



March 30, 2015

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

**Nicole Arceneaux**  
Project Manager  
Marketing Business Unit

**Chevron Environmental  
Management Company**  
6101 Bollinger Canyon Road  
Suite 5119  
San Ramon, CA 94583  
Tel (925) 790-6912  
Nicole.Arceneaux@chevron.com

**RECEIVED**

*By Alameda County Environmental Health at 2:05 pm, Apr 01, 2015*

**RE: First Half 2015 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  
First Half 2015 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

Subject:  
First Half 2015 Semi-Annual Groundwater Monitoring Report Submittal

ENVIRONMENT

Dear Mr. Wickham:

Date:  
March 30, 2015

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:

Contact:  
Katherine Brandt

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

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](mailto: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](mailto: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  
FIRST QUARTER 2015  
MARCH 30, 2015**

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

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 (First Quarter – 2015) :**

1. Gettler-Ryan, Inc. (G-R) conducted groundwater monitoring and sampling on February 17, 2015. 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 eight (8) 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-4 and MP-1 were neither gauged nor sampled on 706 and 726 Harrison Street, respectively, due to parked cars that blocked 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.

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**, Historical Groundwater Gauging and Analytical Results are summarized in **Table 2**, 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](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 (Third Quarter – 2015):**

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

Current Phase of Project:	<u>Groundwater Monitoring/ Remedial Action Implementation</u>
Site Use:	<u>Active 76 branded service station/parking lots (YEE/GIN)</u>
Frequency of Sampling:	<u>Groundwater – Semi-Annually</u>
Frequency of Monitoring:	<u>Groundwater – Semi-Annually</u>
Are Separate-Phase Hydrocarbons (SPH) Present On-Site:	<u>No</u>
Cumulative SPH Recovered to Date:	<u>None</u>
SPH Recovered This Quarter:	<u>None</u>
Bulk Soil Removed to Date:	<u>Unknown</u>
Bulk Soil Removed this Quarter:	<u>None</u>
Water Wells or Surface Waters within a 2000' Radius and Their Respective Directions:	<u>San Francisco Bay (approximately 300 ft west)</u>

**UNION OIL OF CALIFORNIA  
SEMI-ANNUALLY MONITORING REPORT  
FIRST QUARTER 2015  
MARCH 30, 2015**

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

Groundwater Use Designation:	<u>Potential Drinking Water Source – Santa Clara Valley – East Bay Plain</u>
Current Remediation Techniques:	<u>Under Evaluation</u>
Permits for Discharge (No.):	<u>None</u>
Approximate Depth to Groundwater (at Unocal 0752 and 726 Harrison Street):	<u>17.84 (MW-1) – 25.64 (MW-6) feet below top of casing</u> Measured <input checked="" type="checkbox"/> Estimated
Approximate Groundwater Elevation (at Unocal 0752 and 726 Harrison Street):	<u>8.89 (MW-6) – 17.65 (MW-2) feet relative to mean sea level</u> Measured <input checked="" type="checkbox"/> Estimated
Approximate Depth to Groundwater (at 706 Harrison Street):	<u>15.97 (MW-5) - 17.66 (MW-2) feet below top of casing</u> Measured <input checked="" type="checkbox"/> Estimated
Approximate Groundwater Elevation (at 706 Harrison Street):	<u>11.87 (MW-1) – 12.87 (MW-2) feet relative to mean sea level</u> Measured <input checked="" type="checkbox"/> Estimated
Groundwater Gradient (at Unocal 0752 and 726 Harrison Street):	<u>0.007 ft/ft</u> (Magnitude) <u>Southwest</u> (Direction)
Groundwater Gradient (at 706 Harrison Street):	<u>0.006 ft/ft</u> (Magnitude) <u>Southwest</u> (Direction)

**UNION OIL OF CALIFORNIA  
SEMI-ANNUALLY MONITORING REPORT  
FIRST QUARTER 2015  
MARCH 30, 2015**

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

**DISCUSSION:**

Groundwater conditions during the first quarter 2015 remained relatively consistent with previous quarters.

706 Harrison Street:

The maximum dissolved concentration of TPPH (28,000 micrograms per liter [ $\mu\text{g/L}$ ]), benzene (1,200  $\mu\text{g/L}$ ), toluene (4,600  $\mu\text{g/L}$ ), ethylbenzene (1,300  $\mu\text{g/L}$ ), total xylenes (5,600  $\mu\text{g/L}$ ), and MTBE (1,900  $\mu\text{g/L}$ ) were detected in the sample collected from MW-2.

726 Harrison Street:

The maximum dissolved concentrations of TPPH (16,000  $\mu\text{g/L}$ ), benzene (1,600  $\mu\text{g/L}$ ), toluene (360  $\mu\text{g/L}$ ), ethylbenzene (390  $\mu\text{g/L}$ ), total xylenes (950  $\mu\text{g/L}$ ), and MTBE (5,300  $\mu\text{g/L}$ ) were detected in the sample collected from MW-5.

800 Harrison Street:

The maximum dissolved concentrations of TPPH (1,900  $\mu\text{g/L}$ ) and MTBE (60  $\mu\text{g/L}$ ) were detected in the sample collected from MW-3. The maximum dissolved concentration of benzene (36  $\mu\text{g/L}$ ) was detected in the sample collected from MW-7. The maximum dissolved concentrations of toluene (4.3  $\mu\text{g/L}$ ), ethylbenzene (2.4  $\mu\text{g/L}$ ), and total xylenes (8  $\mu\text{g/L}$ ) were detected in the sample collected from MW-5.

Groundwater elevations at the site for 726 and 800 Harrison Street vary by approximately eight and a half feet, due to a low groundwater elevation at MW-6. MW-6 groundwater elevation was not used in calculating the hydraulic gradient. The remaining wells create a relatively gentle hydraulic gradient of 0.007 foot per foot (ft/ft) in the southwest direction. Groundwater elevations at the site for 706 Harrison Street vary by approximately one foot, creating a relatively gentle hydraulic gradient of 0.006 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.

**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

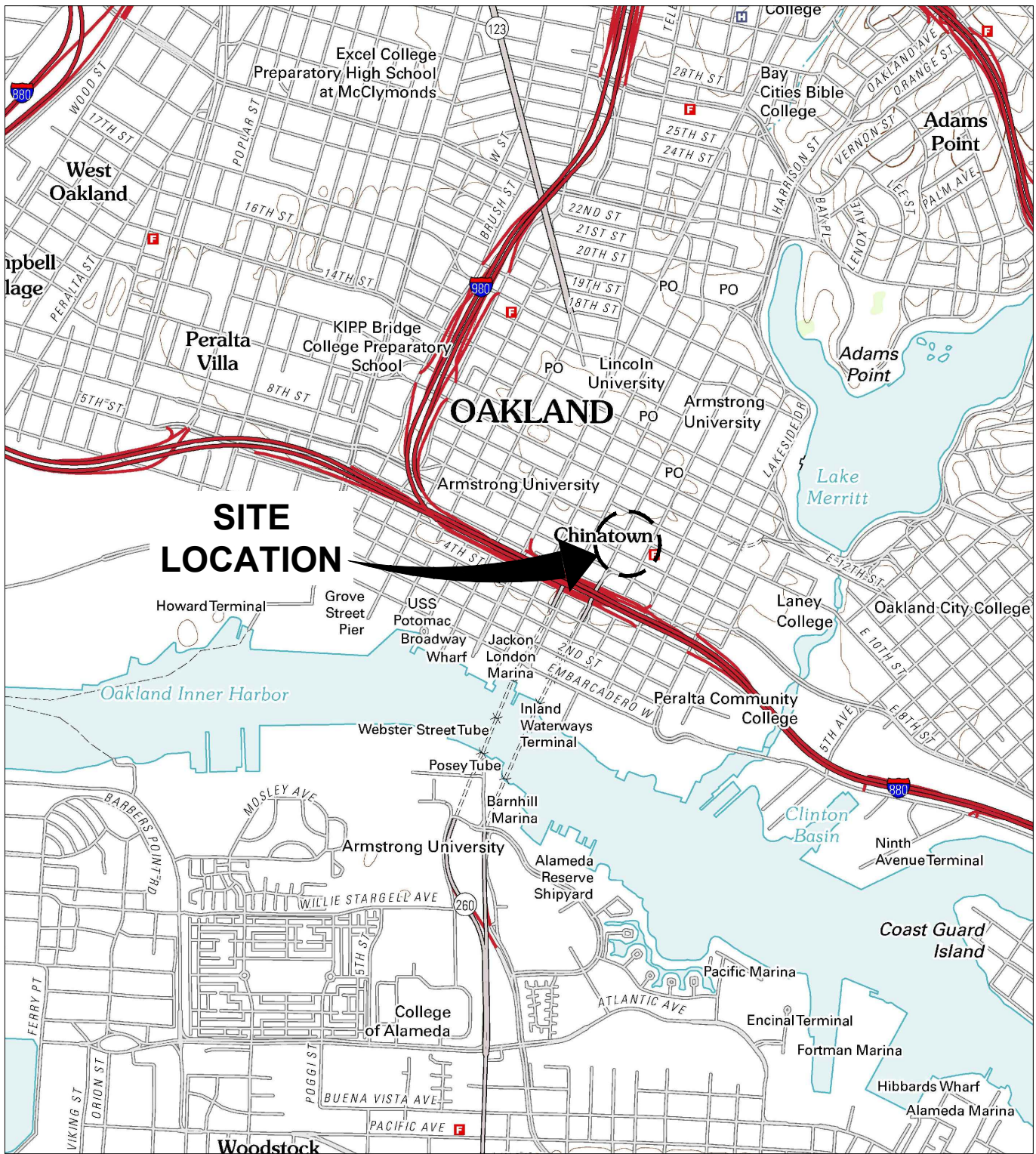
- Table 1: Current Groundwater Gauging and Analytical Results
- Table 1a: Additional Groundwater Analytical Results – MNA Parameters
- Table 1b: Additional Groundwater Analytical Results – Metals
- Table 2: Historical Groundwater Gauging and Analytical Results
- Table 2a: Historical Additional Groundwater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

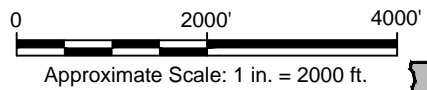
ARCADIS

**Figures**

CITY: SAN RAFAEL, CA DIV/GROUP: ENV DB: J. HARRIS  
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 IMAGES: PROJECTNAME: ...  
 XREFS: Oakland West 2012.rgs



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CALIFORNIA, 2012.



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

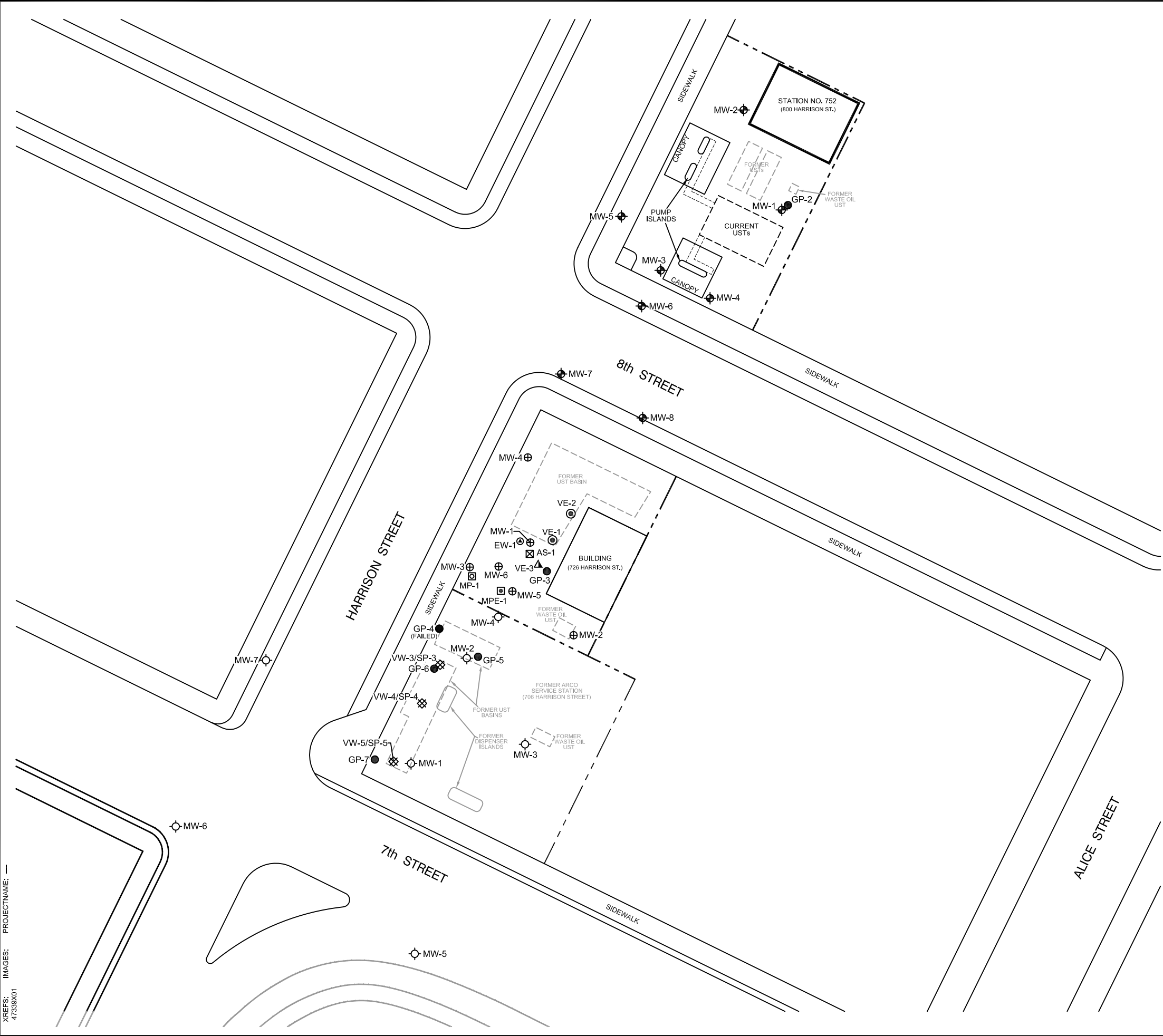
**SITE LOCATION MAP**



FIGURE  
**1**



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 XREFS: IMAGES: PROJECTNAME: 47339X01



