

# Quik Stop Markets, Inc.

4567 Enterprise Street • Fremont, CA 94538 • (510) 657-8500 • Fax: (510) 657-1544

**RECEIVED**

*11:17 am, Oct 26, 2011*

Alameda County  
Environmental Health

October 21, 2011

Mr. Paresh Khatri  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Reference: Quik Stop Market #56  
3132 Beaumont Avenue  
Oakland, CA 94602

**Subject: Second Quarter 2011 Semiannual Groundwater Monitoring Report**

Dear Mr. Khatri:

I have reviewed and approved the subject report. I declare, under penalty of perjury, that the information and/or recommendations contained in the report are true and correct to the best of my knowledge.

Sincerely,  
QUIK STOP MARKETS, INC.



Mike Karvelot  
Director of Environmental Affairs



One Concord Center  
2300 Clayton Road, Suite 610  
Concord, CA 94520

925.688.1200 PHONE  
925.688.0388 FAX

www.TRCSolutions.com

July 29, 2011

Project No. 183318

Mr. Paresh Khatri  
Alameda County Health Care Services Agency  
Department of Environmental Health  
Hazardous Materials Program  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

SITE: QUIK STOP MARKET NO. 56  
3132 BEAUMONT AVENUE  
OAKLAND, CALIFORNIA

RE: SEMIANNUAL GROUNDWATER MONITORING REPORT  
SECOND QUARTER 2011

Dear Mr. Khatri:

Enclosed is a copy of the *Second Quarter 2011 Semiannual Groundwater Monitoring Report* for the property located at 3132 Beaumont Avenue in Oakland, California. This report is submitted on behalf of Quik Stop Markets, Inc.

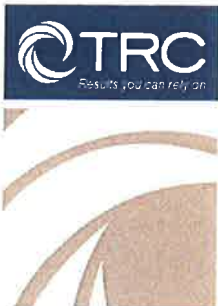
Please direct all questions and correspondence to:

Mr. Mike Karvelot  
Quik Stop Markets, Inc.  
4567 Enterprise Street  
Fremont, California 94538  
Phone: (510) 657-8500

Sincerely,

Jonathan Scheiner  
Project Manager

cc: Mr. Mike Karvelot, Quik Stop Markets, Inc.



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Project No. 183318

Mr. Mike Karvelot  
Quik Stop Markets, Inc.  
4567 Enterprise Street  
Fremont, California 94538

SITE: QUIK STOP MARKET NO. 56  
3132 BEAUMONT AVENUE  
OAKLAND, CALIFORNIA

RE: SEMIANNUAL GROUNDWATER MONITORING REPORT  
SECOND QUARTER 2011

Dear Mr. Karvelot:

This *Second Quarter 2011 Semiannual Groundwater Monitoring Report* presents the results of the Second Quarter 2011 fluid level monitoring and groundwater sampling at the above-referenced site (Figure 1). The work at the Site was performed in accordance with the requirements of the Alameda County Health Care Services Agency, Department of Environmental Health (ACDEH).

#### **1.0 FLUID-LEVEL MONITORING AND GROUNDWATER FLOW PATTERNS**

Fluid levels were measured in onsite monitoring wells MW-1, MW-2, and MW-3, and offsite monitoring wells MW-4, MW-5, MW-6 and MW-7 on June 9, 2011. Refer to Table 1 for fluid-level monitoring data, and to Figure 2 for a groundwater elevation contour map based on the fluid-level measurements. A description of fluid-level monitoring procedures is included in the Appendix.

Groundwater elevations range between 123.17 feet above mean sea level (MSL) in MW-6 at the south end of the study area to 131.68 feet above MSL in MW-3 in the north, with an average elevation of 127.60 feet above MSL. Groundwater flow direction was predominantly to the southwest at a gradient of 0.064 feet per foot in the northern portion of the study area, and approximately 0.025 feet per foot over the entire extent of the well network (i.e., extending to MW-6 at the southern end of the study area). South-southeastern and western components of groundwater flow are also evident at the west and east portions of the well network, respectively. The observed variation in groundwater flow direction and gradient may be attributed to local topography, with 14<sup>th</sup> Avenue (Beaumont Avenue) forming a north-south depression relative to the steeply trending perpendicular

East 31<sup>st</sup> Street to the east and west. Surface topography is also generally steeper at the north end of the study area (near Site) than at the south end (near MW-6), which could explain the gentler gradient in the south relative to that in the northern portion of the study area.

## 2.0 GROUNDWATER SAMPLING

### 2.1 Field Sampling and Analytical Testing

On June 9, 2011, groundwater samples were collected from onsite wells MW-1, MW-2, and MW-3, and offsite monitoring wells MW-4, MW-5, MW-6 and MW-7. Approximately 144 gallons of purge water and equipment rinsate were generated during groundwater sampling activities conducted on June 9, 2011. The purge water was stored onsite in three Department of Transportation-approved 55-gallon drums pending disposal. General Field Procedures, Field Measurement Forms, Official Laboratory Reports, and Chain of Custody Records are included in the Appendix. Groundwater samples were submitted to a state-certified laboratory for analysis of the following constituents:

- Total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method SW8015B
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method SW8260B.
- Fuel Oxygenates by EPA Method 8260B, including:
  - Methyl tert-butyl ether (MTBE)
  - Tertiary butyl alcohol (TBA)
  - Di-isopropyl ether (DIPE)
  - Ethyl tertiary butyl ether (ETBE)
  - Tertiary amyl methyl ether (TAME)
- Ethanol by EPA Method SW8260B-DI.

### 2.2 Analytical Results

Second Quarter 2011 groundwater analytical results are summarized in Table 1 and Figure 3. TPH-G concentrations reported during this event ranged from non-detect (<50 micrograms per liter [ $\mu\text{g/L}$ ]) to 320  $\mu\text{g/L}$  (MW-4). MTBE concentrations ranged from non-detect (<0.50  $\mu\text{g/L}$ ) to 500  $\mu\text{g/L}$  (MW-1), and TBA concentrations ranged from non-detect (<10  $\mu\text{g/L}$ ) to 1,700  $\mu\text{g/L}$  (MW-1) during this sampling event. No other analytes were detected above their respective reporting limits.

### 2.3 Discussion

The Second Quarter 2011 monitoring event represents the seventh monitoring with the expanded well network (i.e., including offsite wells MW-4 through MW-7), and is also the seventh monitoring event to include the analysis of dissolved phase TBA, DIPE, ETBE and TAME. In general, the results are consistent with those from historic sampling events and the previous Fourth Quarter 2010 monitoring event.

The presence of a detectable level of TPH-G was reported in the southern (downgradient) Site area, in wells MW-1 and MW-4. TBA was also detected in both downgradient wells MW-1 and MW-4 located immediately beyond the southern Site perimeter.

