2
4-Bromofluorobenzene (Surrogate)	105	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	99.7	%	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	08/15/14	08/16/14	04:04	JMS	MS-V12	1	BXH1317
2	EPA-8260B	08/15/14	08/18/14	13:42	JMS	MS-V12	20	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-21	Client Sample Name: 0752, S-MW-6-W-140814, 8/14/2014 9:35:00AM						
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)	88.1	%	70 - 130 (LCL - UCL)	EPA-8015B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 00:58	jjh	GC-V9	1	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-21	Client Sample Name: 0752, S-MW-6-W-140814, 8/14/2014 9:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.0015	mg/L	0.0010		RSK-175M	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	RSK-175M	08/22/14	08/22/14 15:41	JMS	GC-V1	1		BXH1797

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-21	Client Sample Name: 0752, S-MW-6-W-140814, 8/14/2014 9:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	170	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	4.3	mg/L	0.44		EPA-300.0	ND		2
Sulfate	26	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 14:54	RML	MET-1	1	BXH1582
2	EPA-300.0	08/16/14	08/16/14 09:59	LD1	IC5	1	BXH1592
3	EPA-353.2	08/15/14	08/15/14 09:22	TDC	KONE-1	1	BXH1533

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2000 Powell Street 7th Floor
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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-21	Client Sample Name:	0752, S-MW-6-W-140814, 8/14/2014 9:35:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:34	ARD	PE-OP1	1	BXH1782



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-22	Client Sample Name:	0752, S-EW-1-W-140814, 8/14/2014 9:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	63	ug/L	2.5		EPA-8260B	ND	A01	1
Ethylbenzene	83	ug/L	0.50		EPA-8260B	ND		2
Methyl t-butyl ether	340	ug/L	2.5		EPA-8260B	ND	A01	1
Toluene	7.5	ug/L	0.50		EPA-8260B	ND		2
Total Xylenes	57	ug/L	1.0		EPA-8260B	ND		2
1,2-Dichloroethane-d4 (Surrogate)	93.4	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	94.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	111	%	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	08/15/14	08/18/14	13:07	JMS	MS-V12	5	BXH1317
2	EPA-8260B	08/15/14	08/16/14	03:29	JMS	MS-V12	1	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-22	Client Sample Name: 0752, S-EW-1-W-140814, 8/14/2014 9:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	8000	ug/L	500		EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	95.2	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 04:43	jjh	GC-V9	10	BXH1710

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Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1418836-22	Client Sample Name: 0752, S-EW-1-W-140814, 8/14/2014 9:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	0.57	mg/L	0.0050		RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/22/14	08/22/14 15:55	JMS	GC-V1	5	BXH1797

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1418836-22	Client Sample Name:	0752, S-EW-1-W-140814, 8/14/2014 9:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Alkalinity as CaCO ₃	220	mg/L	4.1		EPA-310.1	ND		1
Nitrate as NO ₃	ND	mg/L	0.44		EPA-300.0	ND		2
Sulfate	2.8	mg/L	1.0		EPA-300.0	ND		2
Nitrite as NO ₂	ND	mg/L	0.17		EPA-353.2	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-310.1	08/18/14	08/18/14 15:01	RML	MET-1	1	BXH1582
2	EPA-300.0	08/16/14	08/16/14 08:40	LD1	IC5	1	BXH1593
3	EPA-353.2	08/15/14	08/15/14 09:22	TDC	KONE-1	1	BXH1533

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

BCL Sample ID:	1418836-22	Client Sample Name:	0752, S-EW-1-W-140814, 8/14/2014 9:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Cadmium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Iron	2600	ug/L	50		EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50		EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10		EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10		EPA-6010B	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	08/19/14	08/20/14 11:52	ARD	PE-OP1	1	BXH1783



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-23	Client Sample Name: 0752, MPE-1-W-140814, 8/14/2014 6:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	24	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	3.2	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	470	ug/L	5.0		EPA-8260B	ND	A01	2
Toluene	1.7	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	5.5	ug/L	1.0		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	95.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	91.1	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.4	%	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	08/15/14	08/16/14	04:21	JMS	MS-V12	1	BXH1317
2	EPA-8260B	08/15/14	08/18/14	13:59	JMS	MS-V12	10	BXH1317