**LEGEND**

- PROPERTY BOUNDARY
- PRODUCT PIPING
- MW-1 ⊕ GROUNDWATER MONITORING WELL (UNOCAL)
- MW-1 ⊙ GROUNDWATER MONITORING WELL (GIN)
- VW-3/SP-3 ⊗ SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN)
- MW-1 ⊕ GROUNDWATER MONITORING WELL (YEE)
- AS-1 ⊠ AIR SPARGE WELL (YEE)
- EW-1 ⊕ EXTRACTION WELL (YEE)
- GP-2 ● GEOPROBE™ (JUNE 2011)
- MPE-1 ⊠ MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE)
- MP-1 ⊠ PILOT TEST MONITORING POINT
- VE-1 ⊙ VAPOR EXTRACTION WELL
- VE-3 ▲ PILOT TEST VAPOR EXTRACTION WELL

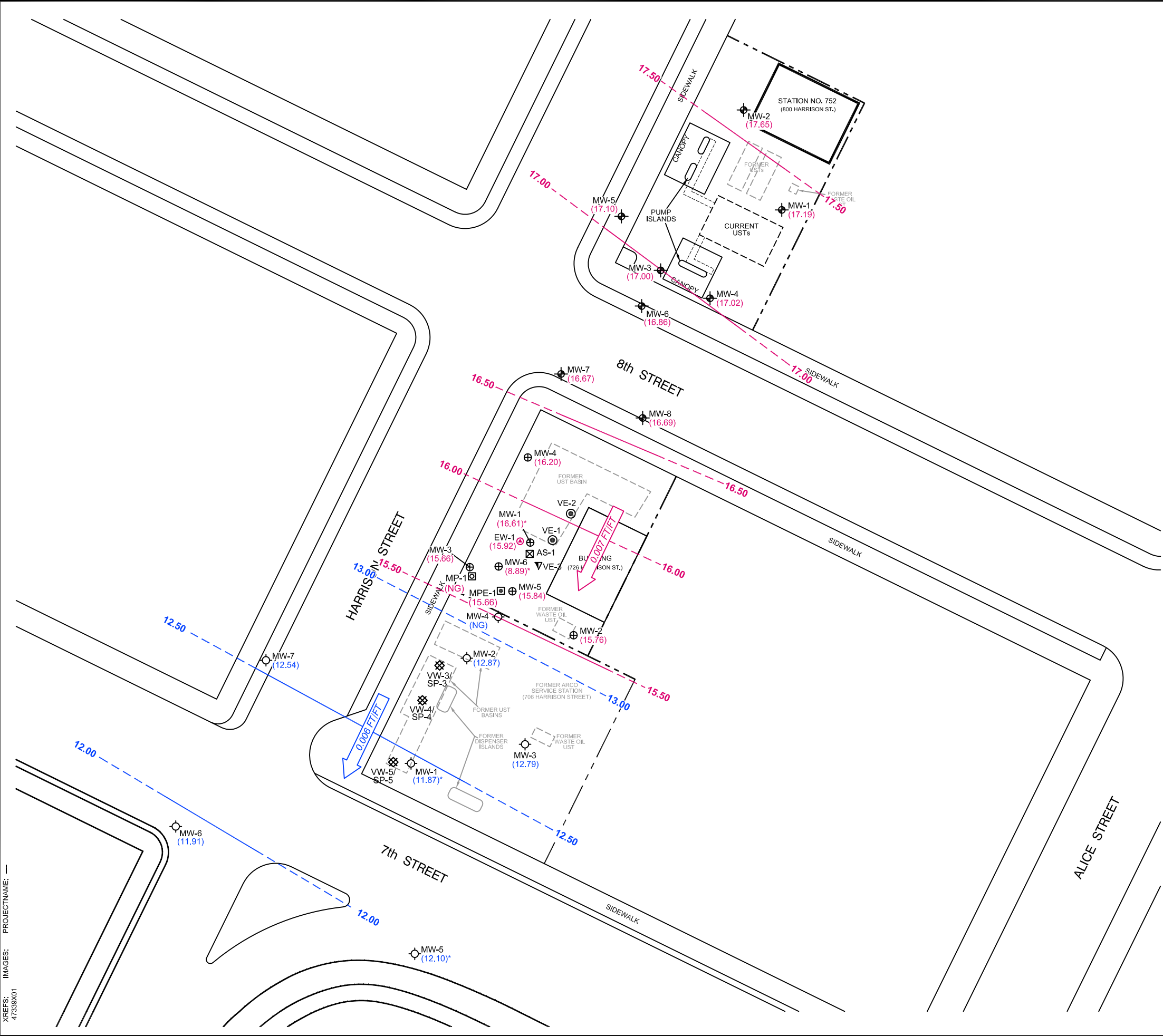
**NOTE:**

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.



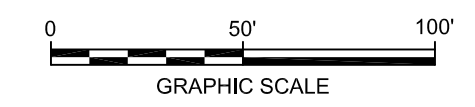
UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED 706/726/800 HARRISON STREET OAKLAND, CALIFORNIA	
<h2 style="margin: 0;">SITE PLAN</h2>	
	FIGURE <h1 style="margin: 0;">2</h1>

CITY: SAN RAFAEL, CA (PETALUMA) DIV: GROUP: ENV: CAD DB: J. HARRIS, R. HUBBATCH, J. HARRIS  
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 XREFS: IMAGES: PROJECTNAME: 47339\01



- 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)
  - (12.79) GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL (FT MSL)
  - 12.00 GROUNDWATER ELEVATION CONTOUR (FT MSL; DASHED WHERE INFERRED)
  - ← 0.006 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 2015.



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

**GROUNDWATER ELEVATION  
 CONTOUR MAP**

**ARCADIS**

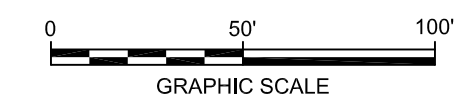
FIGURE  
**3**

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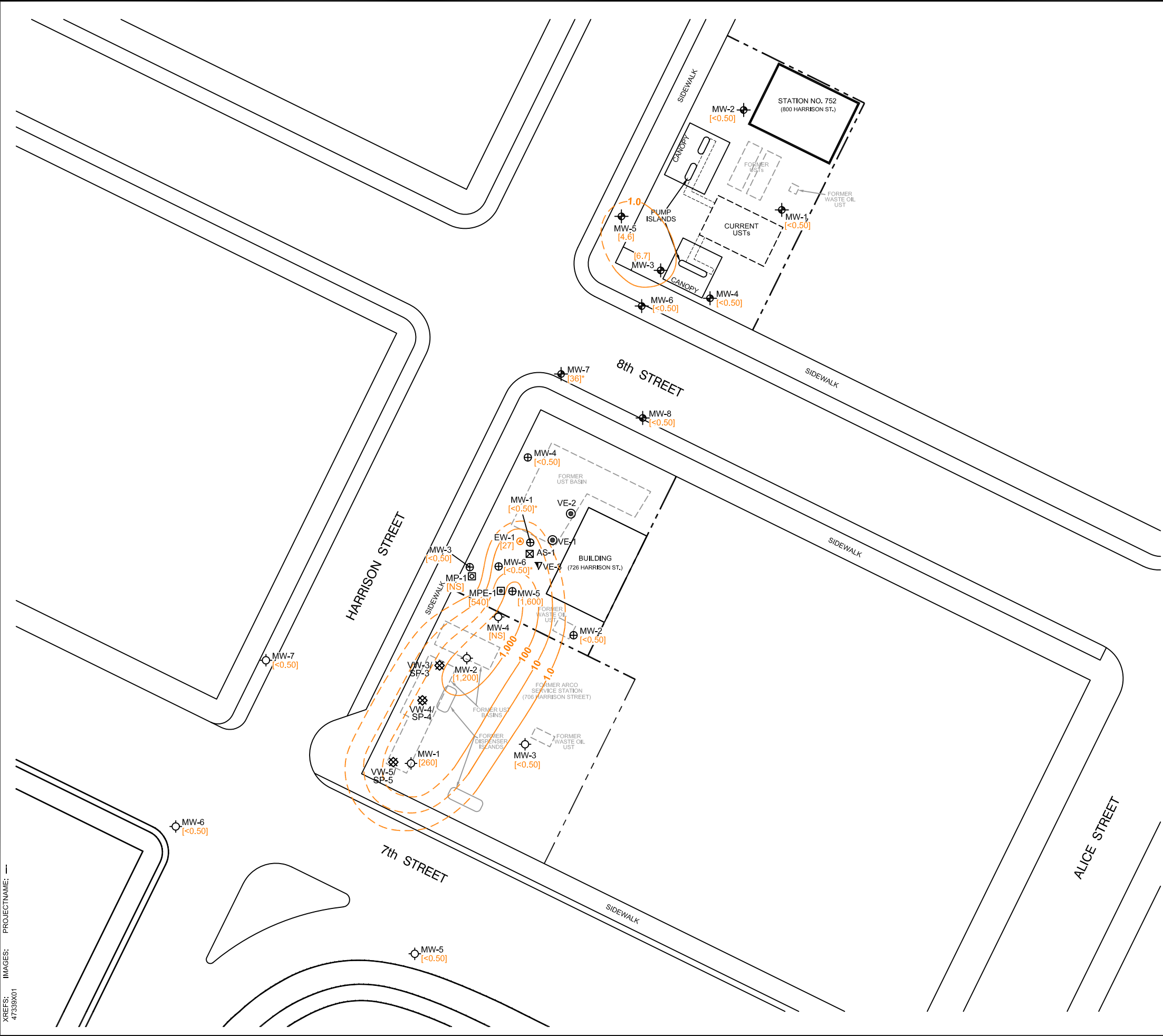
- LEGEND**
- PROPERTY BOUNDARY
  - PRODUCT PIPING
  - MW-1 ⊕ GROUNDWATER MONITORING WELL (UNOCAL SITE)
  - MW-1 ⊕ GROUNDWATER MONITORING WELL (YEE SITE)
  - EW-1 ⊕ EXTRACTION WELL (YEE SITE)
  - MW-1 ⊕ GROUNDWATER MONITORING WELL (GIN SITE)
  - VW-3/SP-3 ⊗ SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN 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)
  - [350] TOTAL PURGEABLE PETROLEUM HYDROCARBONS (TPPH) CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
  - 100 ——— TPPH ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
  - < DENOTES LESS THAN LABORATORY REPORTING LIMIT
  - [NS] NOT SAMPLED
  - WELL NOT USED IN CONCENTRATION CONTOURING

- NOTES:**
- 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.
  - COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
  - MW-6 IS NOT USED IN THE GROUNDWATER CONTOURS 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	
<b>TPPH CONCENTRATION MAP</b>	
	FIGURE <b>4</b>

CITY: SAN RAFAEL, CA (PETALUMA) DIV(GROUP): ENVCAD DB: J. HARRIS, R. HUBBACH, J. HARRIS  
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 XREFS: IMAGES: PROJECTNAME: 47339X01



- LEGEND**
- PROPERTY BOUNDARY
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  - 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)
  - [27] 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'. MUIR SURVEY COMPLETED A SURVEY ON 8/21/13.
  2. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
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UNION OIL OF CALIFORNIA  
 STATION NO. 0752/YEE/GIN COMMINGLED  
 706/726/800 HARRISON STREET  
 OAKLAND, CALIFORNIA

**BENZENE CONCENTRATION MAP**

**ARCADIS**

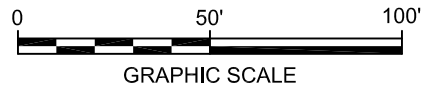
FIGURE  
**5**

CITY: SAN RAFAEL, CA (PETALUMA) DIV: GROUP: ENVCAD DB: J. HARRIS, R. HUBBARD, J. HARRIS  
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 XREFS: IMAGES: PROJECTNAME: 47339X01



- LEGEND**
- PROPERTY BOUNDARY
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  - 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)
  - [180] METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
  - 500 ——— MTBE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
  - < DENOTES LESS THAN LABORATORY REPORTING LIMIT
  - [NS] NOT SAMPLED
  - WELL NOT USED IN CONCENTRATION CONTOURING