## SEMIANNUAL GROUNDWATER MONITORING REPORT, SECOND QUARTER 2011

Quik Stop Market No. 56-3132 Beaumont Avenue, Oakland, California

July 29, 2011

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MTBE was detected in five of the seven groundwater samples analyzed (i.e., except for MW-3 and MW-5). The maximum concentration of MTBE was reported in MW-1, which is consistent with historical results.

Overall diminishing trends are apparent for TPH-G in wells where detectable levels have been reported (i.e., downgradient, near Site wells MW-1, MW-4). Similarly diminishing trends are apparent for MTBE in wells where highest detectable levels have historically been reported (e.g., MW-1), and for TBA (in MW-1, MW-4).

As concluded in the Site Conceptual Model, the lateral extent of impacts to shallow groundwater has been defined, and the well network is deemed adequate (TRC, 2011). Pursuant to a request by the ACDEH dated June 23, 2011, the vertical extent of groundwater impacts will be evaluated following the planned installation of Cone Penetration Testing (CPT) borings into deeper water bearing zones locally downgradient of the source area.

### 3.0 LIST OF ATTACHMENTS

- Figure 1: Vicinity Map
- Figure 2: Groundwater Elevation Contour Map, June 9, 2011
- Figure 3: Dissolved-Phase Constituent Concentrations, June 9, 2011
- Table 1: Summary of Groundwater Levels and Chemical Analysis
- Appendix: General Field Procedures, Field Measurement Forms, Official Laboratory Reports, and Chain of Custody Records

If you have any questions regarding this report, please call me at (925) 688-2473.

Sincerely,



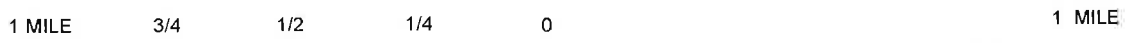
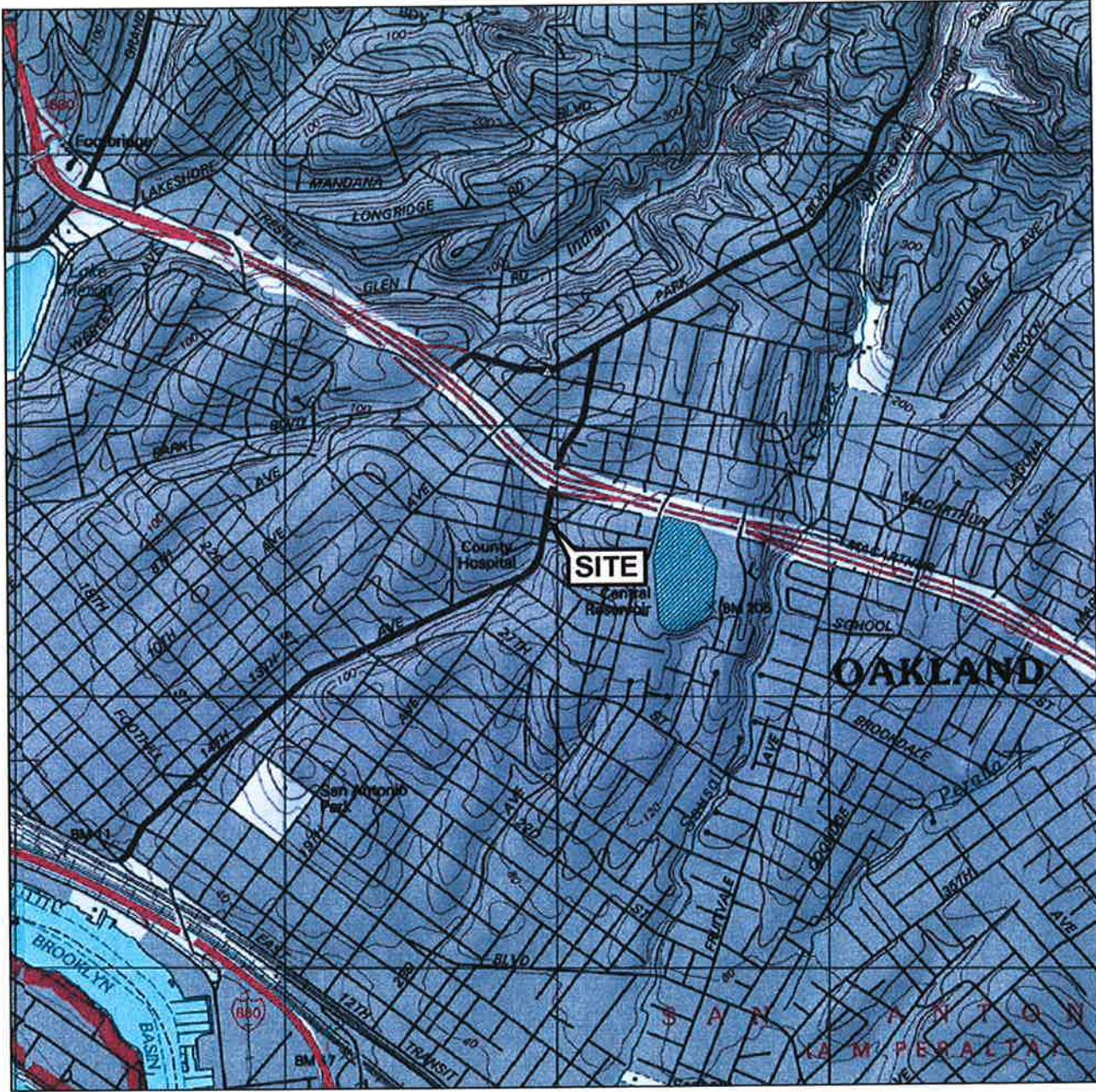
Jonathan Scheiner  
Project Manager



Keith Woodburne, P.G.  
Senior Project Geologist



## FIGURES



SCALE 1 : 24,000



SOURCE:  
 United States Geological Survey  
 7.5 Minute Topographic Maps:  
 Oakland East and  
 Oakland West Quadrangles