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-23	Client Sample Name: 0752, MPE-1-W-140814, 8/14/2014 6:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	150	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	94.0	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 01:18	jjh	GC-V9	1	BXH1710

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Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418836-24	Client Sample Name: 0752, MP-1-W-140814, 8/14/2014 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND			1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND			1
Methyl t-butyl ether	1.6	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
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	94.1	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-8260B	08/15/14	08/15/14 20:00	JMS	MS-V12	1	BXH1317

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Project Number: 351646
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1418836-24	Client Sample Name: 0752, MP-1-W-140814, 8/14/2014 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	93	ug/L	50		EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	84.6	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/18/14	08/19/14 01:39	jjh	GC-V9	1	BXH1710

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

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: BXH0972						
Benzene	BXH0972-BLK1	ND	ug/L	0.50		
Ethylbenzene	BXH0972-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BXH0972-BLK1	ND	ug/L	0.50		
Toluene	BXH0972-BLK1	ND	ug/L	0.50		
Total Xylenes	BXH0972-BLK1	ND	ug/L	1.0		
1,2-Dichloroethane-d4 (Surrogate)	BXH0972-BLK1	103	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXH0972-BLK1	94.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXH0972-BLK1	97.7	%	80 - 120 (LCL - UCL)		
QC Batch ID: BXH1317						
Benzene	BXH1317-BLK1	ND	ug/L	0.50		
Ethylbenzene	BXH1317-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BXH1317-BLK1	ND	ug/L	0.50		
Toluene	BXH1317-BLK1	ND	ug/L	0.50		
Total Xylenes	BXH1317-BLK1	ND	ug/L	1.0		
1,2-Dichloroethane-d4 (Surrogate)	BXH1317-BLK1	101	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXH1317-BLK1	93.0	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXH1317-BLK1	97.0	%	80 - 120 (LCL - UCL)		
QC Batch ID: BXH1450						
Benzene	BXH1450-BLK1	ND	ug/L	0.50		
Ethylbenzene	BXH1450-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BXH1450-BLK1	ND	ug/L	0.50		
Toluene	BXH1450-BLK1	ND	ug/L	0.50		
Total Xylenes	BXH1450-BLK1	ND	ug/L	1.0		
1,2-Dichloroethane-d4 (Surrogate)	BXH1450-BLK1	104	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXH1450-BLK1	97.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXH1450-BLK1	102	%	80 - 120 (LCL - UCL)		

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

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: BXH0972									
Benzene	BXH0972-BS1	LCS	29.810	25.000	ug/L	119		70 - 130	
Toluene	BXH0972-BS1	LCS	28.590	25.000	ug/L	114		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BXH0972-BS1	LCS	10.170	10.000	ug/L	102		75 - 125	
Toluene-d8 (Surrogate)	BXH0972-BS1	LCS	10.460	10.000	ug/L	105		80 - 120	
4-Bromofluorobenzene (Surrogate)	BXH0972-BS1	LCS	9.6400	10.000	ug/L	96.4		80 - 120	
QC Batch ID: BXH1317									
Benzene	BXH1317-BS1	LCS	27.890	25.000	ug/L	112		70 - 130	
Toluene	BXH1317-BS1	LCS	27.370	25.000	ug/L	109		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BXH1317-BS1	LCS	9.1300	10.000	ug/L	91.3		75 - 125	
Toluene-d8 (Surrogate)	BXH1317-BS1	LCS	10.110	10.000	ug/L	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	BXH1317-BS1	LCS	9.5700	10.000	ug/L	95.7		80 - 120	
QC Batch ID: BXH1450									
Benzene	BXH1450-BS1	LCS	31.460	25.000	ug/L	126		70 - 130	
Toluene	BXH1450-BS1	LCS	28.890	25.000	ug/L	116		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BXH1450-BS1	LCS	9.7400	10.000	ug/L	97.4		75 - 125	
Toluene-d8 (Surrogate)	BXH1450-BS1	LCS	9.8400	10.000	ug/L	98.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	BXH1450-BS1	LCS	9.8100	10.000	ug/L	98.1		80 - 120	