- NOTES:**
- 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.
  - COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
  - MW-6 IS NOT USED IN THE GROUNDWATER CONTOURS 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	
<b>MTBE CONCENTRATION MAP</b>	
	FIGURE <b>6</b>



**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 AMSL)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
<b>800 Harrison Street</b>																	
MW-1	2/17/2015	37.22	20.03	0.00	17.19	16.24	0.95	110	<0.50	<0.50	<0.50	<1.0	5.0	--	--	--	
MW-2	2/17/2015	37.44	19.79	0.00	17.65	16.76	0.89	57	<0.50	<0.50	<0.50	<1.0	1.4	--	--	--	
MW-3	2/17/2015	35.88	18.88	0.00	17.00	16.58	0.42	1,900	6.7	2.2	2.2	3.2	60	--	--	--	A01, S09
MW-4	2/17/2015	35.42	18.40	0.00	17.02	16.09	0.93	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-5	2/17/2015	35.68	18.58	0.00	17.10	16.20	0.90	1,200	4.6	4.3	2.4	8.0	<0.50	--	--	--	
MW-6	2/17/2015	34.89	18.03	0.00	16.86	15.96	0.90	65	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	2/17/2015	34.92	18.25	0.00	16.67	15.65	1.02	350	36	2.8	2.1	1.2	10	--	--	--	
MW-8	2/17/2015	34.73	18.04	0.00	16.69	15.67	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
<b>706 Harrison Street</b>																	
MW-1	2/17/2015	29.17	17.30	0.00	11.87	--	--	550	260	3.7	7.0	4.1	15	--	--	--	A01
MW-2	2/17/2015	30.53	17.66	0.00	12.87	11.83	1.04	28,000	1,200	4,600	1,300	5,600	1,900	--	--	--	A01
MW-3	2/17/2015	29.79	17.00	0.00	12.79	11.72	1.07	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	2/17/2015	31.20	--	--	--	12.03	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-5	2/17/2015	28.07	15.97	0.00	12.10	11.06	1.04	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-6	2/17/2015	29.13	17.22	0.00	11.91	10.89	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	2/17/2015	29.70	17.16	0.00	12.54	11.55	0.99	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
<b>726 Harrison Street</b>																	
AS-1	2/17/2015	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-1	2/17/2015	34.37	18.45	0.00	15.92	14.89	1.03	1,200	27	3.3	5.0	5.2	180	--	--	--	A01
MP-1	2/17/2015	34.16	--	--	--	14.60	--	--	--	--	--	--	--	--	--	--	Parked Car
MPE-1	2/17/2015	34.36	18.70	0.00	15.66	14.58	1.08	4,400	540	30	87	89	3,400	--	--	--	A01
MW-1	2/17/2015	34.45	17.84	0.00	16.61	14.78	1.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-2	2/17/2015	34.91	19.15	0.00	15.76	14.63	1.13	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	2/17/2015	34.12	18.46	0.00	15.66	14.64	1.02	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--	
MW-4	2/17/2015	35.05	18.85	0.00	16.20	15.15	1.05	180	<0.50	<0.50	<0.50	<1.0	12	--	--	--	
MW-5	2/17/2015	34.76	18.92	0.00	15.84	14.84	1.00	16,000	1,600	360	390	950	5,300	--	--	--	A01
MW-6	2/17/2015	34.53	25.64	0.00	8.89	6.61	2.28	490	<0.50	<0.50	<0.50	<1.0	850	--	--	--	A01, A90

**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.

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 NAV29 to NAV88. The 706 Harrison Street data was not converted due to discrepancies with the data.

EPA Method 8260B for Volatile Organic Compounds.

**Standard Abbreviations**

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
AMSL	above mean sealevel
btoc	below top of casing
DTW	depth to water
GC/MS	gas chromatography–mass spectrometry for TPPH
GW	groundwater
GWE	groundwater elevation
LPH	liquid-phase hydrocarbons
TOC	top of casing (surveyed reference elevation)
A01	PQL's and MDL's are raised due to sample dilution
A90	TPPH does not exhibit "gasoline" pattern, TPPH is entirely due to MTBE
S09	the surrogate recovery on the sample was not within the control limits

**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	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Comments
<b>800 Harrison Street</b>							
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	
<b>706 Harrison Street</b>							
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	
<b>726 Harrison Street</b>							
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.

**Standard Abbreviations**

- not analyzed, measured, or collected
- < not detected at or above laboratory detection limit

**Analytes**

- CaCO3 calcium carbonate
- NO3 nitrate
- NO2 nitrogen dioxide

**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
<b>800 Harrison Street</b>								
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	
<b>706 Harrison Street</b>								
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	
<b>726 Harrison Street</b>								
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.

**Standard Abbreviations**

- not analyzed, measured, or collected
- < not detected at or above laboratory detection limit

**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 AMSL)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
<b>800 Harrison Street</b>																	
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-1	2/17/2015	37.22	20.03	0.00	17.19	16.24	0.95	110	<0.50	<0.50	<0.50	<1.0	5.0	--	--	--	
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-2	2/17/2015	37.44	19.79	0.00	17.65	16.76	0.89	57	<0.50	<0.50	<0.50	<1.0	1.4	--	--	--	
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	0.87	1.7	5.2	760	<0.50	<0.50	<250	A01
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	--	--	--	A01
MW-3	2/17/2015	35.88	18.88	0.00	17.00	16.58	0.42	1,900	6.7	2.2	2.2	3.2	60	--	--	--	A01, S09
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-4	2/17/2015	35.42	18.40	0.00	17.02	16.09	0.93	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
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	--	--	--	A01
MW-5	2/17/2015	35.68	18.58	0.00	17.10	16.20	0.90	1,200	4.6	4.3	2.4	8.0	<0.50	--	--	--	

**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 AMSL)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
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	
MW-6	8/14/2014	34.89	18.93	0.00	15.96	15.79	0.17	150	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-6	2/17/2015	34.89	18.03	0.00	16.86	15.96	0.90	65	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	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	10	2.5	17	47	<0.50	<0.50	<250	A01
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	--	--	--	A01
MW-7	2/17/2015	34.92	18.25	0.00	16.67	15.65	1.02	350	36	2.8	2.1	1.2	10	--	--	--	
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	--	--	--	
MW-8	2/17/2015	34.73	18.04	0.00	16.69	15.67	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
<b>706 Harrison Street</b>																	
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
MW-1	2/17/2015	29.17	17.30	0.00	11.87	--	--	550	260	3.7	7.0	4.1	15	--	--	--	A01
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	5,200	1,400	5,200	1,300	5,000	3,000	<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	--	--	--	A01
MW-2	2/17/2015	30.53	17.66	0.00	12.87	11.83	1.04	28,000	1,200	4,600	1,300	5,600	1,900	--	--	--	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 AMSL)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
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-3	2/17/2015	29.79	17.00	0.00	12.79	11.72	1.07	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
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
MW-4	2/6/2014	31.20	20.68	0.00	10.52	12.50	--	620	850	29	54	62	600	<0.50	<0.50	<250	A01
MW-4	8/14/2014	31.20	19.17	0.00	12.03	10.52	--	3,200	210	47	72	100	480	--	--	--	A01
MW-4	2/17/2015	31.20	--	--	--	12.03	--	--	--	--	--	--	--	--	--	--	Parked Car
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	<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	<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	<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	<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-5	2/17/2015	28.07	15.97	0.00	12.10	11.06	1.04	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
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	<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	<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	<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	<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	--	--	--	S05
MW-6	2/17/2015	29.13	17.22	0.00	11.91	10.89	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
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	--	
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	<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	<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	<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	<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	--	--	--	
MW-7	2/17/2015	29.70	17.16	0.00	12.54	11.55	0.99	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	

**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 AMSL)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
SP-3	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	2/17/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	2/17/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	2/17/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
<b>726 Harrison Street</b>																	
AS-1	8/15/2013	34.50	18.17	0.00	16.33	--	--	--	--	--	--	--	--	--	--	--	
AS-1	8/14/2014	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	2/17/2015	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-1	2/27/2013	*--	18.17	0.00	*--	--	--	960	180	6.0	3.6	12	170	<0.50	<0.50	<250	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	<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	<0.50	<0.50	<250	A01
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	--	--	--	A01
EW-1	2/17/2015	34.37	18.45	0.00	15.92	14.89	1.03	1,200	27	3.3	5.0	5.2	180	--	--	--	A01
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	<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	<0.50	<1.0	1.6	--	--	--	
MP-1	2/17/2015	34.16	--	--	--	14.60	--	--	--	--	--	--	--	--	--	--	Parked Car
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	24	13	29	410	<0.50	<0.50	<250	A01
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	--	--	--	A01
MPE-1	2/17/2015	34.36	18.70	0.00	15.66	14.58	1.08	4,400	540	30	87	89	3,400	--	--	--	A01
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	6,600	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	2,600	1,800	86	400	250	10,000	<0.50	<0.50	<250	A01
MW-1	8/14/2014	34.45	19.67	0.00	14.78	14.58	0.20	9,100	1,700	53	340	320	7,600	--	--	--	A01
MW-1	2/17/2015	34.45	17.84	0.00	16.61	14.78	1.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	

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**706/726/800 Harrison Street Oakland, California**

Well ID	Date Sampled	TOC Elevation (feet AMSL)	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8015B-GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
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-2	2/17/2015	34.91	19.15	0.00	15.76	14.63	1.13	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
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-3	2/17/2015	34.12	18.46	0.00	15.66	14.64	1.02	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--	
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-4	2/17/2015	35.05	18.85	0.00	16.20	15.15	1.05	180	<0.50	<0.50	<0.50	<1.0	12	--	--	--	
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	3,400	1,900	150	240	220	7,600	<0.50	<0.50	<250	A01
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	--	--	--	A01
MW-5	2/17/2015	34.76	18.92	0.00	15.84	14.84	1.00	16,000	1,600	360	390	950	5,300	--	--	--	A01
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	1,100	<0.50	<0.50	<250	A01
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	--	--	--	A01
MW-6	2/17/2015	34.53	25.64	0.00	8.89	6.61	2.28	490	<0.50	<0.50	<0.50	<1.0	850	--	--	--	A01, A90

**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.

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 with the data.

EPA Method 8260B for Volatile Organic Compounds.

**Standard Abbreviations**

--	not analyzed, measured, or collected
*--	not surveyed
<	not detected at or above laboratory detection limit
AMSL	above mean sealevel
btoc	below top of casing
DTW	depth to water
GC/MS	gas chromatography--mass spectrometry for TPPH
GW	groundwater
GWE	groundwater elevation
J	estimated value
LPH	liquid-phase hydrocarbons
TOC	top of casing (surveyed reference elevation)
A01	PQL's and MDL's are raised due to sample dilution
A90	TPPH does not exhibit a "gasoline" pattern, TPPH is entirely due to MTBE
S05	the sample holding time was exceeded
S09	the surrogate recovery on the sample was not within the control limits

**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	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Non-Volatile Organic Carbon	Comments
<b>800 Harrison Street</b>								
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	--	A01
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	--	A01
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	--	A01
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	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Non-Volatile Organic Carbon	Comments
<b>706 Harrison Street</b>								
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	--	A01
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	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Non-Volatile Organic Carbon	Comments
<b>726 Harrison Street</b>								
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	--	A01
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	--	A01
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	--	A01
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	430	<0.44	<0.17	<1.0	11	A01
MW-5	8/14/2014	1.7	440	<0.44	<0.17	<1.0	--	A01
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**

**Notes**

Analytical results given in milligrams per liter.

**Standard Abbreviations**

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
A01	PQL's and MDL's are raised due to sample dilution
A10	PQL's and MDL's were raised due to matrix interference
S01	sample result is not within the quantitation range of the method

**Analytes**

CaCO3	calcium carbonate
NO3	nitrate
NO2	nitrogen dioxide
EDC	1,2-dichloroethane (same as ethylene dichloride)
PQL	practical quantitation limit
MDL	method detection limit

**Table 2B**  
**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
<b>800 Harrison Street</b>								
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	

**Table 2B**  
**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-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	--	--	--	
MW-8	8/15/2013	--	--	71	--	--	--	
MW-8	2/6/2014	--	--	130	--	--	--	
MW-8	8/14/2014	<10	<10	<50	<50	<10	<10	
<b>706 Harrison Street</b>								
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	

**Table 2B**  
**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-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
SP-5	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	--	--	--	--	--	--	Unable to Locate
<b>726 Harrison Street</b>								
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	

**Table 2B**  
**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-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	

**Notes**

Analytical results given in micrograms per liter.