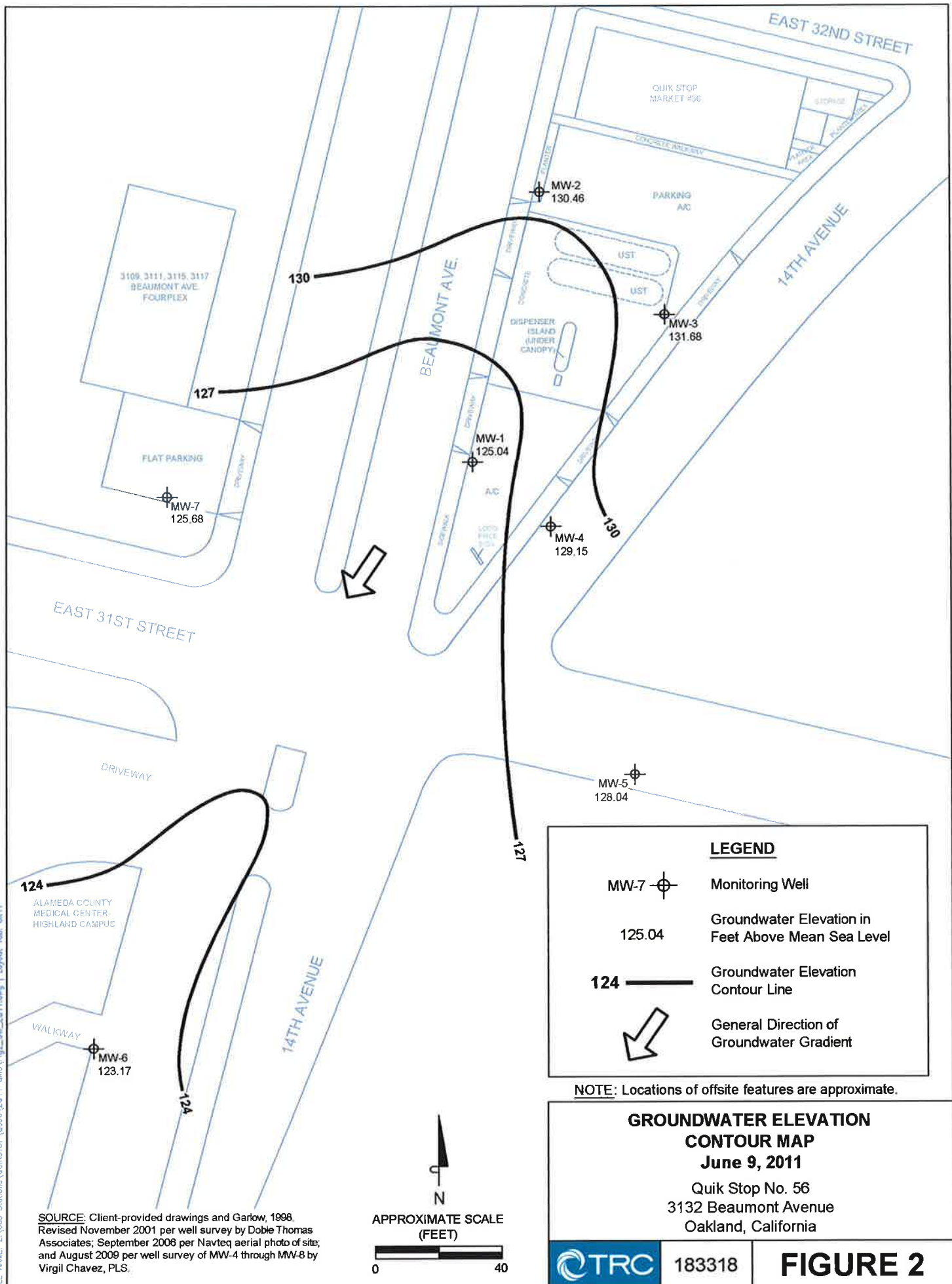
**VICINITY MAP**  
 Quik Stop No. 56  
 3132 Beaumont Avenue  
 Oakland, California






183318

**FIGURE 1**

FILE NAME: Z:\Gas Stations\QUIKSTOP\Q556 (2011) QMS\Fig2\_GW\_2011.dwg | Layout Tab: 8/11



**LEGEND**

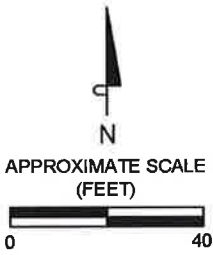
- MW-7  Monitoring Well
- 125.04  
Groundwater Elevation in Feet Above Mean Sea Level
- 124  Groundwater Elevation Contour Line
-  General Direction of Groundwater Gradient


NOTE: Locations of offsite features are approximate.

**GROUNDWATER ELEVATION  
CONTOUR MAP  
June 9, 2011**

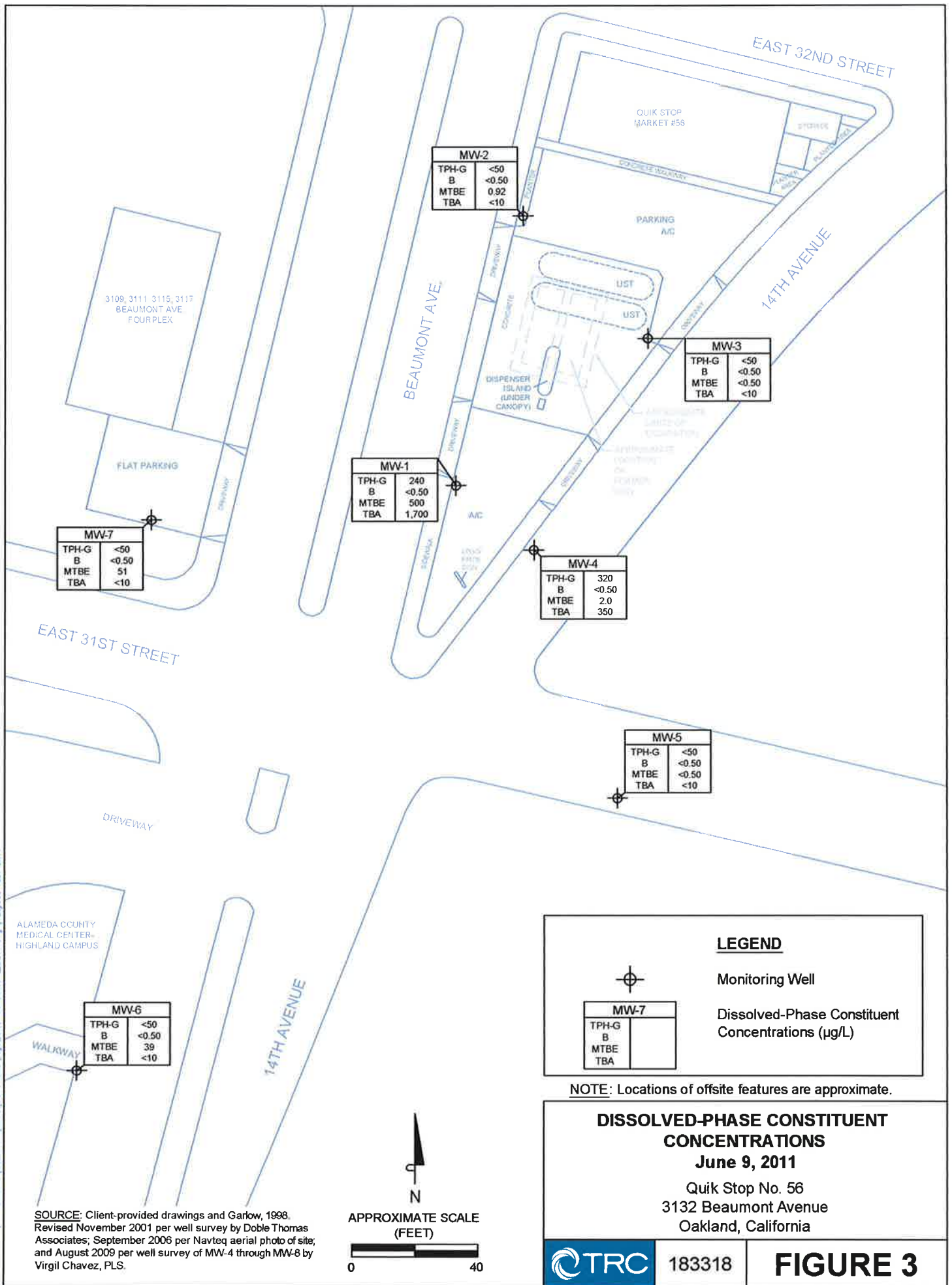
Quik Stop No. 56  
3132 Beaumont Avenue  
Oakland, California