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BXH0972		Used client sample: N								
Benzene	MS	1418228-06	ND	29.480	25.000	ug/L		118		70 - 130
	MSD	1418228-06	ND	28.500	25.000	ug/L	3.4	114	20	70 - 130
Toluene	MS	1418228-06	ND	28.390	25.000	ug/L		114		70 - 130
	MSD	1418228-06	ND	27.090	25.000	ug/L	4.7	108	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1418228-06	ND	9.5300	10.000	ug/L		95.3		75 - 125
	MSD	1418228-06	ND	9.9200	10.000	ug/L	4.0	99.2		75 - 125
Toluene-d8 (Surrogate)	MS	1418228-06	ND	9.8800	10.000	ug/L		98.8		80 - 120
	MSD	1418228-06	ND	9.7900	10.000	ug/L	0.9	97.9		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1418228-06	ND	10.220	10.000	ug/L		102		80 - 120
	MSD	1418228-06	ND	10.330	10.000	ug/L	1.1	103		80 - 120
QC Batch ID: BXH1317		Used client sample: N								
Benzene	MS	1418795-01	ND	29.970	25.000	ug/L		120		70 - 130
	MSD	1418795-01	ND	29.790	25.000	ug/L	0.6	119	20	70 - 130
Toluene	MS	1418795-01	ND	27.060	25.000	ug/L		108		70 - 130
	MSD	1418795-01	ND	27.340	25.000	ug/L	1.0	109	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1418795-01	ND	9.6700	10.000	ug/L		96.7		75 - 125
	MSD	1418795-01	ND	9.3300	10.000	ug/L	3.6	93.3		75 - 125
Toluene-d8 (Surrogate)	MS	1418795-01	ND	10.260	10.000	ug/L		103		80 - 120
	MSD	1418795-01	ND	9.9200	10.000	ug/L	3.4	99.2		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1418795-01	ND	10.380	10.000	ug/L		104		80 - 120
	MSD	1418795-01	ND	9.6700	10.000	ug/L	7.1	96.7		80 - 120
QC Batch ID: BXH1450		Used client sample: N								
Benzene	MS	1418901-08	ND	21.750	25.000	ug/L		87.0		70 - 130
	MSD	1418901-08	ND	23.190	25.000	ug/L	6.4	92.8	20	70 - 130
Toluene	MS	1418901-08	ND	20.250	25.000	ug/L		81.0		70 - 130
	MSD	1418901-08	ND	21.950	25.000	ug/L	8.1	87.8	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1418901-08	ND	9.8800	10.000	ug/L		98.8		75 - 125
	MSD	1418901-08	ND	9.6700	10.000	ug/L	2.1	96.7		75 - 125
Toluene-d8 (Surrogate)	MS	1418901-08	ND	10.220	10.000	ug/L		102		80 - 120
	MSD	1418901-08	ND	9.8700	10.000	ug/L	3.5	98.7		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1418901-08	ND	10.330	10.000	ug/L		103		80 - 120
	MSD	1418901-08	ND	9.8900	10.000	ug/L	4.4	98.9		80 - 120

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Arcadis
2000 Powell Street 7th Floor
Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

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: BXH1709						
Gasoline Range Organics (C6 - C12)	BXH1709-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BXH1709-BLK1	113	%	70 - 130 (LCL - UCL)		
QC Batch ID: BXH1710						
Gasoline Range Organics (C6 - C12)	BXH1710-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BXH1710-BLK1	86.6	%	70 - 130 (LCL - UCL)		