ARCADIS

**Attachment A**

Field Data Sheets and General Procedures



# GETTLER-RYAN INC.



## TRANSMITTAL

February 25, 2015  
G-R #385647

TO: Ms. Katherine Brandt  
Arcadis  
2000 Powell Street, 7<sup>th</sup> 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 First Semi-Annual Event of February 17, 2015

### COMMENTS:

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

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

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

trans/351646 0752

# WELL CONDITION STATUS SHEET

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

Site Address: **800 Harrison Street**

City: **Oakland, CA**

Job #: **385647**

Event Date: **2-17-15**

Sampler: **AW**

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
S-mw-2	OK	→	→	2B	OK	→	→	N	N	Monksen / 8" / 2	N
MPT-1	OK	→	→			→	→			Enro / 12" / 2	
A-mw-1	OK	→	→	2S	OK	→	→			Monksen / 8" / 2	
A-mw-3	OK	→	→	3S	OK	→	→			Bradford / 8" / 3	
A-mw-2	OK	→	→			→	→			BL / 8" / 3	
SP-3	→		UTL			→	→				
SP-4	→		UTL			→	→				
SP-5	→		UTL			→	→				

Comments \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# WELL CONDITION STATUS SHEET

2-4

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

Job #: 385647  
Event Date: 2/17/18  
Sampler: JH

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
A-MW-5	OK	N/A	→	→	OK	→	→	N	N	Christy	N
A-MW-6	OK	N/A	→	→	OK	→	→	Y	Y		
A-MW-7	OK	N/A	→	→	OK	→	→	Y	Y		
S-MW-4	OK		→	→		→	→	Y	Y 2"	8" BSL	
S-MW-1	OK		→	→		→	→	Y	Y 2"		
S-EW-1	OK		→	→		→	→	N	N	12" emco	

Comments \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# WELL CONDITION STATUS SHEET

34

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

Job #: 385647  
 Event Date: 2/17/18  
 Sampler: G. Medina

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
MW-7	OK	→				→		N	N	Emco/12/2	N
MW-8	OK	→	→	S(1)	OK	→				B. Killma-12/3	↓
S-MW-3	OK	→	→	S(2)	OK	→				MORRISON/8/2	↓
S-MW-5	OK	→	→	S(2)	OK	→				↓ 12 ↓	↓
S-MW-6	OK	→	→			→				↓	↓
MP-1	MTA - PARKED OVER				→					Emco/12/2	Y

Comments \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# WELL CONDITION STATUS SHEET

4-4

Client/  
Facility #: Chevron #351646 / 0752

Site Address: 800 Harrison Street

City: Oakland, CA

Job #: 385647

Event Date: 2.17.15

Sampler: FT

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/ <input checked="" type="radio"/>	REPLACE CAP Y/ <input checked="" type="radio"/>	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/ <input checked="" type="radio"/>
MW-1	OK		→			→				EMER / 12" 12	
MW-2	OK		→	S=2	OK	→				UNIVERSAL / 8" 2	
MW-3	OK		→			→				EMER / 12" 12	
MW-4	OK		→			→				↓ ↓	
MW-5	OK		→			→					
MW-6	OK		→	S=3	OK	→				BOUNT L. / 8" 13	

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

Job Number: 385647  
 Event Date: 2.17.15 (inclusive)  
 Sampler: FT

Well ID: MW-1  
 Well Diameter: 1 1/2 / 4 1/6 in.  
 Total Depth: 33.44 ft.  
 Depth to Water: 20.03 ft.  
13.43 xVF .17 = 2.28

Date Monitored: 2.17.15

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 7.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.71

### 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): 0740  
 Sample Time/Date: 0805 / 2.17.15  
 Approx. Flow Rate: ✓ gpm.  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: FOG  
 Water Color: CLEAR Odor: Ø / N SLIGHT  
 Sediment Description: NONE  
 DTW @ Sampling: 20.10

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0745</u>	<u>2.5</u>	<u>7.40</u>	<u>872</u>	<u>19.0</u>	<u>PRE: 2.2</u>	<u>PRE: 118</u>	<u>PRE: 125</u>
<u>0750</u>	<u>5.0</u>	<u>7.37</u>	<u>867</u>	<u>19.6</u>			
<u>0755</u>	<u>7.0</u>	<u>7.34</u>	<u>862</u>	<u>19.9</u>	<u>POST: 2.0</u>	<u>POST: 109</u>	<u>POST: 144</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2.17.15 (inclusive)  
 Sampler: FT

Well ID: MW-2  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 Total Depth: 30.75 ft.  
 Depth to Water: 19.79 ft.

Date Monitored: 2.17.15

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

Check if water column is less than 0.50 ft.

10.96 xVF .17 = 1.86 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.98

### 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): 0700  
 Sample Time/Date: 0725 / 2.17.15  
 Approx. Flow Rate: — gpm.  
 Did well de-water? No If yes, Time: \_\_\_\_\_

Weather Conditions: FoV  
 Water Color: CLEAR Odor: Y 10  
 Sediment Description: None  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 19.84

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
<u>0704</u>	<u>2.0</u>	<u>7.59</u>	<u>856</u>	<u>20.3</u>	<u>PRE: 2.5</u>	<u>PRE: 152</u>	<u>PRE: 110</u>
<u>0708</u>	<u>4.0</u>	<u>7.56</u>	<u>850</u>	<u>20.7</u>			
<u>0712</u>	<u>6.0</u>	<u>7.54</u>	<u>842</u>	<u>21.0</u>	<u>POST: 2.3</u>	<u>POST: 144</u>	<u>POST: 122</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3</u> x vov vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2.17.15 (inclusive)  
 City: Oakland, CA Sampler: FT

Well ID: MW-3 Date Monitored: 2.17.15  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 Total Depth: 30.46 ft.  
 Depth to Water: 18.88 ft.  Check if water column is less than 0.50 ft.  
11.58 xVF .17 = 1.96 x3 case volume = Estimated Purge Volume: 6.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.19

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

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

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

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

Start Time (purge): 0905 Weather Conditions: Fog  
 Sample Time/Date: 0927 / 2.17.15 Water Color: LT. GRAY Odor: 0 / N Strong  
 Approx. Flow Rate: — gpm. Sediment Description: S. SILTY  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 18.93

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0909</u>	<u>2.0</u>	<u>7.17</u>	<u>1256</u>	<u>20.2</u>	<u>PRE: 1.7</u>	<u>PRE: -95</u>	<u>PRE: 248</u>
<u>0913</u>	<u>4.0</u>	<u>7.14</u>	<u>1249</u>	<u>20.7</u>			
<u>0917</u>	<u>6.0</u>	<u>7.11</u>	<u>1243</u>	<u>21.1</u>	<u>POST: 1.4</u>	<u>POST: -82</u>	<u>POST: 267</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2-17-15 (inclusive)  
 City: Oakland, CA Sampler: FT

Well ID: MW-4 Date Monitored: 2-17-15  
 Well Diameter: 1 1/4 / 1 1/2 in.  
 Total Depth: 32.00 ft.  
 Depth to Water: 18.40 ft.  Check if water column is less than 0.50 ft.  
13.60 xVF .17 = 2.31 x3 case volume = Estimated Purge Volume: 7.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.12

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

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

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

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

Start Time (purge): 0825 Weather Conditions: Fog  
 Sample Time/Date: 0850 / 2-17-15 Water Color: Brn. Odor: Y / 0  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: S. SILTY  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 18.50

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0830</u>	<u>2.5</u>	<u>7.61</u>	<u>821</u>	<u>19.7</u>	<u>PRE: 2.1</u>	<u>PRE: 113</u>	<u>PRE: 235</u>
<u>0835</u>	<u>5.0</u>	<u>7.59</u>	<u>817</u>	<u>20.1</u>			
<u>0840</u>	<u>7.0</u>	<u>7.56</u>	<u>811</u>	<u>20.6</u>	<u>POST: 1.9</u>	<u>POST: 108</u>	<u>POST: 274</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2.17.15 (inclusive)  
 Sampler: FR

Well ID: MW-5  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 Total Depth: 31.57 ft.  
 Depth to Water: 18.58 ft.

Date Monitored: 2.17.15

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

Check if water column is less than 0.50 ft.  
12.99 xVF .17 = 2.20 x3 case volume = Estimated Purge Volume: 7.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.17

### 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): 0945  
 Sample Time/Date: 1010 / 2.17.15  
 Approx. Flow Rate: / gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_

Weather Conditions: FOL  
 Water Color: LT. blue Odor: ⓪ / N Strong  
 Sediment Description: S. SILTY  
 gal. DTW @ Sampling: 19.63

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0950</u>	<u>2.5</u>	<u>7.36</u>	<u>1310</u>	<u>19.9</u>	<u>PRE: 1.5</u>	<u>PRE: -84</u>	<u>PRE: 277</u>
<u>0955</u>	<u>5.0</u>	<u>7.32</u>	<u>1298</u>	<u>20.1</u>			
<u>1000</u>	<u>7.0</u>	<u>7.29</u>	<u>1289</u>	<u>20.8</u>	<u>POST: 1.4</u>	<u>POST: -92</u>	<u>POST: 291</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW5</u>	<u>3 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2.17.15 (inclusive)  
 City: Oakland, CA Sampler: FR

Well ID: MW-6 Date Monitored: 2.17.15  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 Total Depth: 30.84 ft.  
 Depth to Water: 18.03 ft.  Check if water column is less than 0.50 ft.  
12.81 xVF .17 = 2.17 x3 case volume = Estimated Purge Volume: 17.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.20

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

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

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

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

Start Time (purge): 1025 Weather Conditions: FOL  
 Sample Time/Date: 1050 / 2.17.15 Water Color: BAN. Odor: Y / 10  
 Approx. Flow Rate: / gpm. Sediment Description: S. SILTY  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 18.10

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS / cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>1030</u>	<u>2.5</u>	<u>7.57</u>	<u>921</u>	<u>20.1</u>	<u>PRE: 1.8</u>	<u>PRE: 125</u>	<u>PRE: 236</u>
<u>1035</u>	<u>5.0</u>	<u>7.54</u>	<u>917</u>	<u>20.8</u>			
<u>1040</u>	<u>7.0</u>	<u>7.51</u>	<u>910</u>	<u>21.3</u>	<u>POST: 1.7</u>	<u>POST: 119</u>	<u>POST: 260</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW6</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2/17/15 (inclusive)  
 Sampler: GM

Well ID: MW-7  
 Well Diameter: 1 1/2 4/16 in.  
 Total Depth: 31.33 ft.  
 Depth to Water: 18.25 ft.  
13.08 xVF 0.17 = 2.22

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 7 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.86

### Purge Equipment:

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

### Sampling Equipment:

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

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	<u>0</u> ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ ltr
Amt Removed from Well:	_____ ltr
Water Removed:	_____ ltr

Start Time (purge): 0610  
 Sample Time/Date: 0655 / 2/17/15  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: Cloudy / mist  
 Water Color: CLOUDY Odor: VDN SLIGHT  
 Sediment Description: SILT  
 DTW @ Sampling: 20.01

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (mS / $\mu$ mhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0615</u>	<u>2.5</u>	<u>7.20</u>	<u>300</u>	<u>14.4</u>	PRE: <u>1.9</u>	PRE: <u>-41</u>	PRE: <u>119</u>
<u>0620</u>	<u>5</u>	<u>7.16</u>	<u>302</u>	<u>14.1</u>			
<u>0625</u>	<u>7</u>	<u>7.11</u>	<u>302</u>	<u>14.0</u>	POST: <u>2.1</u>	POST: <u>-39</u>	POST: <u>276</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>3 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</u>

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



# 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: 2/17/15 (inclusive)  
 Sampler: GM

Well ID: MW-8  
 Well Diameter: 11 1/2" 4 1/6 in.  
 Total Depth: 26.30 ft.  
 Depth to Water: 18.04 ft.  
8.26 xVF 0.17 = 1.40

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.69

### Purge Equipment:

Disposable Bailer: X  
 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:	<u>0</u> ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ ltr
Amt Removed from Well:	_____ ltr
Water Removed:	_____ ltr

Start Time (purge): 0520  
 Sample Time/Date: 0550 / 2/17/15  
 Approx. Flow Rate: — gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_

Weather Conditions: CLOUDY / MIST  
 Water Color: Cloudy Odor: DN SLIGHT  
 Sediment Description: SILT  
 gal. DTW @ Sampling: 19.14

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
<u>0523</u>	<u>1.5</u>	<u>6.99</u>	<u>476</u>	<u>14.5</u>	<u>PRE: 1.6</u>	<u>PRE: -41</u>	<u>PRE: 201</u>
<u>0526</u>	<u>3</u>	<u>6.93</u>	<u>481</u>	<u>14.5</u>			
<u>0529</u>	<u>4.5</u>	<u>6.91</u>	<u>484</u>	<u>14.3</u>	<u>POST: 1.9</u>	<u>POST: -37</u>	<u>POST: 364</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-8</u>	<u>3 x vovial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2-17-15 (inclusive)  
 Sampler: AW

Well ID: A-mw-1  
 Well Diameter: 1 1/4" / 4 1/6 in.  
 Total Depth: 24.39 ft.  
 Depth to Water: 17.30 ft.

Date Monitored: 2-17-15

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

Check if water column is less than 0.50 ft.

7.09 xVF .17 = 1.20 x3 case volume = Estimated Purge Volume: 4.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.71

### 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): 0530  
 Sample Time/Date: 0605 / 2-17-15  
 Approx. Flow Rate: — gpm.  
 Did well de-water? N If yes, Time: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
 Water Color: Cloudy Odor: DI N / moderate  
 Sediment Description: Cloudy  
 Volume: — gal. DTW @ Sampling: 18.55

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (mS / $\mu$ mhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
<u>0535</u>	<u>1.5</u>	<u>7.02</u>	<u>363</u>	<u>18.1</u>	<u>PRE: 1.3</u>	<u>PRE: 132</u>	<u>PRE: 324</u>
<u>0540</u>	<u>3.0</u>	<u>7.08</u>	<u>390</u>	<u>18.3</u>			
<u>0545</u>	<u>4.0</u>	<u>7.11</u>	<u>420</u>	<u>18.4</u>	<u>POST: 1.2</u>	<u>POST: 150</u>	<u>POST: 360</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A-mw-1</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2-17-15 (inclusive)  
 Sampler: AW

Well ID: A-MW-2  
 Well Diameter: 1 1/4 / 1 1/6 in.  
 Total Depth: 24.85 ft.  
 Depth to Water: 17.66 ft.