SOURCE: Client-provided drawings and Garlow, 1998.  
Revised November 2001 per well survey by Doble Thomas Associates; September 2008 per Navteq aerial photo of site; and August 2009 per well survey of MW-4 through MW-8 by Virgil Chavez, PLS.



	183318	<b>FIGURE 2</b>
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FILE NAME: Z:\Geo\_Solobona\QuikStop\0656\2011 DMST\Fig3\_Diss-Const\Layout\_2011.dwg | Layout\_Tob: 8x11

MW-7	
TPH-G	<50
B	<0.50
MTBE	51
TBA	<10

MW-2	
TPH-G	<50
B	<0.50
MTBE	0.92
TBA	<10

MW-1	
TPH-G	240
B	<0.50
MTBE	500
TBA	1,700


MW-3	
TPH-G	<50
B	<0.50
MTBE	<0.50
TBA	<10

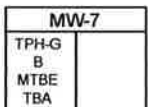
MW-4	
TPH-G	320
B	<0.50
MTBE	2.0
TBA	350

MW-5	
TPH-G	<50
B	<0.50
MTBE	<0.50
TBA	<10

MW-6	
TPH-G	<50
B	<0.50
MTBE	39
TBA	<10

**LEGEND**

 Monitoring Well

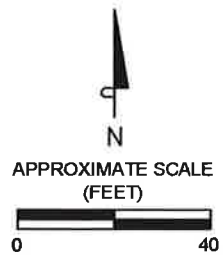
 Dissolved-Phase Constituent Concentrations (µg/L)

NOTE: Locations of offsite features are approximate.

**DISSOLVED-PHASE CONSTITUENT CONCENTRATIONS**  
**June 9, 2011**  
 Quik Stop No. 56  
 3132 Beaumont Avenue  
 Oakland, California

 183318 **FIGURE 3**

**SOURCE:** Client-provided drawings and Garlow, 1998, Revised November 2001 per well survey by Doble Thomas Associates; September 2006 per Navteq aerial photo of site, and August 2009 per well survey of MW-4 through MW-8 by Virgil Chavez, PLS.