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

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: BXH1709										
Gasoline Range Organics (C6 - C12)	BXH1709-BS1	LCS	970.41	1000.0	ug/L	97.0		85 - 115		
a,a,a-Trifluorotoluene (FID Surrogate)	BXH1709-BS1	LCS	42.926	40.000	ug/L	107		70 - 130		
QC Batch ID: BXH1710										
Gasoline Range Organics (C6 - C12)	BXH1710-BS1	LCS	955.58	1000.0	ug/L	95.6		85 - 115		
a,a,a-Trifluorotoluene (FID Surrogate)	BXH1710-BS1	LCS	42.150	40.000	ug/L	105		70 - 130		



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Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
QC Batch ID: BXH1709		Used client sample: N									
Gasoline Range Organics (C6 - C12)	MS	1416132-99	ND	1051.2	1000.0	ug/L		105		70 - 130	
	MSD	1416132-99	ND	1073.3	1000.0	ug/L	2.1	107	20	70 - 130	
a,a,a-Trifluorotoluene (FID Surrogate)	MS	1416132-99	ND	44.852	40.000	ug/L		112		70 - 130	
	MSD	1416132-99	ND	44.058	40.000	ug/L	1.8	110		70 - 130	
QC Batch ID: BXH1710		Used client sample: N									
Gasoline Range Organics (C6 - C12)	MS	1416132-98	ND	919.37	1000.0	ug/L		91.9		70 - 130	
	MSD	1416132-98	ND	949.94	1000.0	ug/L	3.3	95.0	20	70 - 130	
a,a,a-Trifluorotoluene (FID Surrogate)	MS	1416132-98	ND	42.454	40.000	ug/L		106		70 - 130	
	MSD	1416132-98	ND	40.907	40.000	ug/L	3.7	102		70 - 130	

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Gas Testing in Water

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH1795						
Methane	BXH1795-BLK1	ND	mg/L	0.0010		
QC Batch ID: BXH1796						
Methane	BXH1796-BLK1	ND	mg/L	0.0010		
QC Batch ID: BXH1797						
Methane	BXH1797-BLK1	ND	mg/L	0.0010		



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Gas Testing in Water

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: BXH1795									
Methane	BXH1795-BS1	LCS	0.012345	0.010843	mg/L	114		80 - 120	
	BXH1795-BSD1	LCSD	0.012128	0.010843	mg/L	112	1.8	80 - 120	20
QC Batch ID: BXH1796									
Methane	BXH1796-BS1	LCS	0.011171	0.010843	mg/L	103		80 - 120	
	BXH1796-BSD1	LCSD	0.010226	0.010843	mg/L	94.3	8.8	80 - 120	20
QC Batch ID: BXH1797									
Methane	BXH1797-BS1	LCS	0.011454	0.010843	mg/L	106		80 - 120	
	BXH1797-BSD1	LCSD	0.011395	0.010843	mg/L	105	0.5	80 - 120	20

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH1530						
Nitrite as NO2	BXH1530-BLK1	ND	mg/L	0.17		
QC Batch ID: BXH1531						
Nitrite as NO2	BXH1531-BLK1	ND	mg/L	0.17		
QC Batch ID: BXH1533						
Nitrite as NO2	BXH1533-BLK1	ND	mg/L	0.17		
QC Batch ID: BXH1580						
Total Alkalinity as CaCO3	BXH1580-BLK1	ND	mg/L	4.1		
QC Batch ID: BXH1581						
Total Alkalinity as CaCO3	BXH1581-BLK1	ND	mg/L	4.1		
QC Batch ID: BXH1582						
Total Alkalinity as CaCO3	BXH1582-BLK1	ND	mg/L	4.1		
QC Batch ID: BXH1592						
Nitrate as NO3	BXH1592-BLK1	ND	mg/L	0.44		
Sulfate	BXH1592-BLK1	ND	mg/L	1.0		
QC Batch ID: BXH1593						
Nitrate as NO3	BXH1593-BLK1	ND	mg/L	0.44		
Sulfate	BXH1593-BLK1	ND	mg/L	1.0		
QC Batch ID: BXH1597						
Nitrate as NO3	BXH1597-BLK1	ND	mg/L	0.44		
Sulfate	BXH1597-BLK1	ND	mg/L	1.0		