Date Monitored: 2-17-15

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

Depth to Water 7.19 xVF .17 = 1.22  Check if water column is less than 0.50 ft.  
 x3 case volume = Estimated Purge Volume: 4.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.09

**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 Weather Conditions: Cloudy  
 Sample Time/Date: 0930 / 2-17-15 Water Color: Cloudy Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water?  If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 18.85

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0902	1.5	7.25	770	18.9	PRE: 1.2	PRE: 81	PRE: 214
0908	3.0	7.31	870	19.2			
0915	4.0	7.34	894	19.5	POST: 1.6	POST: 116	POST: 299

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A-MW-2</u>	<u>3</u> x vva vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

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: 2-17-15 (inclusive)  
 Sampler: AW

Well ID: A-MW-3  
 Well Diameter: 1 1/2 x 4 1/6 in.  
 Total Depth: 27.27 ft.  
 Depth to Water: 17.00 ft.

Date Monitored: 2-17-15

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

Check if water column is less than 0.50 ft.  
 $10.27 \times VF \ 17 = 1.74$  x3 case volume = Estimated Purge Volume: 5.5 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.05

### 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): 0800  
 Sample Time/Date: 0830 / 2-17-15  
 Approx. Flow Rate: - gpm.  
 Did well de-water? N If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: \_\_\_\_\_  
 Water Color: Cloudy Odor: DN Moderate  
 Sediment Description: Cloudy  
 DTW @ Sampling: 18.85

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (DS / mS umhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0805</u>	<u>2.0</u>	<u>7.40</u>	<u>379</u>	<u>18.3</u>	<u>PRE: 1.2</u>	<u>PRE: 68</u>	<u>PRE: 217</u>
<u>0810</u>	<u>4.0</u>	<u>7.44</u>	<u>409</u>	<u>18.5</u>			
<u>0815</u>	<u>6.5</u>	<u>7.47</u>	<u>436</u>	<u>18.8</u>	<u>POST: 1.4</u>	<u>POST: 84</u>	<u>POST: 249</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A-MW-3</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2-17-15 (inclusive)  
 Sampler: AW

Well ID: A-mw-4  
 Well Diameter: 1 1/4 / 6 in.  
 Total Depth: 25.58 ft.  
 Depth to Water: \_\_\_\_\_ ft.

Date Monitored: \_\_\_\_\_

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

Check if water column is less than 0.50 ft.

\_\_\_\_\_ 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	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to access. Parked over, checked with parking attendant who does not have access or keys to vehicle.

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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2/17/15 (inclusive)  
 City: Oakland, CA Sampler: JH

Well ID: AMW-5 Date Monitored: 2/17/15  
 Well Diameter: 11 @ 14 1/6 in.  
 Total Depth: 28.18 ft.  
 Depth to Water: 15.97 ft.  Check if water column is less than 0.50 ft.  
12.21 xVF .17 = 2.07 x3 case volume = Estimated Purge Volume: 6.22 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.41

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

### Purge Equipment:

Disposable Bailer 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): 0510 Weather Conditions: Foggy / Dark  
 Sample Time/Date: 0540 / 2/17/15 Water Color: clean Odor: Y 10  
 Approx. Flow Rate: — gpm. Sediment Description: none  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 17.80

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS (µmhos/cm))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (ntu)
<u>0515</u>	<u>2</u>	<u>7.26</u>	<u>584</u>	<u>18.7</u>	<u>PRE: 1.3</u>	<u>PRE: 36</u>	<u>PRE: 64</u>
<u>0520</u>	<u>4</u>	<u>7.20</u>	<u>561</u>	<u>18.3</u>			
<u>0525</u>	<u>6</u>	<u>7.03</u>	<u>539</u>	<u>18.1</u>	<u>POST: 1.1</u>	<u>POST: 22</u>	<u>POST: 90</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>AMW-5</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</u>

COMMENTS: CHRISTY BOX



# 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: 2/17/15 (inclusive)  
 Sampler: JH

Well ID: A-MU-6  
 Well Diameter: 11 @ 14 1/6 in.  
 Total Depth: 25.93 ft.  
 Depth to Water: 17.22 ft.  
8.71 xVF .17 = 1.48

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 4.44 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.96

### 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): 0555  
 Sample Time/Date: 0630 / 2/17/15  
 Approx. Flow Rate: — gpm.  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: DARK / Foggy  
 Water Color: Clear Odor: Y / ①  
 Sediment Description: None  
 DTW @ Sampling: 18.53

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS cmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
<u>0559</u>	<u>1.5</u>	<u>7.25</u>	<u>585</u>	<u>18.8</u>	<u>PRE: 1.3</u>	<u>PRE: 36</u>	<u>PRE: 28</u>
<u>0604</u>	<u>3.0</u>	<u>7.18</u>	<u>572</u>	<u>18.5</u>			
<u>0608</u>	<u>4.5</u>	<u>7.13</u>	<u>559</u>	<u>18.4</u>	<u>POST: 1.2</u>	<u>POST: 53</u>	<u>POST: 76</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A-MU-6</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2/17/15 (inclusive)  
 Sampler: JH

Well ID: A-MW-7  
 Well Diameter: 11 1/4 / 4 1/6 in.  
 Total Depth: 27.63 ft.  
 Depth to Water: 17.16 ft.  
10.47 xVF = .17 = 1.77

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 5.33 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.25

### 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): 0650  
 Sample Time/Date: 0730 / 2/17/15  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: DARK / Foggy  
 Water Color: Clear Odor: Y / 0  
 Sediment Description: None  
 DTW @ Sampling: 19.08

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS / (µmhos/cm))	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (ntu)
<u>0655</u>	<u>1.5</u>	<u>6.99</u>	<u>598</u>	<u>18.9</u>	<u>PRE: 1.7</u>	<u>PRE: 47</u>	<u>PRE: 88</u>
<u>0700</u>	<u>3.0</u>	<u>6.85</u>	<u>572</u>	<u>18.8</u>			
<u>0707</u>	<u>5.0</u>	<u>6.77</u>	<u>560</u>	<u>18.6</u>	<u>POST: 1.5</u>	<u>POST: 62</u>	<u>POST: 108</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A-MW-7</u>	<u>3</u> x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

### 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: 2-17-15 (inclusive)  
 Sampler: HW

Well ID: SP-3

Date Monitored: ~~2-17-15~~

Well Diameter: 1 1/2 / 4 / 6 in.

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

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	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to locate



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2-17-15 (inclusive)  
 City: Oakland, CA Sampler: AW

Well ID: SP-4 Date Monitored: \_\_\_\_\_  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 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.

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

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

### 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	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to locate





# 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: 2-17-15 (inclusive)  
 Sampler: Aw

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

Date Monitored: \_\_\_\_\_

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

Check if water column is less than 0.50 ft.

\_\_\_\_\_ xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

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

**Purge Equipment:**

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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

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

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ( $\mu$ S / mS $\mu$ 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 100a vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2/17/15 (inclusive)  
 City: Oakland, CA Sampler: 318

Well ID: S-MU-1  
 Well Diameter: 110/416 in.  
 Total Depth: 27.40 ft.  
 Depth to Water: 17.84 ft.

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.  
 $9.56 \times VF .17 = 1.62$  x3 case volume = Estimated Purge Volume: 4.87 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.75

### 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): 0948 Weather Conditions: Foggy  
 Sample Time/Date: 1015 / 2/17/15 Water Color: Clear Odor: Oil / Strong  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: 1.0 hr  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 19.60

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS (µmhos/cm))	Temperature (C F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (ntu)
<u>0944</u>	<u>1.5</u>	<u>7.29</u>	<u>502</u>	<u>19.0</u>	<u>PRE: 1.0</u>	<u>PRE: 72</u>	<u>PRE: 131</u>
<u>0948</u>	<u>3.0</u>	<u>7.21</u>	<u>489</u>	<u>18.7</u>			
<u>0953</u>	<u>5.0</u>	<u>7.03</u>	<u>460</u>	<u>18.8</u>	<u>POST: 1.1</u>	<u>POST: 95</u>	<u>POST: 176</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-MU-1</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</u>

### COMMENTS:

Add/Replaced Gasket: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_ Add/Replaced Lock: X Add/Replaced Plug: X 3"



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2-17-15 (inclusive)  
 City: Oakland, CA Sampler: AW

Well ID S-MW-2 Date Monitored: 2-17-15

Well Diameter 1 1/2 1/4 1/6 in.

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

Total Depth 28.00 ft.

Depth to Water 19.15 ft.

Check if water column is less than 0.50 ft.

8.85 xVF .17 = 1.50 x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.92

**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): 0715 Weather Conditions: Down  
 Sample Time/Date: 0745 / 2-17-15 Water Color: Cloudy Odor: Y 10  
 Approx. Flow Rate: 2 gpm. Sediment Description: Cloudy  
 Did well de-water? 2 If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.55

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
<u>0720</u>	<u>1.5</u>	<u>6.90</u>	<u>363</u>	<u>17.8</u>	PRE: <u>1.1</u>	PRE: <u>92</u>	PRE: <u>306</u>
<u>0725</u>	<u>3.0</u>	<u>6.94</u>	<u>404</u>	<u>18.0</u>			
<u>0730</u>	<u>4.5</u>	<u>6.97</u>	<u>420</u>	<u>18.3</u>	POST: <u>1.2</u>	POST: <u>114</u>	POST: <u>349</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-MW-2</u>	<u>3</u> x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

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: 2/17/15 (inclusive)  
 Sampler: GM

Well ID: S-MW-3  
 Well Diameter: 1 1/8 / 4 / 6 in.  
 Total Depth: 26.79 ft.  
 Depth to Water: 18.46 ft.

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.  
 $9.33 \times VF 0.17 = 1.41$  x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.12

### 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: Ø 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: 0740 / 2/17/15  
 Approx. Flow Rate: - gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: CLOUDY / mist  
 Water Color: Cloudy Odor: (Y) N SLIGHT  
 Sediment Description: SILT  
 DTW @ Sampling: 19.93

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0718</u>	<u>1.5</u>	<u>6.96</u>	<u>289</u>	<u>16.5</u>	<u>PRE: 1.4</u>	<u>PRE: -20</u>	<u>PRE: 201</u>
<u>0721</u>	<u>3</u>	<u>6.93</u>	<u>290</u>	<u>16.3</u>			
<u>0724</u>	<u>4.5</u>	<u>6.90</u>	<u>292</u>	<u>16.1</u>	<u>POST: 1.7</u>	<u>POST: -5</u>	<u>POST: 326</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-MW-3</u>	<u>2 x vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2/17/15 (inclusive)  
 City: Oakland, CA Sampler: JH

Well ID S-MW-4 Date Monitored: 2/17/15  
 Well Diameter 11 1/4 / 16 in.  
 Total Depth 29.30 ft.  
 Depth to Water 18.85 ft.  Check if water column is less than 0.50 ft.  
10.45 xVF .17 = 1.77 x3 case volume = Estimated Purge Volume: 5.32 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.94

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

**Purge Equipment:**  
 Disposable Bailer 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): 0750 Weather Conditions: Foggy  
 Sample Time/Date: 0830 / 2/17/15 Water Color: clear Odor: 0 / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: 1.0H  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.36

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS / umhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0755</u>	<u>2</u>	<u>6.92</u>	<u>738</u>	<u>18.7</u>	<u>PRE: 1.4</u>	<u>PRE: 65</u>	<u>PRE: 103</u>
<u>0800</u>	<u>4</u>	<u>6.83</u>	<u>722</u>	<u>18.6</u>			
<u>0805</u>	<u>5.5</u>	<u>6.65</u>	<u>706</u>	<u>18.4</u>			
					<u>POST: 1.3</u>	<u>POST: 83</u>	<u>POST: 149</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-MW-4</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</u>

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

Add/Replaced Gasket: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_ Add/Replaced Lock: X Add/Replaced Plug: X 2"



# 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: 2/17/15 (inclusive)  
 Sampler: GM

Well ID: S-MW-5  
 Well Diameter: 1 1/4 / 1 1/2 in.  
 Total Depth: 28.82 ft.  
 Depth to Water: 18.92 ft.