**TABLE**

**Table 1**  
**Summary of Groundwater Levels and Chemical Analysis**

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

Sample ID	Date	Top of Casing	Depth to	Groundwater		TPH-G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260 (µg/L)	Ethanol (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	DO (mg/L)	
		Elevation (ft-MSL)	Water (feet)	Elevation (feet)														
MW-1	03/02/00	131.58	10.33	121.25	670	<1.0	<1.0	<1.0	<1.0	2,200	—	—	—	—	—	—	0.62	
MW-1	11/16/00	131.58	11.86	119.72	<500	<0.5	<0.5	<0.5	<0.5	18,000	—	—	—	—	—	—	0.34	
MW-1	01/23/01	131.58	11.05	120.53	6,400	<10	<10	<10	<10	21,000	—	—	—	—	—	—	0.83	
MW-1	04/25/01	131.58	12.06	119.52	12,000	<20	<20	<20	<20	17,000	—	—	—	—	—	—	0.39	
MW-1	07/24/01	131.58	12.42	119.16	8,800	<13	<13	<13	<13	14,000	—	—	—	—	—	—	7.61	
MW-1	11/08/01	131.58	12.00	119.58	18,000	<25	<25	<25	<25	28,000	—	—	—	—	—	—	—	
MW-1	11/27/01	134.13	Well resurveyed to new reference point															
MW-1	02/05/02	134.13	10.99	123.14	28,000	<50	<50	<50	<50	44,000	—	—	—	—	—	—	—	
MW-1	04/29/02	134.13	10.97	123.16	12,000	<25	<25	<25	<25	30,000	—	—	—	—	—	—	—	
MW-1	07/29/02	134.13	10.20	123.93	16,000	<25	<25	<25	<25	22,000	—	—	—	—	—	—	—	
MW-1	10/21/02	134.13	10.48	123.65	17,000	<50	<50	<50	<50	39,000	—	—	—	—	—	—	—	
MW-1	03/05/03	134.13	8.94	125.19	40,000	<100	<100	<100	<100	69,000	—	—	—	—	—	—	—	
MW-1	06/06/03	134.13	8.68	125.45	27,000	<50	<50	<50	<50	63,000	—	—	—	—	—	—	—	
MW-1	09/05/03	134.13	9.21	124.92	28,000	<25	<25	<25	<25	51,000	—	—	—	—	—	—	—	
MW-1	12/24/03	134.13	8.65	125.48	29,000	<50	<50	<50	<50	84,000	—	—	—	—	—	—	—	
MW-1	03/25/04	134.13	8.66	125.47	39,000	<100	<100	<100	<100	72,000	—	—	—	—	—	—	—	
MW-1	06/25/04	134.13	8.66	125.47	50,000	<100	<100	<100	<100	90,000	—	—	—	—	—	—	—	
MW-1	09/16/04	134.13	9.02	125.11	30,000	<50	<50	<50	<50	75,000	—	—	—	—	—	—	—	
MW-1	12/17/04	134.13	7.46	126.67	35,000	<50	<50	<50	<50	59,000	—	—	—	—	—	—	—	
MW-1	03/10/05	134.13	7.17	126.96	14,000	<25	<25	<25	<25	33,000	—	—	—	—	—	—	—	
MW-1	06/09/05	134.13	8.14	125.99	36,000	<50	<50	<50	<50	60,000	—	—	—	—	—	—	—	
MW-1	09/13/05	134.13	12.64	121.49	<20,000	<100	<100	<100	<100	32,000	—	—	—	—	—	—	—	
MW-1	12/06/05	134.13	11.40	122.73	<5,000	<25	<25	<25	<25	5,700	—	—	—	—	—	—	—	
MW-1	03/29/06	134.13	10.51	123.62	16,000	<25	<25	<25	<25	23,000	—	—	—	—	—	—	—	
MW-1	06/29/06	134.13	11.28	122.85	8,200	<15	<15	<15	<15	12,000	<5.0	—	—	—	—	—	—	
MW-1	09/21/06	134.13	11.90	122.23	4,500	<10	<10	<10	<10	7,900	<5.0	—	—	—	—	—	—	
MW-1	12/08/06	134.13	11.65	122.48	3,900	<10	<10	<10	<10	4,100	<5.0	—	—	—	—	—	—	
MW-1	03/28/07	134.13	11.22	122.91	5,000	<10	<10	<10	<10	7,700	<5.0	—	—	—	—	—	—	
MW-1	06/14/07	134.13	12.18	121.95	3,600	<10	<10	<10	<10	4,300	<5.0	—	—	—	—	—	—	
MW-1	09/06/07	134.13	12.84	121.29	3,400	<10	<10	<10	<10	4,500	<5.0	—	—	—	—	—	—	
MW-1	12/31/07	134.13	12.52	121.61	2,900	<5.0	<5.0	<5.0	<5.0	3,300	<5.0	—	—	—	—	—	—	
MW-1	03/18/08	134.13	12.74	121.39	1,800	<2.5	<2.5	<2.5	<2.5	3,400	<5.0	—	—	—	—	—	—	
MW-1	06/30/08	134.13	13.00	121.13	1,400	<2.5	<2.5	<2.5	<2.5	2,400	<5.0	—	—	—	—	—	—	
MW-1	09/26/08	134.13	13.77	120.36	1,100	<2.0	<2.0	<2.0	<2.0	2,200	<5.0	—	—	—	—	—	—	
MW-1	11/25/08	134.13	13.57	120.56	1,300	<2.5	<2.5	<2.5	<2.5	2,000	<5.0	—	—	—	—	—	—	
MW-1	03/09/09	134.13	11.09	123.04	1,100	<2.0	<2.0	<2.0	<2.0	1,600	<5.0	—	—	—	—	—	—	
MW-1	06/29/09	134.13	11.33	122.80	430	<1.0	<1.0	<1.0	<1.0	730	<5.0	—	—	—	—	—	—	
MW-1	09/11/09	134.13	11.01	123.12	880	<2.5	<2.5	<2.5	<2.5	980	<5.0	7,000	<5.0	<5.0	<5.0	<5.0	—	
MW-1	12/08/09	134.13	11.86	122.27	710	<2.5	<2.5	<2.5	<2.5	1,300	<5.0	9,900	<5.0	<5.0	<5.0	<5.0	—	
MW-1	03/19/10	134.13	10.09	124.04	1,100	<2.5	<2.5	<2.5	<2.5	1,000	<5.0	5,300	<5.0	<5.0	<5.0	<5.0	—	
MW-1	06/08/10	134.13	9.67	124.46	<300	<1.5	<1.5	<1.5	<1.5	500	<5.0	3,500	<3.0	<3.0	<3.0	<3.0	—	
MW-1	09/14/10	134.13	10.48	123.65	320	<1.0	<1.0	<1.0	<1.0	470	<5.0	2,500	<2.0	<2.0	<2.0	<2.0	—	
MW-1	12/03/10	134.13	10.45	123.68	500	<1.0	<1.0	<1.0	<1.0	740	<5.0	1,900	<2.0	<2.0	<2.0	<2.0	—	
MW-1	06/09/11	134.13	9.09	125.04	240	<0.50	<0.50	<0.50	<0.50	500	<5.0	1,700	<1.0	<1.0	<1.0	<1.0	—	
MW-2	03/02/00	132.63	5.88	126.75	<50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—	—	—	—	1.45	