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

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: BXH1530									
Nitrite as NO2	BXH1530-BS1	LCS	1.6691	1.6425	mg/L	102		90 - 110	
QC Batch ID: BXH1531									
Nitrite as NO2	BXH1531-BS1	LCS	1.6655	1.6425	mg/L	101		90 - 110	
QC Batch ID: BXH1533									
Nitrite as NO2	BXH1533-BS1	LCS	1.6100	1.6425	mg/L	98.0		90 - 110	
QC Batch ID: BXH1580									
Total Alkalinity as CaCO3	BXH1580-BS3	LCS	101.78	100.00	mg/L	102		90 - 110	
QC Batch ID: BXH1581									
Total Alkalinity as CaCO3	BXH1581-BS3	LCS	107.56	100.00	mg/L	108		90 - 110	
QC Batch ID: BXH1582									
Total Alkalinity as CaCO3	BXH1582-BS3	LCS	103.45	100.00	mg/L	103		90 - 110	
QC Batch ID: BXH1592									
Nitrate as NO3	BXH1592-BS1	LCS	22.254	22.134	mg/L	101		90 - 110	
Sulfate	BXH1592-BS1	LCS	100.88	100.00	mg/L	101		90 - 110	
QC Batch ID: BXH1593									
Nitrate as NO3	BXH1593-BS1	LCS	23.081	22.134	mg/L	104		90 - 110	
Sulfate	BXH1593-BS1	LCS	103.98	100.00	mg/L	104		90 - 110	
QC Batch ID: BXH1597									
Nitrate as NO3	BXH1597-BS1	LCS	23.126	22.134	mg/L	104		90 - 110	
Sulfate	BXH1597-BS1	LCS	103.97	100.00	mg/L	104		90 - 110	

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BXH1530		Used client sample: N								
Nitrite as NO2	DUP	1418758-01	ND	ND		mg/L		10		
	MS	1418758-01	ND	1.7630	1.7289	mg/L		102	90 - 110	
	MSD	1418758-01	ND	1.7699	1.7289	mg/L	0.4	102	10	90 - 110
QC Batch ID: BXH1531		Used client sample: Y - Description: MW-7-W-140814, 08/14/2014 07:43								
Nitrite as NO2	DUP	1418836-08	ND	ND		mg/L		10		
	MS	1418836-08	ND	1.7585	1.7289	mg/L		102	90 - 110	
	MSD	1418836-08	ND	1.7483	1.7289	mg/L	0.6	101	10	90 - 110
QC Batch ID: BXH1533		Used client sample: Y - Description: S-MW-3-W-140814, 08/14/2014 11:18								
Nitrite as NO2	DUP	1418836-18	ND	ND		mg/L		10		
	MS	1418836-18	ND	1.8362	1.7289	mg/L		106	90 - 110	
	MSD	1418836-18	ND	1.8364	1.7289	mg/L	0.0	106	10	90 - 110
QC Batch ID: BXH1580		Used client sample: N								
Total Alkalinity as CaCO3	DUP	1418649-04	512.69	516.95		mg/L	0.8	10		
QC Batch ID: BXH1581		Used client sample: Y - Description: MW-7-W-140814, 08/14/2014 07:43								
Total Alkalinity as CaCO3	DUP	1418836-08	72.570	73.180		mg/L	0.8	10		
QC Batch ID: BXH1582		Used client sample: Y - Description: S-MW-3-W-140814, 08/14/2014 11:18								
Total Alkalinity as CaCO3	DUP	1418836-18	142.09	142.40		mg/L	0.2	10		
QC Batch ID: BXH1592		Used client sample: N								
Nitrate as NO3	DUP	418808-03RE'	ND	ND		mg/L		10		
	MS	418808-03RE'	ND	22.881	22.358	mg/L		102	80 - 120	
	MSD	418808-03RE'	ND	23.037	22.358	mg/L	0.7	103	10	80 - 120
Sulfate	DUP	418808-03RE'	20.819	20.955		mg/L	0.7	10		
	MS	418808-03RE'	20.819	128.02	101.01	mg/L		106	80 - 120	
	MSD	418808-03RE'	20.819	128.32	101.01	mg/L	0.2	106	10	80 - 120
QC Batch ID: BXH1593		Used client sample: N								
Nitrate as NO3	DUP	418808-04RE'	0.11067	ND		mg/L		10		
	MS	418808-04RE'	0.11067	23.310	22.358	mg/L		104	80 - 120	
	MSD	418808-04RE'	0.11067	23.203	22.358	mg/L	0.5	103	10	80 - 120
Sulfate	DUP	418808-04RE'	20.717	20.594		mg/L	0.6	10		
	MS	418808-04RE'	20.717	128.56	101.01	mg/L		107	80 - 120	
	MSD	418808-04RE'	20.717	128.42	101.01	mg/L	0.1	107	10	80 - 120
QC Batch ID: BXH1597		Used client sample: Y - Description: MW-1-W-140814, 08/14/2014 10:00								
Nitrate as NO3	DUP	I418836-02RE1	2.3374	1.9035		mg/L	20.5	10		A02
	MS	I418836-02RE1	2.3374	25.371	22.358	mg/L		103	80 - 120	
	MSD	I418836-02RE1	2.3374	25.210	22.358	mg/L	0.6	102	10	80 - 120