Date Monitored: 2/12/15

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

Check if water column is less than 0.50 ft.  
9.90 xVF 0.17 = 1.68 x3 case volume = Estimated Purge Volume: 5.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.90

### Purge Equipment:

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

### Sampling Equipment:

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

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	<u>0</u> ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ ltr
Amt Removed from Well:	_____ ltr
Water Removed:	_____ ltr

Start Time (purge): 0755 Weather Conditions: CLOUDY  
 Sample Time/Date: 0835 / 2/17/15 Water Color: CLOUDY Odor: OPN MODERATE  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: SILT  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.41

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (US mS μmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0800</u>	<u>2</u>	<u>7.05</u>	<u>1006</u>	<u>17.6</u>	<u>PRE: 1.5</u>	<u>PRE: -51</u>	<u>PRE: 101</u>
<u>0805</u>	<u>4</u>	<u>6.99</u>	<u>1011</u>	<u>17.3</u>			
<u>0810</u>	<u>5.5</u>	<u>6.90</u>	<u>1025</u>	<u>17.0</u>	<u>POST: 1.8</u>	<u>POST: -38</u>	<u>POST: 177</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-MW-5</u>	<u>3 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2/17/15 (inclusive)  
 Sampler: GM

Well ID: G-MW-6  
 Well Diameter: 1 1/2 x 4 1/6 in.  
 Total Depth: 49.29 ft.  
 Depth to Water: 25.64 ft.

Date Monitored: 2/17/15

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

Check if water column is less than 0.50 ft.  
 $23.65 \times VF 0.17 = 4.02$  x3 case volume = Estimated Purge Volume: 12.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 30.37

### Purge Equipment:

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

### Sampling Equipment:

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

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

Start Time (purge): 0850 Weather Conditions: CLOUDY  
 Sample Time/Date: 0930 / 2/17/15 Water Color: CLEAR Odor: Y/N  
 Approx. Flow Rate: ~ gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 29.22

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/mhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0856</u>	<u>4</u>	<u>7.80</u>	<u>380</u>	<u>18.4</u>	<u>PRE: 1.2</u>	<u>PRE: -69</u>	<u>PRE: 106</u>
<u>0902</u>	<u>8</u>	<u>7.69</u>	<u>390</u>	<u>18.1</u>			
<u>0908</u>	<u>12.5</u>	<u>7.61</u>	<u>400</u>	<u>17.5</u>	<u>POST: 2.1</u>	<u>POST: -56</u>	<u>POST: 190</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-MW-6</u>	<u>3 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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 Job Number: 385647  
 Site Address: 800 Harrison Street Event Date: 2/17/15 (inclusive)  
 City: Oakland, CA Sampler: SH

Well ID: S-EW-1 Date Monitored: 2/17/15  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 Total Depth: 28.67 ft.  
 Depth to Water: 18.45 ft.  Check if water column is less than 0.50 ft.  
10.22 xVF 1.50 = 15.33 x3 case volume = Estimated Purge Volume: 45.99 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.49

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

### Purge Equipment:

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

### Sampling Equipment:

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

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

Start Time (purge): 0840 Weather Conditions: Foggy  
 Sample Time/Date: 0930 / 2/17/15 Water Color: Cloudy Odor: DI N / 15HT  
 Approx. Flow Rate: 2-3 gpm. Sediment Description: 15HT  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.27

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY <u>NTU</u>
<u>0845</u>	<u>15</u>	<u>7.33</u>	<u>682</u>	<u>18.9</u>	<u>PRE: 1.4</u>	<u>PRE: 28</u>	<u>PRE: 106</u>
<u>0850</u>	<u>30</u>	<u>7.21</u>	<u>705</u>	<u>19.0</u>			
<u>0856</u>	<u>46</u>	<u>7.08</u>	<u>721</u>	<u>19.0</u>	<u>POST: 1.2</u>	<u>POST: 41</u>	<u>POST: 153</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>S-EW-1</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>BC LABS</u>	<u>TPPH(8260)/BTEX+MTBE(8260)</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: 2-17-15 (inclusive)  
 Sampler: AW

Well ID: MPE-1  
 Well Diameter: 1 1/2 @ 1/6 in.  
 Total Depth: 32.11 ft.  
 Depth to Water: 18.70 ft.  
13.41 xVF = .66 = 8.85

Date Monitored: 2-17-15

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 27.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.38

### 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): 0630  
 Sample Time/Date: 0705 / 2-17-15  
 Approx. Flow Rate: 1-2 gpm.  
 Did well de-water? N If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: Dark  
 Water Color: cloudy Odor: DI N moderate  
 Sediment Description: cloudy  
 DTW @ Sampling: 21.06

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
<u>0637</u>	<u>9.0</u>	<u>6.93</u>	<u>1765</u>	<u>18.6</u>	<u>PRE: 1.1</u>	<u>PRE: 121</u>	<u>PRE: 265</u>
<u>0644</u>	<u>18.0</u>	<u>6.99</u>	<u>490</u>	<u>19.0</u>			
<u>0650</u>	<u>27.0</u>	<u>7.04</u>	<u>544</u>	<u>19.1</u>	<u>POST: 1.3</u>	<u>POST: 140</u>	<u>POST: 304</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MPE-1</u>	<u>3</u> x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

### 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: 2/17/15 (inclusive)  
 Sampler: lam

Well ID: MP-1  
 Well Diameter: 1 1/2 / 4 / 6 in.  
 Total Depth: \_\_\_\_\_ ft.  
 Depth to Water: UTA ft.

Date Monitored: UTA

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

Check if water column is less than 0.50 ft.

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	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: UNABLE TO ACCESS, CAR PARKED OVER WELL

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: <u>0752</u>				Union Oil Consultant: <u>Arctis</u>				<b>ANALYSES REQUIRED</b>													
Site Global ID: <u>TEC0010486</u>				Consultant Contact: <u>Kathleen Pruitt</u>				TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPH (8015) / BTEX / MTBE / OXYS							Turnaround Time (TAT):	
Site Address: <u>300 Harrison St. Oakland CA</u>				Consultant Phone No.: <u>916-591-1715</u>																Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/>	48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>
Union Oil PM: <u>Mark Anderson</u>				Sampling Company: <u>BC Labs - Rivers</u>																Special Instructions	
Union Oil PM Phone No.: <u>916-700-1717</u>				Sampled By (PRINT): <u>Alex Wang</u>																	
Charge Code: <u>NWRTB-0 51-46-0-LAB</u>				Sampler Signature: _____										Notes / Comments							
<p style="font-size: small;">This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.</p>				<b>BC Laboratories, Inc.</b> Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911																	
SAMPLE ID				Date (yymmdd)	Sample Time	# of Containers															
Field Point Name	Matrix	DTW																			
<u>QA</u>	<u>W-S-A</u>		<u>150217</u>	<u>—</u>	<u>2</u>																
<u>MW-1</u>	<u>W-S-A</u>			<u>0805</u>	<u>3</u>																
<u>MW-2</u>	<u>W-S-A</u>			<u>0725</u>																	
<u>MW-3</u>	<u>W-S-A</u>			<u>0927</u>																	
<u>MW-4</u>	<u>W-S-A</u>			<u>0850</u>																	
<u>MW-5</u>	<u>W-S-A</u>			<u>1010</u>																	
<u>MW-6</u>	<u>W-S-A</u>			<u>1050</u>																	
<u>MW-7</u>	<u>W-S-A</u>			<u>0155</u>																	
<u>MW-8</u>	<u>W-S-A</u>			<u>0550</u>																	
<u>A-MW-1</u>	<u>W-S-A</u>			<u>1605</u>																	
<u>A-MW-2</u>	<u>W-S-A</u>			<u>0930</u>																	
<u>A-MW-3</u>	<u>W-S-A</u>			<u>0930</u>																	
Relinquished By: <u>[Signature]</u> Company: <u>G-E INC</u> Date / Time: <u>2-17-15 1215</u>				Relinquished By: <u>[Signature]</u> Company: <u>G-E INC</u> Date / Time: <u>2-17-15 1430</u>				Relinquished By: _____ Company: _____ Date / Time: _____													
Received By: <u>[Signature]</u> Company: <u>G-E INC</u> Date / Time: <u>2-17-15 1215</u>				Received By: <u>[Signature]</u> Company: <u>BeLab</u> Date / Time: <u>2-17-15 1430</u>				Received By: _____ Company: _____ Date / Time: _____													

### CHAIN OF CUSTODY FORM

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

COC \_\_\_\_\_ of \_\_\_\_\_

Union Oil Site ID: <u>0752</u>				Union Oil Consultant: <u>Alaris</u>				ANALYSES REQUIRED																	
Site Global ID: <u>T0100101486</u>				Consultant Contact: <u>Kathleen Brown</u>				TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPH (C03)/BTEX - PM10 (C04)	Turnaround Time (TAT): Standard <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>											
Site Address: <u>900 Harrison St. Oakland CA</u>				Consultant Phone No.: <u>916-506-9175</u>										Special Instructions											
Union Oil PM: <u>Nicole Anderson</u>				Sampling Company: <u>BC Laboratories - Ripon</u>																					
Union Oil PM Phone No.: <u>925-790-1512</u>				Sampled By (PRINT): <u>Alex Wang</u>										Notes / Comments											
Charge Code: <u>NWRTB-0 51746-0-LAB</u>				Sampler Signature: <u>[Signature]</u>																					
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.				BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911																					
				SAMPLE ID																					
Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers																				
<u>A-MW-5</u>	<u>W-S-A</u>		<u>150217</u>	<u>0540</u>	<u>3</u>																				
<u>A-MW-6</u>	<u>W-S-A</u>			<u>0630</u>																					
<u>A-MW-7</u>	<u>W-S-A</u>			<u>0730</u>																					
<u>S-MW-1</u>	<u>W-S-A</u>			<u>1015</u>																					
<u>S-MW-2</u>	<u>W-S-A</u>			<u>0745</u>																					
<u>S-MW-3</u>	<u>W-S-A</u>			<u>1740</u>																					
<u>S-MW-4</u>	<u>W-S-A</u>			<u>1830</u>																					
<u>S-MW-5</u>	<u>W-S-A</u>			<u>0535</u>																					
<u>S-MW-6</u>	<u>W-S-A</u>			<u>0930</u>																					
<u>S-EW-1</u>	<u>W-S-A</u>			<u>1030</u>																					
<u>A-PE-1</u>	<u>W-S-A</u>			<u>0705</u>																					
Relinquished By: <u>[Signature]</u> Company: <u>U-OIL</u> Date / Time: <u>2-17-15 (1215)</u>				Relinquished By: <u>[Signature]</u> Company: <u>U-OIL</u> Date / Time: <u>2-17-15 1430</u>				Relinquished By: _____ Company: _____ Date / Time: _____																	
Received By: <u>[Signature]</u> Company: <u>U-OIL</u> Date / Time: <u>2-17-15 1215</u>				Received By: <u>[Signature]</u> Company: <u>U-OIL</u> Date / Time: <u>2-17-15 1430</u>				Received By: _____ Company: _____ Date / Time: _____																	

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 (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
<b>MW-1</b>														
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)	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
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	
<b>MW-2</b>														
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)	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
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	
<b>MW-3</b>														
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**

**August 3, 2011  
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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
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	
<b>MW-4</b>														
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**

**August 3, 2011  
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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
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**

**August 3, 2011  
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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	
<b>MW-5</b>														
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**

**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
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	
<b>MW-6</b>														
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**

**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
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**

**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	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	
<b>MW-7</b>														
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	--	--	--	--	--	--	--	--	--	--	--	--	
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	--	

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**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)	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
7/30/2001	32.20	16.79	--	15.41	0.02	<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	<5.0	--	
1/14/2002	32.20	14.85	--	17.35	2.13	<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	0.70	<5.0	--	
7/15/2002	32.20	15.92	--	16.28	-0.63	<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	<1.0	<2.0	--	
7/11/2003	32.20	15.89	--	16.31	-0.78	--	<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	<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	
<b>MW-8</b>														
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)	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
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 (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
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 Report and Chain-of-Custody Documentation



Date of Report: 02/23/2015

Kathy Brandt

Arcadis

2000 Powell Street 7th Floor  
Emeryville, CA 94608

Client Project: 351646  
BCL Project: 0752  
BCL Work Order: 1504008  
Invoice ID: B196341

Enclosed are the results of analyses for samples received by the laboratory on 2/17/2015. 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 1504008 Page 1 of 5

15-04008

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

COC 1 of 2

Union Oil Site ID: <u>0752</u>				Union Oil Consultant: <u>Arcadis</u>				ANALYSES REQUIRED			
Site Global ID: <u>T0600101486</u>				Consultant Contact: <u>Katherine Brandt</u>				Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/> Special Instructions			
Site Address: <u>800 Harrison St. Oakland CA</u>				Consultant Phone No.: <u>510-596-9675</u>							
Union Oil PM: <u>Nicole Arzeneaux</u>				Sampling Company: <u>Gettler-Ryan</u>				Notes / Comments			
Union Oil PM Phone No.: <u>925-790-6912</u>				Sampled By (PRINT): <u>Alex Wong</u>							
Charge Code: NWRTB-0 <u>351646</u> -0- LAB				Sampler Signature: <u>[Signature]</u>				TPH - Diesel by EPA 8015 TPH - G by GC/MS BTEX/MTBE/OXYS by EPA 8260B Ethanol by EPA 8260B EPA 8260B Full List with OXYS <u>(928) 8BLM + YALB (9092) 8PH (926)</u>			
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.				BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911							
SAMPLE ID											
Field Point Name	Matrix	DTW	Date (yyymmdd)	Sample Time	# of Containers						
1 QA	W-S-A		150217		2						
2 MW-1	W-S-A			0805	3						
3 MW-2	W-S-A			0725							
4 MW-3	W-S-A			0927							
5 MW-4	W-S-A			0850							
6 MW-5	W-S-A			1010							
7 MW-6	W-S-A			1050							
8 MW-7	W-S-A			0655							
9 MW-8	W-S-A			0550							
10 A-MW-1	W-S-A			0605							
11 A-MW-2	W-S-A			0930							
12 A-MW-3	W-S-A			0830							
Relinquished By: <u>[Signature]</u> Company: <u>G-2 BK.</u> Date / Time: <u>2-17-15 (1215)</u>			Relinquished By: <u>[Signature]</u> Company: <u>GR INC</u> Date / Time: <u>02-17-15 14:30</u>			Relinquished By: <u>Nancy Boyen</u> Company: <u>BCLAB</u> Date / Time: <u>2-17-15 1830</u>					
Received By: <u>GETTLER RYAN FREDER</u> Company: <u>GR</u> Date / Time: <u>02-17-15 1215</u>			Received By: <u>[Signature]</u> Company: <u>BCLAB</u> Date / Time: <u>2-17-15 1430</u>			Received By: <u>[Signature]</u> Company: <u>BCLAB</u> Date / Time: <u>2-17-15 18:30</u>					