**Table 1  
Summary of Groundwater Levels and Chemical Analysis**

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

Sample ID	Date	Top of Casing	Depth to Water	Groundwater	TPH-G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260 (µg/L)	Ethanol (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	DO (mg/L)	
		Elevation (ft-MSL)	(feet)	Elevation (feet)													
MW-2	11/16/00	132.63	6.40	126.23	<50	<0.5	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	1.67	
MW-2	01/23/01	132.63	5.67	126.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—	—	—	1.20	
MW-2	04/25/01	132.63	6.26	126.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—	—	—	0.76	
MW-2	07/24/01	132.63	6.38	126.25	<50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—	—	—	2.92	
MW-2	11/08/01	132.63	5.97	126.66	<50	<0.50	<0.50	<0.50	<0.50	2.7	—	—	—	—	—	—	
MW-2	11/27/01	135.16	Well resurveyed to new reference point														
MW-2	02/05/02	135.16	4.95	130.21	<50	<0.50	<0.50	<0.50	<0.50	2.7	—	—	—	—	—	—	
MW-2	04/29/02	135.16	5.03	130.13	<50	<0.50	<0.50	<0.50	<0.50	2.8	—	—	—	—	—	—	
MW-2	07/29/02	135.16	5.46	129.70	<50	<0.50	<0.50	<0.50	<0.50	4.1	—	—	—	—	—	—	
MW-2	10/21/02	135.16	5.68	129.48	<50	<0.50	<0.50	<0.50	<0.50	8.1	—	—	—	—	—	—	
MW-2	03/05/03	135.16	4.87	130.29	<50	1.4	<0.50	0.61	0.69	5.5	—	—	—	—	—	—	
MW-2	06/06/03	135.16	4.88	130.28	<50	<0.50	<0.50	<0.50	<0.50	5.2	—	—	—	—	—	—	
MW-2	09/05/03	135.16	5.60	129.56	<50	<0.50	<0.50	<0.50	0.66	6.4	—	—	—	—	—	—	
MW-2	12/24/03	135.16	5.25	129.91	<50	<0.50	<0.50	<0.50	<0.50	5.4	—	—	—	—	—	—	
MW-2	03/25/04	135.16	5.25	129.91	<50	<0.50	<0.50	<0.50	<0.50	5.3	—	—	—	—	—	—	
MW-2	06/25/04	135.16	6.89	128.27	<50	<0.50	<0.50	<0.50	<0.50	5.4	—	—	—	—	—	—	
MW-2	09/16/04	135.16	6.09	129.07	<50	<0.50	<0.50	<0.50	<0.50	5.5	—	—	—	—	—	—	
MW-2	12/17/04	135.16	5.30	129.86	<50	<0.50	<0.50	<0.50	<0.50	5.4	—	—	—	—	—	—	
MW-2	03/10/05	135.16	4.49	130.67	<50	<0.50	<0.50	<0.50	<0.50	3.7	—	—	—	—	—	—	
MW-2	06/09/05	135.16	4.85	130.31	<50	<0.50	<0.50	<0.50	<0.50	4.8	—	—	—	—	—	—	
MW-2	09/13/05	135.16	5.82	129.34	<50	<0.50	<0.50	<0.50	<0.50	5.6	—	—	—	—	—	—	
MW-2	12/06/05	135.16	5.14	130.02	<50	<0.50	<0.50	<0.50	<0.50	4.5	—	—	—	—	—	—	
MW-2	03/29/06	135.16	4.27	130.89	<50	<0.50	<0.50	<0.50	<0.50	4.4	—	—	—	—	—	—	
MW-2	06/29/06	135.16	5.21	129.95	<50	<0.50	<0.50	<0.50	<0.50	5.1	<5.0	—	—	—	—	—	
MW-2	09/21/06	135.16	5.62	129.54	<50	<0.50	<0.50	<0.50	<0.50	3.3	<5.0	—	—	—	—	—	
MW-2	12/08/06	135.16	5.29	129.87	<50	<0.50	<0.50	<0.50	<0.50	3.1	<5.0	—	—	—	—	—	
MW-2	03/28/07	135.16	5.08	130.08	<50	<0.50	<0.50	<0.50	<0.50	2.5	<5.0	—	—	—	—	—	
MW-2	06/14/07	135.16	5.30	129.86	<50	<0.50	<0.50	<0.50	<0.50	1.5	<5.0	—	—	—	—	—	
MW-2	09/06/07	135.16	5.64	129.52	<50	<0.50	<0.50	<0.50	<0.50	3.2	<5.0	—	—	—	—	—	
MW-2	12/31/07	135.16	5.10	130.06	<50	<0.50	<0.50	<0.50	<0.50	1.8	<5.0	—	—	—	—	—	
MW-2	03/18/08	135.16	5.45	129.71	<50	<0.50	<0.50	<0.50	<0.50	1.8	<5.0	—	—	—	—	—	
MW-2	06/30/08	135.16	5.61	129.55	<50	<0.50	<0.50	<0.50	<0.50	1.0	<5.0	—	—	—	—	—	
MW-2	09/26/08	135.16	6.00	129.16	<50	<0.50	<0.50	<0.50	<0.50	1.7	<5.0	—	—	—	—	—	
MW-2	11/25/08	135.16	5.73	129.43	<50	<0.50	<0.50	<0.50	<0.50	1.4	<5.0	—	—	—	—	—	
MW-2	03/09/09	135.16	4.56	130.60	<50	<0.50	<0.50	<0.50	<0.50	1.7	<5.0	—	—	—	—	—	
MW-2	06/29/09	135.16	5.39	129.77	<50	<0.50	<0.50	<0.50	<0.50	1.1	<5.0	—	—	—	—	—	
MW-2	09/11/09	135.16	5.78	129.38	<50	<0.50	<0.50	<0.50	<0.50	1.4	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-2	12/08/09	135.16	5.48	129.68	<50	<0.50	<0.50	<0.50	<0.50	1.5	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-2	03/19/10	135.16	4.47	130.69	<50	<0.50	<0.50	<0.50	<0.50	1.0	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-2	06/08/10	135.16	4.73	130.43	<50	<0.50	<0.50	<0.50	<0.50	1.0	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-2	09/14/10	135.16	5.47	129.69	<50	<0.50	<0.50	<0.50	<0.50	1.2	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-2	12/03/10	135.16	4.83	130.33	<50	<0.50	<0.50	<0.50	<0.50	1.0	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-2	06/09/11	135.16	4.70	130.46	<50	<0.50	<0.50	<0.50	<0.50	0.92	<5.0	<10	<1.0	<1.0	<1.0	—	
MW-3	03/02/00	133.78	6.41	127.37	<50	<0.50	<0.50	<0.50	<0.50	0.96	—	—	—	—	—	0.90	
MW-3	11/16/00	133.78	6.46	127.32	<50	<0.5	<0.5	<0.5	<0.5	24	—	—	—	—	—	3.91	

**Table 1**  
**Summary of Groundwater Levels and Chemical Analysis**  
 Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