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Emeryville, CA 94608

Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

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: BXH1597		Used client sample: Y - Description: MW-1-W-140814, 08/14/2014 10:00									
Sulfate	DUP	I418836-02RE1	11.426	9.2880		mg/L	20.6		10		Q01
	MS	I418836-02RE1	11.426	116.42	101.01	mg/L		104		80 - 120	
	MSD	I418836-02RE1	11.426	115.87	101.01	mg/L	0.5	103	10	80 - 120	



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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH1782						
Dissolved Cadmium	BXH1782-BLK1	ND	ug/L	10		
Dissolved Chromium	BXH1782-BLK1	ND	ug/L	10		
Dissolved Iron	BXH1782-BLK1	ND	ug/L	50		
Dissolved Lead	BXH1782-BLK1	ND	ug/L	50		
Dissolved Nickel	BXH1782-BLK1	ND	ug/L	10		
Dissolved Zinc	BXH1782-BLK1	ND	ug/L	10		
QC Batch ID: BXH1783						
Dissolved Cadmium	BXH1783-BLK1	ND	ug/L	10		
Dissolved Chromium	BXH1783-BLK1	ND	ug/L	10		
Dissolved Iron	BXH1783-BLK1	ND	ug/L	50		
Dissolved Lead	BXH1783-BLK1	ND	ug/L	50		
Dissolved Nickel	BXH1783-BLK1	ND	ug/L	10		
Dissolved Zinc	BXH1783-BLK1	ND	ug/L	10		

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Project Manager: Kathy Brandt

Metals Analysis

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: BXH1782									
Dissolved Cadmium	BXH1782-BS1	LCS	198.39	200.00	ug/L	99.2		85 - 115	
Dissolved Chromium	BXH1782-BS1	LCS	204.09	200.00	ug/L	102		85 - 115	
Dissolved Iron	BXH1782-BS1	LCS	1058.5	1000.0	ug/L	106		85 - 115	
Dissolved Lead	BXH1782-BS1	LCS	410.74	400.00	ug/L	103		85 - 115	
Dissolved Nickel	BXH1782-BS1	LCS	412.84	400.00	ug/L	103		85 - 115	
Dissolved Zinc	BXH1782-BS1	LCS	506.34	500.00	ug/L	101		85 - 115	
QC Batch ID: BXH1783									
Dissolved Cadmium	BXH1783-BS1	LCS	206.65	200.00	ug/L	103		85 - 115	
Dissolved Chromium	BXH1783-BS1	LCS	214.30	200.00	ug/L	107		85 - 115	
Dissolved Iron	BXH1783-BS1	LCS	1068.9	1000.0	ug/L	107		85 - 115	
Dissolved Lead	BXH1783-BS1	LCS	424.20	400.00	ug/L	106		85 - 115	
Dissolved Nickel	BXH1783-BS1	LCS	430.14	400.00	ug/L	108		85 - 115	
Dissolved Zinc	BXH1783-BS1	LCS	536.23	500.00	ug/L	107		85 - 115	