REL [Signature] 2-17-15 1235

[Signature] 2-17-15 1235



Environmental Testing Laboratory Since 1949

*M.M.*

Chain of Custody and Cooler Receipt Form for 1504008 Page 2 of 5

15-04008

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>Arcadis</u>				ANALYSES REQUIRED									
Site Global ID: <u>T0600101486</u>				Consultant Contact: <u>Katherine Brandt</u>				TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	<u>(928) 30LW-2AL9/(50929) HALL</u>	Turnaround Time (TAT):			
Site Address: <u>800 Harrison St. Oakland CA</u>				Consultant Phone No.: <u>510-596-9675</u>										Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/>			
Union Oil PM: <u>Nicole Arceneaux</u>				Sampling Company: <u>Gettler Ryan</u>										48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>			
Union Oil PM Phone No.: <u>925-790-6912</u>				Sampled By (PRINT): <u>Alex Wong</u>				Special Instructions									
Charge Code: NWRTB-0 <u>351646-0</u> -LAB				Sampler Signature:													
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.				BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911				Notes / Comments									
SAMPLE ID																	
Field Point Name	Matrix	DTW	Date (yyymmdd)	Sample Time	# of Containers												
<u>13 A-MW-5</u>	<u>W-S-A</u>		<u>150217</u>	<u>0540</u>	<u>3</u>												
<u>14 A-MW-6</u>	<u>W-S-A</u>			<u>0630</u>													
<u>15 A-MW-7</u>	<u>W-S-A</u>			<u>0730</u>													
<u>16 S-MW-1</u>	<u>W-S-A</u>			<u>1015</u>													
<u>17 S-MW-2</u>	<u>W-S-A</u>			<u>0745</u>													
<u>18 S-MW-3</u>	<u>W-S-A</u>			<u>0740</u>													
<u>19 S-MW-4</u>	<u>W-S-A</u>			<u>0830</u>													
<u>20 S-MW-5</u>	<u>W-S-A</u>			<u>0835</u>													
<u>21 S-MW-6</u>	<u>W-S-A</u>			<u>0930</u>													
<u>22 S-EW-1</u>	<u>W-S-A</u>			<u>0930</u>													
<u>23 MPE-1</u>	<u>W-S-A</u>			<u>0705</u>													
Relinquished By <u>J-L Teri</u> Company <u>G-L INK.</u> Date / Time: <u>2-17-15 (1215)</u>				Relinquished By <u>[Signature]</u> Company <u>GRINC</u> Date / Time: <u>02-17-15 1430</u>				Relinquished By <u>Nancy Bogan</u> Company <u>BCLAB</u> Date / Time: <u>2-17-15 1830</u>									
Received By <u>GETTLER-RYAN FRIDGE</u> Company <u>[Signature]</u> Date / Time: <u>02-17-15 1215</u>				Received By <u>Nancy Bogan</u> Company <u>BCLAB</u> Date / Time: <u>2-17-15 1430</u>				Received By <u>[Signature]</u> Company <u>BCLAB</u> Date / Time: <u>2-17-15 18:30</u>									

REL. [Signature] 2-17-15 2235 [Signature] 2-17-15 2235





BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 3

Submission #: 15-04008

SHIPPING INFORMATION: Federal Express, UPS, Hand Delivery, BC Lab Field Service, Other. SHIPPING CONTAINER: Ice Chest, None, Box, Other. FREE LIQUID: YES, NO.

Refrigerant: Ice, Blue Ice, None, Other. Comments:

Custody Seals: Ice Chest, Containers, None. Intact? Yes, No.

All samples received? Yes, No. All samples containers intact? Yes, No. Description(s) match COC? Yes, No.

COC Received: YES, NO. Emissivity: 0.97, Container: V09, Thermometer ID: 208, Date/Time: 2/17/15, Analyst Init: KJB zzzlo. Temperature: (A) 1.0 C, (C) 0.9 C.

Table with columns for SAMPLE CONTAINERS and SAMPLE NUMBERS (1-10). Rows include various sample types like QT GENERAL MINERAL, PT PE UNPRESERVED, etc.

Comments: Sample Numbering Completed By: [Signature] Date/Time: 2/18/15 0900 [S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\SAMREC] A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 of 3

Submission #: 15-24008

SHIPPING INFORMATION
Federal Express [ ] UPS [ ] Hand Delivery [ ]
BC Lab Field Service [x] Other [ ] (Specify) \_\_\_\_\_

SHIPPING CONTAINER
Ice Chest [x] None [ ] Box [ ]
Other [ ] (Specify) \_\_\_\_\_

FREE LIQUID
YES [ ] NO [ ]

Refrigerant: Ice [x] Blue Ice [ ] None [ ] Other [ ] Comments: \_\_\_\_\_

Custody Seals Ice Chest [ ] Containers [ ] None [x] Comments: \_\_\_\_\_
Intact? Yes [ ] No [ ] Intact? Yes [ ] No [ ]

All samples received? Yes [x] No [ ] All samples containers intact? Yes [ ] No [x] Description(s) match COC? Yes [x] No [ ]

COC Received YES [x] NO [ ]
Emissivity: 0.97 Container: 1009 Thermometer ID: 208 Date/Time: 2/17/15
Temperature: (A) 1.0 °C (C) 0.9 °C Analyst Init: KIB 2246

Table with columns for Sample Containers and Sample Numbers (1-20). Rows include various sample types like QT GENERAL MINERAL, PT PE UNPRESERVED, etc. Handwritten 'A.B.C.' is present in row 19.

Comments: \_\_\_\_\_
Sample Numbering Completed By: [Signature] Date/Time: 2/18/15 09:00
A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 5 of 3

Submission #: 15-04008

SHIPPING INFORMATION
Federal Express [ ] UPS [ ] Hand Delivery [ ]
BC Lab Field Service [x] Other [ ] (Specify) \_\_\_\_\_

SHIPPING CONTAINER
Ice Chest [x] None [ ] Box [ ]
Other [ ] (Specify) \_\_\_\_\_

FREE LIQUID
YES [ ] NO [ ]

Refrigerant: Ice [x] Blue Ice [ ] None [ ] Other [ ] Comments: \_\_\_\_\_

Custody Seals Ice Chest [ ] Containers [ ] None [x] Comments: \_\_\_\_\_
Intact? Yes [ ] No [ ] Intact? Yes [ ] No [ ]

All samples received? Yes [x] No [ ] All samples containers intact? Yes [x] No [ ] Description(s) match COC? Yes [x] No [ ]

COC Received
[x] YES [ ] NO

Emissivity: 0.97 Container: VOA Thermometer ID: 208
Temperature: (A) 1.0 °C / (C) 0.9 °C

Date/Time 2/17/15
Analyst Init KLB zzzk

Table with columns for Sample Containers and Sample Numbers (1-10). Rows include various sample types like QT GENERAL MINERAL/GENERAL, PT PE UNPRESERVED, etc. Handwritten entries 'A, B, C' are present in the first three columns of the 40ml VOA VIAL row.

Comments: \_\_\_\_\_
Sample Numbering Completed By: [Signature] Date/Time: 2/18/15 09:06
A = Actual / C = Corrected

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Arcadis  
2000 Powell Street 7th Floor  
Emeryville, CA 94608

**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

<b>1504008-01</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 00:00
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> QA-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Trip Blank

Delivery Work Order:  
Global ID: T0600101486  
Location ID (FieldPoint): QA  
Matrix: W  
Sample QC Type (SACode): CS  
Cooler ID:

<b>1504008-02</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 08:05
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> MW-1-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water

Delivery Work Order:  
Global ID: T0600101486  
Location ID (FieldPoint): MW-1  
Matrix: W  
Sample QC Type (SACode): CS  
Cooler ID:

<b>1504008-03</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 07:25
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> MW-2-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water

Delivery Work Order:  
Global ID: T0600101486  
Location ID (FieldPoint): MW-2  
Matrix: W  
Sample QC Type (SACode): CS  
Cooler ID:

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Arcadis  
2000 Powell Street 7th Floor  
Emeryville, CA 94608

**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

<b>1504008-04</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-3-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 09:27 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
-------------------	--	--

<b>1504008-05</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-4-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 08:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
-------------------	--	--

<b>1504008-06</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-5-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 10:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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<b>1504008-07</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-6-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 10:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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<b>1504008-08</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-7-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 06:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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<b>1504008-09</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-8-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 05:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-8 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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<b>1504008-10</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> A-MW-1-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 06:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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<b>1504008-11</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> A-MW-2-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 09:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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<b>1504008-12</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> A-MW-3-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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<b>1504008-13</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 05:40
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> A-MW-5-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		Delivery Work Order:
		Global ID: T0600101486
		Location ID (FieldPoint): A-MW-5
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

<b>1504008-14</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 06:30
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> A-MW-6-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		Delivery Work Order:
		Global ID: T0600101486
		Location ID (FieldPoint): A-MW-5
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

<b>1504008-15</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 07:30
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> A-MW-7-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		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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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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<b>1504008-16</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 10:15
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> S-MW-1-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		Delivery Work Order:
		Global ID: T0600101486
		Location ID (FieldPoint): S-MW-1
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

<b>1504008-17</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 07:45
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> S-MW-2-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		Delivery Work Order:
		Global ID: T0600101486
		Location ID (FieldPoint): S-MW-2
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

<b>1504008-18</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 07:40
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> S-MW-3-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		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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**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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<b>1504008-19</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 08:30
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> S-MW-4-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		Delivery Work Order:
		Global ID: T0600101486
		Location ID (FieldPoint): S-MW-4
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

<b>1504008-20</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 08:35
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> S-MW-5-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		Delivery Work Order:
		Global ID: T0600101486
		Location ID (FieldPoint): S-MW-5
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

<b>1504008-21</b>	<b>COC Number:</b> ---	<b>Receive Date:</b> 02/17/2015 22:35
	<b>Project Number:</b> 0752	<b>Sampling Date:</b> 02/17/2015 09:30
	<b>Sampling Location:</b> ---	<b>Sample Depth:</b> ---
	<b>Sampling Point:</b> S-MW-6-W-150217	<b>Lab Matrix:</b> Water
	<b>Sampled By:</b> GRD	<b>Sample Type:</b> Water
		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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**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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<b>1504008-22</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> S-EW-1-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 09:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-EW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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<b>1504008-23</b>	<b>COC Number:</b> --- <b>Project Number:</b> 0752 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MPE-1-W-150217 <b>Sampled By:</b> GRD	<b>Receive Date:</b> 02/17/2015 22:35 <b>Sampling Date:</b> 02/17/2015 07:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MPE-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-01	<b>Client Sample Name:</b> 0752, QA-W-150217, 2/17/2015 12:00:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 15:12	JMS	MS-V12	1	BYB1520

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1504008-02		Client Sample Name: 0752, MW-1-W-150217, 2/17/2015 8:05:00AM						
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
<b>Methyl t-butyl ether</b>	<b>5.0</b>	<b>ug/L</b>	<b>0.50</b>		<b>EPA-8260B</b>	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>110</b>	<b>ug/L</b>	<b>50</b>		<b>Luft-GC/MS</b>	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	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	02/18/15	02/20/15 01:01	JMS	MS-V12	1	BYB1520

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-03	<b>Client Sample Name:</b> 0752, MW-2-W-150217, 2/17/2015 7:25:00AM
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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
<b>Methyl t-butyl ether</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>		<b>EPA-8260B</b>	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>57</b>	<b>ug/L</b>	<b>50</b>		<b>Luft-GC/MS</b>	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 16:23	JMS	MS-V12	1	BYB1520

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Reported: 02/23/2015 13:14  
Project: 0752  
Project Number: 351646  
Project Manager: Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-04	<b>Client Sample Name:</b> 0752, MW-3-W-150217, 2/17/2015 9:27:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	6.7	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	2.2	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	60	ug/L	0.50		EPA-8260B	ND		1
Toluene	2.2	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	3.2	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	1900	ug/L	250		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	129	%	75 - 125 (LCL - UCL)		EPA-8260B		S09	1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	113	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 05:27	JMS	MS-V12	1	BYB1520
2	EPA-8260B	02/18/15	02/20/15 12:12	JMS	MS-V12	5	BYB1520