Sample ID	Date	Top of	Depth to	Groundwater	Groundwater												
		Casing			Water	Elevation	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8260	Ethanol	TBA	DIPE	ETBE	TAME
		Elevation (ft-MSL)	(feet)	(feet)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
MW-3	01/23/01	133.78	5.75	128.03	<50	<0.50	<0.50	<0.50	<0.50	72	—	—	—	—	—	—	1.47
MW-3	04/25/01	133.78	5.90	127.88	<50	<0.50	<0.50	<0.50	<0.50	25	—	—	—	—	—	—	0.56
MW-3	07/24/01	133.78	6.56	127.22	<50	<0.50	0.79	0.73	0.68	5.2	—	—	—	—	—	—	6.67
MW-3	11/08/01	133.78	6.92	126.86	<50	<0.50	<0.50	<0.50	<0.50	14	—	—	—	—	—	—	—
MW-3	11/27/01	136.35	Well resurveyed to new reference point														
MW-3	02/05/02	136.35	5.13	131.22	<50	<0.50	<0.50	<0.50	<0.50	10	—	—	—	—	—	—	—
MW-3	04/29/02	136.35	5.67	130.68	<50	<0.50	<0.50	<0.50	<0.50	5.1	—	—	—	—	—	—	—
MW-3	07/29/02	136.35	6.11	130.24	<50	<0.50	<0.50	<0.50	<0.50	31	—	—	—	—	—	—	—
MW-3	10/21/02	136.35	6.57	129.78	<50	<0.50	<0.50	<0.50	<0.50	5.8	—	—	—	—	—	—	—
MW-3	03/05/03	136.35	5.02	131.33	<50	<0.50	<0.50	<0.50	<0.50	4.9	—	—	—	—	—	—	—
MW-3	06/06/03	136.35	5.12	131.23	<50	<0.50	<0.50	<0.50	<0.50	6.6	—	—	—	—	—	—	—
MW-3	09/05/03	136.35	6.53	129.82	<50	<0.50	<0.50	<0.50	<0.50	4.4	—	—	—	—	—	—	—
MW-3	12/24/03	136.35	5.20	131.15	<50	<0.50	<0.50	<0.50	<0.50	1.2	—	—	—	—	—	—	—
MW-3	03/25/04	136.35	5.42	130.93	<50	<0.50	<0.50	<0.50	<0.50	3.2	—	—	—	—	—	—	—
MW-3	06/25/04	136.35	6.50	129.85	<50	<0.50	<0.50	<0.50	<0.50	13	—	—	—	—	—	—	—
MW-3	09/16/04	136.35	6.79	129.56	<50	<0.50	<0.50	<0.50	<0.50	3.0	—	—	—	—	—	—	—
MWV-3	12/17/04	136.35	5.20	131.15	<50	<0.50	<0.50	<0.50	<0.50	1.6	—	—	—	—	—	—	—
MWV-3	03/10/05	136.35	4.42	131.93	<50	<0.50	<0.50	<0.50	<0.50	3.8	—	—	—	—	—	—	—
MWV-3	06/09/05	136.35	4.98	131.37	<50	<0.50	<0.50	<0.50	<0.50	3.6	—	—	—	—	—	—	—
MWV-3	09/13/05	136.35	6.42	129.93	<50	<0.50	<0.50	<0.50	<0.50	11	—	—	—	—	—	—	—
MWV-3	12/06/05	136.35	5.35	131.00	<50	<0.50	<0.50	<0.50	<0.50	1.4	—	—	—	—	—	—	—
MWV-3	03/29/06	136.35	4.01	132.34	<50	<0.50	<0.50	<0.50	<0.50	3.2	—	—	—	—	—	—	—
MWV-3	06/29/06	136.35	5.41	130.94	<50	<0.50	<0.50	<0.50	<0.50	3.5	<5.0	—	—	—	—	—	—
MWV-3	09/21/06	136.35	6.31	130.04	<50	<0.50	<0.50	<0.50	<0.50	2.1	<5.0	—	—	—	—	—	—
MWV-3	12/08/06	136.35	5.75	130.60	<50	<0.50	<0.50	<0.50	<0.50	1.6	<5.0	—	—	—	—	—	—
MWV-3	03/28/07	136.35	5.09	131.26	<50	<0.50	<0.50	<0.50	<0.50	2.0	<5.0	—	—	—	—	—	—
MWV-3	06/14/07	136.35	5.47	130.88	<50	<0.50	<0.50	<0.50	<0.50	1.1	<5.0	—	—	—	—	—	—
MWV-3	09/06/07	136.35	6.35	130.00	<50	<0.50	<0.50	<0.50	<0.50	2.4	<5.0	—	—	—	—	—	—
MWV-3	12/31/07	136.35	5.21	131.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—	—
MWV-3	03/18/08	136.35	5.59	130.76	<50	<0.50	<0.50	<0.50	<0.50	0.77	<5.0	—	—	—	—	—	—
MWV-3	06/30/08	136.35	6.16	130.19	<50	<0.50	<0.50	<0.50	<0.50	0.68	<5.0	—	—	—	—	—	—
MWV-3	09/26/08	136.35	6.84	129.51	<50	<0.50	<0.50	<0.50	<0.50	0.54	<5.0	—	—	—	—	—	—
MWV-3	11/25/08	136.35	6.37	129.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—	—
MWV-3	03/09/09	136.35	4.19	132.16	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—	—
MWV-3	06/29/09	136.35	5.94	130.41	<50	<0.50	<0.50	<0.50	<0.50	0.68	<5.0	—	—	—	—	—	—
MWV-3	09/11/09	136.35	6.64	129.71	<50	<0.50	<0.50	<0.50	<0.50	0.65	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MWV-3	12/08/09	136.35	5.92	130.43	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MWV-3	03/19/10	136.35	4.30	132.05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MWV-3	06/08/10	136.35	5.04	131.31	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MWV-3	09/14/10	136.35	6.13	130.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MWV-3	12/03/10	136.35	5.07	131.28	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MWV-3	06/09/11	136.35	4.67	131.68	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	<1.0	—
MW-4	09/11/09	133.59	6.52	127.07	1,100	<5.0	<5.0	<5.0	<5.0	11	<5.0	13,000	<10	<10	<10	<10	—
MW-4	12/08/09	133.59	5.28	128.31	780	<1.0	<1.0	<1.0	1.5	2.7	<5.0	1,200	<2.0	<2.0	<2.0	<2.0	—
MW-4	03/19/10	133.59	4.22	129.37	680	<0.50	<0.50	<0.50	0.97	2.5	<5.0	550	<1.0	<1.0	<1.0	<1.0	—

**Table 1**  
**Summary of Groundwater Levels and Chemical Analysis**

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

Sample ID	Date	Top of	Depth to	Groundwater	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8260	Ethanol	TBA	DIPE	ETBE	TAME	DO
		Casing Elevation		Water Elevation												
MW-4	06/08/10	133.59	4.44	129.15	370	<0.50	<0.50	<0.50	0.68	2.0	<5.0	450	<1.0	<1.0	<1.0	—
MW-4	09/14/10	133.59	5.88	127.71	520	<1.0	<1.0	<1.0	<1.0	6.3	<5.0	2,900	<2.0	<2.0	<2.0	—
MW-4	12/03/10	133.59	4.66	128.93	510	<0.50	<0.50	<0.50	0.86	2.3	<5.0	980	<1.0	<1.0	<1.0	—
MW-4	06/09/11	133.59	4.44	129.15	320	<0.50	<0.50	<0.50	<0.50	2.0	<5.0	350	<1.0	<1.0	<1.0	—
MW-5	09/11/09	133.58	8.51	125.07	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	12/08/09	133.58	7.09	126.49	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	03/19/10	133.58	5.23	128.35	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	06/08/10	133.58	5.97	127.61	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	09/14/10	133.58	7.62	125.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	12/03/10	133.58	6.12	127.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	06/09/11	133.58	5.54	128.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	09/11/09	128.83	6.47	122.36	<50	<0.50	<0.50	<0.50	<0.50	43	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	12/08/09	128.83	6.23	122.60	<50	<0.50	<0.50	<0.50	<0.50	29	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	03/19/10	128.83	5.53	123.30	<50	<0.50	<0.50	<0.50	<0.50	23	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	06/08/10	128.83	5.78	123.05	<50	<0.50	<0.50	<0.50	<0.50	24	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	09/14/10	128.83	6.27	122.56	<50	<0.50	<0.50	<0.50	<0.50	26	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	12/03/10	128.83	5.89	122.94	<50	<0.50	<0.50	<0.50	<0.50	19	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	06/09/11	128.83	5.66	123.17	<50	<0.50	<0.50	<0.50	<0.50	39	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	09/11/09	134.37	9.60	124.77	<50	<0.50	<0.50	<0.50	<0.50	17	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	12/08/09	134.37	9.24	125.13	<50	<0.50	<0.50	<0.50	<0.50	15	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	03/19/10	134.37	8.42	125.95	<50	<0.50	<0.50	<0.50	<0.50	18	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	06/08/10	134.37	8.68	125.69	<50	<0.50	<0.50	<0.50	<0.50	22	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	09/14/10	134.37	9.39	124.98	<50	<0.50	<0.50	<0.50	<0.50	35	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	12/03/10	134.37	8.88	125.49	<50	<0.50	<0.50	<0.50	<0.50	34	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	06/09/11	134.37	8.69	125.68	<50	<0.50	<0.50	<0.50	<0.50	51	<5.0	<10	<1.0	<1.0	<1.0	—