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Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BXH1782		Used client sample: Y - Description: MW-1-W-140814, 08/14/2014 10:00								
Dissolved Cadmium	DUP	1418836-02	ND	ND		ug/L			20	
	MS	1418836-02	ND	219.46	204.08	ug/L		108		75 - 125
	MSD	1418836-02	ND	222.21	204.08	ug/L	1.2	109	20	75 - 125
Dissolved Chromium	DUP	1418836-02	4.6996	ND		ug/L			20	
	MS	1418836-02	4.6996	215.78	204.08	ug/L		103		75 - 125
	MSD	1418836-02	4.6996	216.28	204.08	ug/L	0.2	104	20	75 - 125
Dissolved Iron	DUP	1418836-02	ND	ND		ug/L			20	
	MS	1418836-02	ND	1085.4	1020.4	ug/L		106		75 - 125
	MSD	1418836-02	ND	1121.9	1020.4	ug/L	3.3	110	20	75 - 125
Dissolved Lead	DUP	1418836-02	ND	ND		ug/L			20	
	MS	1418836-02	ND	429.48	408.16	ug/L		105		75 - 125
	MSD	1418836-02	ND	439.92	408.16	ug/L	2.4	108	20	75 - 125
Dissolved Nickel	DUP	1418836-02	ND	ND		ug/L			20	
	MS	1418836-02	ND	437.83	408.16	ug/L		107		75 - 125
	MSD	1418836-02	ND	446.13	408.16	ug/L	1.9	109	20	75 - 125
Dissolved Zinc	DUP	1418836-02	ND	ND		ug/L			20	
	MS	1418836-02	ND	559.93	510.20	ug/L		110		75 - 125
	MSD	1418836-02	ND	570.18	510.20	ug/L	1.8	112	20	75 - 125
QC Batch ID: BXH1783		Used client sample: N								
Dissolved Cadmium	DUP	1418711-01	ND	ND		ug/L			20	
	MS	1418711-01	ND	205.67	204.08	ug/L		101		75 - 125
	MSD	1418711-01	ND	205.57	204.08	ug/L	0.0	101	20	75 - 125
Dissolved Chromium	DUP	1418711-01	1.4888	ND		ug/L			20	
	MS	1418711-01	1.4888	202.18	204.08	ug/L		98.3		75 - 125
	MSD	1418711-01	1.4888	202.32	204.08	ug/L	0.1	98.4	20	75 - 125
Dissolved Iron	DUP	1418711-01	ND	ND		ug/L			20	
	MS	1418711-01	ND	1033.0	1020.4	ug/L		101		75 - 125
	MSD	1418711-01	ND	1036.8	1020.4	ug/L	0.4	102	20	75 - 125
Dissolved Lead	DUP	1418711-01	5.4425	ND		ug/L			20	
	MS	1418711-01	5.4425	411.20	408.16	ug/L		99.4		75 - 125
	MSD	1418711-01	5.4425	406.19	408.16	ug/L	1.2	98.2	20	75 - 125
Dissolved Nickel	DUP	1418711-01	ND	ND		ug/L			20	
	MS	1418711-01	ND	406.10	408.16	ug/L		99.5		75 - 125
	MSD	1418711-01	ND	405.77	408.16	ug/L	0.1	99.4	20	75 - 125
Dissolved Zinc	DUP	1418711-01	12.427	11.921		ug/L	4.2		20	
	MS	1418711-01	12.427	544.27	510.20	ug/L		104		75 - 125
	MSD	1418711-01	12.427	544.24	510.20	ug/L	0.0	104	20	75 - 125

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Reported: 08/25/2014 13:29
Project: 0752
Project Number: 351646
Project Manager: Kathy Brandt

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
Q01	Sample precision is not within the control limits.
S05	The sample holding time was exceeded.
S09	The surrogate recovery on the sample for this compound was not within the control limits.