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-05	<b>Client Sample Name:</b> 0752, MW-4-W-150217, 2/17/2015 8:50:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	92.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 16:41	JMS	MS-V12	1	BYB1520

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Project: 0752  
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Project Manager: Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-06	<b>Client Sample Name:</b> 0752, MW-5-W-150217, 2/17/2015 10:10:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	4.6	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	2.4	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	4.3	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	8.0	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	1200	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 02:29	JMS	MS-V12	1	BYB1520

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-07	<b>Client Sample Name:</b> 0752, MW-6-W-150217, 2/17/2015 10:50:00AM
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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
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>65</b>	<b>ug/L</b>	<b>50</b>		<b>Luft-GC/MS</b>	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 01:18	JMS	MS-V12	1	BYB1520

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Reported: 02/23/2015 13:14  
Project: 0752  
Project Number: 351646  
Project Manager: Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-08	<b>Client Sample Name:</b> 0752, MW-7-W-150217, 2/17/2015 6:55:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	36	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	2.1	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	10	ug/L	0.50		EPA-8260B	ND		1
Toluene	2.8	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	1.2	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	350	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	119	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	92.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 02:47	JMS	MS-V12	1	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-09	<b>Client Sample Name:</b> 0752, MW-8-W-150217, 2/17/2015 5:50:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 16:58	JMS	MS-V12	1	BYB1521

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Reported: 02/23/2015 13:14  
Project: 0752  
Project Number: 351646  
Project Manager: Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-10	<b>Client Sample Name:</b> 0752, A-MW-1-W-150217, 2/17/2015 6:05:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	260	ug/L	5.0		EPA-8260B	ND	A01	1
Ethylbenzene	7.0	ug/L	0.50		EPA-8260B	ND	A01	2
Methyl t-butyl ether	15	ug/L	0.50		EPA-8260B	ND	A01	2
Toluene	3.7	ug/L	0.50		EPA-8260B	ND	A01	2
Total Xylenes	4.1	ug/L	1.0		EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	550	ug/L	50		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	119	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 04:34	JMS	MS-V12	10	BYB1521
2	EPA-8260B	02/18/15	02/20/15 11:36	JMS	MS-V12	1	BYB1521

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

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-11	<b>Client Sample Name:</b> 0752, A-MW-2-W-150217, 2/17/2015 9:30:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1200	ug/L	10		EPA-8260B	ND	A01	1
Ethylbenzene	1300	ug/L	10		EPA-8260B	ND	A01	1
Methyl t-butyl ether	1900	ug/L	10		EPA-8260B	ND	A01	1
Toluene	4600	ug/L	50		EPA-8260B	ND	A01	2
Total Xylenes	5600	ug/L	20		EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	28000	ug/L	5000		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	124	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	86.7	%	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
1	EPA-8260B	02/18/15	02/20/15 06:59	JMS	MS-V12	20	BYB1521
2	EPA-8260B	02/18/15	02/20/15 11:54	JMS	MS-V12	100	BYB1521

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**Reported:** 02/23/2015 13:14  
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**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-12	<b>Client Sample Name:</b> 0752, A-MW-3-W-150217, 2/17/2015 8:30:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 17:16	JMS	MS-V12	1	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-13	<b>Client Sample Name:</b> 0752, A-MW-5-W-150217, 2/17/2015 5:40:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 17:33	JMS	MS-V12	1	BYB1521

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**Project:** 0752  
**Project Number:** 351646  
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### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-14	<b>Client Sample Name:</b> 0752, A-MW-6-W-150217, 2/17/2015 6:30:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 17:51	JMS	MS-V12	1	BYB1521

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**Project:** 0752  
**Project Number:** 351646  
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### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-15	<b>Client Sample Name:</b> 0752, A-MW-7-W-150217, 2/17/2015 7:30:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/19/15 18:08	JMS	MS-V12	1	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-16	<b>Client Sample Name:</b> 0752, S-MW-1-W-150217, 2/17/2015 10:15:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 11:18	JMS	MS-V12	1	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
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### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-17	<b>Client Sample Name:</b> 0752, S-MW-2-W-150217, 2/17/2015 7:45:00AM
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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
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 00:43	JMS	MS-V12	1	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-18	<b>Client Sample Name:</b> 0752, S-MW-3-W-150217, 2/17/2015 7:40:00AM
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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
<b>Methyl t-butyl ether</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>		<b>EPA-8260B</b>	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 01:36	JMS	MS-V12	1	BYB1521

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2000 Powell Street 7th Floor  
Emeryville, CA 94608

**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-19	<b>Client Sample Name:</b> 0752, S-MW-4-W-150217, 2/17/2015 8:30:00AM
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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
<b>Methyl t-butyl ether</b>	<b>12</b>	<b>ug/L</b>	<b>0.50</b>		<b>EPA-8260B</b>	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>180</b>	<b>ug/L</b>	<b>50</b>		<b>Luft-GC/MS</b>	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 01:54	JMS	MS-V12	1	BYB1521

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Reported: 02/23/2015 13:14  
Project: 0752  
Project Number: 351646  
Project Manager: Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-20	<b>Client Sample Name:</b> 0752, S-MW-5-W-150217, 2/17/2015 8:35:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1600	ug/L	50		EPA-8260B	ND	A01	1
Ethylbenzene	390	ug/L	5.0		EPA-8260B	ND	A01	2
Methyl t-butyl ether	5300	ug/L	50		EPA-8260B	ND	A01	1
Toluene	360	ug/L	5.0		EPA-8260B	ND	A01	2
Total Xylenes	950	ug/L	10		EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	16000	ug/L	500		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.1	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	02/18/15	02/20/15 15:08	JMS	MS-V12	100	BYB1521
2	EPA-8260B	02/18/15	02/20/15 06:38	JMS	MS-V12	10	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-21	<b>Client Sample Name:</b> 0752, S-MW-6-W-150217, 2/17/2015 9:30:00AM
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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
<b>Methyl t-butyl ether</b>	<b>850</b>	<b>ug/L</b>	<b>5.0</b>		<b>EPA-8260B</b>	ND	<b>A01</b>	<b>2</b>
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>490</b>	<b>ug/L</b>	<b>50</b>		<b>Luft-GC/MS</b>	ND	<b>A90</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	96.8	%	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
1	EPA-8260B	02/18/15	02/20/15 05:44	JMS	MS-V12	1	BYB1521
2	EPA-8260B	02/18/15	02/20/15 13:23	JMS	MS-V12	10	BYB1521

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Reported: 02/23/2015 13:14  
Project: 0752  
Project Number: 351646  
Project Manager: Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-22	<b>Client Sample Name:</b> 0752, S-EW-1-W-150217, 2/17/2015 9:30:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	27	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	5.0	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	180	ug/L	2.5		EPA-8260B	ND	A01	2
Toluene	3.3	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	5.2	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	1200	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	118	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	110	%	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
1	EPA-8260B	02/18/15	02/20/15 05:09	JMS	MS-V12	1	BYB1521
2	EPA-8260B	02/18/15	02/20/15 15:43	JMS	MS-V12	5	BYB1521

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**Reported:** 02/23/2015 13:14  
**Project:** 0752  
**Project Number:** 351646  
**Project Manager:** Kathy Brandt

### Volatile Organic Analysis (EPA Method 8260B)

<b>BCL Sample ID:</b> 1504008-23	<b>Client Sample Name:</b> 0752, MPE-1-W-150217, 2/17/2015 7:05:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	540	ug/L	10		EPA-8260B	ND	A01	1
Ethylbenzene	87	ug/L	0.50		EPA-8260B	ND		2
Methyl t-butyl ether	3400	ug/L	25		EPA-8260B	ND	A01	3
Toluene	30	ug/L	0.50		EPA-8260B	ND		2
Total Xylenes	89	ug/L	1.0		EPA-8260B	ND		2
Total Purgeable Petroleum Hydrocarbons	4400	ug/L	1000		Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-8260B			2
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-8260B			3
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			3
4-Bromofluorobenzene (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-8260B			3

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-8260B	02/18/15	02/20/15 12:30	JMS	MS-V12	20	BYB1521
2	EPA-8260B	02/18/15	02/20/15 06:02	JMS	MS-V12	1	BYB1521
3	EPA-8260B	02/18/15	02/20/15 16:01	JMS	MS-V12	50	BYB1521

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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
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**QC Batch ID: BYB1520**

Benzene	BYB1520-BLK1	ND	ug/L	0.50		
Ethylbenzene	BYB1520-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BYB1520-BLK1	ND	ug/L	0.50		
Toluene	BYB1520-BLK1	ND	ug/L	0.50		
Total Xylenes	BYB1520-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BYB1520-BLK1	ND	ug/L	50		
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYB1520-BLK1</b>	<b>94.8</b>	<b>%</b>	<b>75 - 125 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYB1520-BLK1</b>	<b>104</b>	<b>%</b>	<b>80 - 120 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYB1520-BLK1</b>	<b>85.3</b>	<b>%</b>	<b>80 - 120 (LCL - UCL)</b>		

**QC Batch ID: BYB1521**

Benzene	BYB1521-BLK1	ND	ug/L	0.50		
Ethylbenzene	BYB1521-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BYB1521-BLK1	ND	ug/L	0.50		
Toluene	BYB1521-BLK1	ND	ug/L	0.50		
Total Xylenes	BYB1521-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BYB1521-BLK1	ND	ug/L	50		
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BYB1521-BLK1</b>	<b>92.7</b>	<b>%</b>	<b>75 - 125 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BYB1521-BLK1</b>	<b>99.9</b>	<b>%</b>	<b>80 - 120 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BYB1521-BLK1</b>	<b>82.7</b>	<b>%</b>	<b>80 - 120 (LCL - UCL)</b>		

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Reported: 02/23/2015 13:14  
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	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
<b>QC Batch ID: BYB1520</b>											
Benzene	BYB1520-BS1	LCS	27.270	25.000	ug/L	109		70 - 130			
Toluene	BYB1520-BS1	LCS	24.720	25.000	ug/L	98.9		70 - 130			
1,2-Dichloroethane-d4 (Surrogate)	BYB1520-BS1	LCS	9.2400	10.000	ug/L	92.4		75 - 125			
Toluene-d8 (Surrogate)	BYB1520-BS1	LCS	10.340	10.000	ug/L	103		80 - 120			
4-Bromofluorobenzene (Surrogate)	BYB1520-BS1	LCS	8.7300	10.000	ug/L	87.3		80 - 120			
<b>QC Batch ID: BYB1521</b>											
Benzene	BYB1521-BS1	LCS	28.060	25.000	ug/L	112		70 - 130			
Toluene	BYB1521-BS1	LCS	25.260	25.000	ug/L	101		70 - 130			
1,2-Dichloroethane-d4 (Surrogate)	BYB1521-BS1	LCS	9.4600	10.000	ug/L	94.6		75 - 125			
Toluene-d8 (Surrogate)	BYB1521-BS1	LCS	10.510	10.000	ug/L	105		80 - 120			
4-Bromofluorobenzene (Surrogate)	BYB1521-BS1	LCS	8.5800	10.000	ug/L	85.8		80 - 120			

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### Volatile Organic Analysis (EPA Method 8260B)

#### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery		Lab
								RPD	Percent Recovery	
<b>QC Batch ID: BYB1520</b>		Used client sample: N								
Benzene	MS	1503766-01	ND	29.790	25.000	ug/L		119		70 - 130
	MSD	1503766-01	ND	28.200	25.000	ug/L	5.5	113	20	70 - 130
Toluene	MS	1503766-01	ND	27.830	25.000	ug/L		111		70 - 130
	MSD	1503766-01	ND	26.960	25.000	ug/L	3.2	108	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1503766-01	ND	9.3100	10.000	ug/L		93.1		75 - 125
	MSD	1503766-01	ND	9.1000	10.000	ug/L	2.3	91.0		75 - 125
Toluene-d8 (Surrogate)	MS	1503766-01	ND	10.480	10.000	ug/L		105		80 - 120
	MSD	1503766-01	ND	10.400	10.000	ug/L	0.8	104		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1503766-01	ND	8.6400	10.000	ug/L		86.4		80 - 120
	MSD	1503766-01	ND	8.6800	10.000	ug/L	0.5	86.8		80 - 120
<b>QC Batch ID: BYB1521</b>		Used client sample: N								
Benzene	MS	1503951-08	ND	31.560	25.000	ug/L		126		70 - 130
	MSD	1503951-08	ND	31.770	25.000	ug/L	0.7	127	20	70 - 130
Toluene	MS	1503951-08	ND	29.680	25.000	ug/L		119		70 - 130
	MSD	1503951-08	ND	28.600	25.000	ug/L	3.7	114	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1503951-08	ND	9.2100	10.000	ug/L		92.1		75 - 125
	MSD	1503951-08	ND	9.1700	10.000	ug/L	0.4	91.7		75 - 125
Toluene-d8 (Surrogate)	MS	1503951-08	ND	10.380	10.000	ug/L		104		80 - 120
	MSD	1503951-08	ND	10.560	10.000	ug/L	1.7	106		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1503951-08	ND	8.2100	10.000	ug/L		82.1		80 - 120
	MSD	1503951-08	ND	8.4200	10.000	ug/L	2.5	84.2		80 - 120

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**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.
- A90 TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.
- S09 The surrogate recovery on the sample for this compound was not within the control limits.