NOTES: ft-MSL = feet above mean sea level  
µg/L = micrograms per liter  
mg/L = milligrams per liter  
TPH-G = total petroleum hydrocarbons as gasoline  
DO = dissolved oxygen  
< = not detected at or above the stated detection limit

MTBE = methyl tert butyl ether  
TBA = tertiary butyl alcohol  
DIPE = di-isopropyl ether  
ETBE = ethyl tertiary butyl ether  
TAME = tertiary amyl methyl ether

**APPENDIX**

**GENERAL FIELD PROCEDURES, FIELD MEASUREMENT FORMS, OFFICIAL  
LABORATORY REPORTS, AND CHAIN OF CUSTODY RECORDS**

## GENERAL FIELD PROCEDURES

General field procedures used during fluid-level monitoring and groundwater sampling activities are described below.

### FLUID-LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste. The depth to liquid-phase hydrocarbons and water is measured relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city benchmark.

### GROUNDWATER SAMPLING

Groundwater monitoring wells are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of groundwater prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging.

The purged water is stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.



# FIELD MONITORING DATA SHEET

Technician: JOE      Job #/Task #: 183318

Date: 06/09/11

Site # QUIK STOP 56      Project Manager J. Scheiner

Page 1 of 1

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-2	X	0609	29.90	4.70	—	—	1032	2"
MW-3	X	0613	30.26	4.67	—	—	1040	2"
MW-1	X	0618	30.06	9.09	—	—	0937	2"
MW-5	X	0627	10.24	5.54	—	—	1000	2"
MW-4	X	0622	14.76	4.44	—	—	0948	2"
MW-7	X	0631	24.80	8.69	—	—	1010	2"
MW-6	X	0637	19.72	5.66	—	—	1020	2"

FIELD DATA COMPLETE	QA/QC	COC	WELL BOX CONDITION SHEETS
MANIFEST	DRUM INVENTORY	TRAFFIC CONTROL	



## GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: Quill stop 56

Project No.: 183318

Date: 06/09/11

Well No. MW-2

Purge Method: SUB

Depth to Water (feet): ~~24~~ 4.70

Depth to Product (feet):                     

Total Depth (feet): 29.90

LPH & Water Recovered (gallons):                     

Water Column (feet): 25.20

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 9.74

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F/C)	pH	D.O. (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
0900			5	1337	19.2	6.49			
			10	1383	19.5	6.03			
	0905		15	1390	19.8	6.04			
Static at Time Sampled			Total Gallons Purged			Sample Time			
5.40			15			1032			
<b>Comments:</b>									

Well No. MW-3

Purge Method: SUB

Depth to Water (feet): 4.67

Depth to Product (feet):                     

Total Depth (feet): 30.26

LPH & Water Recovered (gallons):                     

Water Column (feet): 25.59

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 9.74

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F/C)	pH	D.O. (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
0916			5	969.3	19.6	6.90			
			10	986.0	19.6	6.40			
	0921		15	988.1	19.8	6.26			
Static at Time Sampled			Total Gallons Purged			Sample Time			
5.85			15			1040			
<b>Comments:</b>									

## GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: Quillstop 56

Project No.: 193318

Date: 06/09/11

Well No. MW-1

Purge Method: \_\_\_\_\_

Depth to Water (feet): 9.09

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): 30.06

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 20.97

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 13.28

1 Well Volume (gallons): 4

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F/C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0721			4	1051	18.2	6.89			
			8	969.1	19.2	6.17			
	0726		12	1057	19.5	5.71			
Static at Time Sampled			Total Gallons Purged			Sample Time			
12.38			12			0437			
Comments:									

Well No. MW-5

Purge Method: HB

Depth to Water (feet): 5.54

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): 10.24

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 4.70

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 6.48

1 Well Volume (gallons): 1

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F/C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0744			1	293.1	17.8	5.55			
			2	275.6	18.0	5.13			
	0749		3	275.4	18.1	5.00			
Static at Time Sampled			Total Gallons Purged			Sample Time			
5.62			3			1000			
Comments:									

## GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: QUILL STOP 56

Project No.: 183318

Date: 06/09/11

Well No. MW-4

Purge Method: \_\_\_\_\_

Depth to Water (feet): 4.44

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): 14.76

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 10.32

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 6.50

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F <sup>⊙</sup> C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0731			2	725.6	18.4	5.66			
			4	731.7	18.4	5.40			
	0740		6	730.0	18.6	5.48			
Static at Time Sampled			Total Gallons Purged		Sample Time				
4.43			6		0743				
Comments:									

Well No. MW-7

Purge Method: HB

Depth to Water (feet): 8.69

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): 24.80

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 16.11

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 11.91

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F <sup>⊙</sup> C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0755			3	1901	18.4	5.58			
			6	1901	18.5	6.10			
	0815		9	1894	18.6	6.33			
Static at Time Sampled			Total Gallons Purged		Sample Time				
9.50			9		1010				
Comments:									

## GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: quik stop 56

Project No.: 183318

Date: 06/09/11

Well No. MW-6

Purge Method: HB

Depth to Water (feet): 5.66

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet) 19.72

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 14.06

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 8.47

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity	
<b>Pre-Purge</b>										
0827			3	1092	17.8	6.80				
			6	1087	17.9	6.68				
	0840		9	1063	17.9	6.57				
Static at Time Sampled			Total Gallons Purged			Sample Time				
			9				1020			
<b>Comments:</b>										

Well No. \_\_\_\_\_

Purge Method: \_\_\_\_\_

Depth to Water (feet): \_\_\_\_\_

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet) \_\_\_\_\_

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): \_\_\_\_\_

Casing Diameter (Inches): \_\_\_\_\_

80% Recharge Depth(feet): \_\_\_\_\_

1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
Static at Time Sampled			Total Gallons Purged			Sample Time			
<b>Comments:</b>									

# FIELD REPORT - DRUM INVENTORY

Project Number: 183318 Date: 06/09/11

Site/Station I.D. QUIL STOP 56

Address: 3132 Beaumont Ave.

Active Station? yes

Drums Needed: 3 Drums Used: 3

Drums Empty: \_\_\_\_\_ Drums Full: \_\_\_\_\_

Drums Labeled: yes Not Labeled: \_\_\_\_\_

Total Gallons for Today: 144

Field Notes: Left 3 drums on site

Drums were filled with ground water &

Decon water

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Drums needed for next event: \_\_\_\_\_ Scheduled for: \_\_\_\_\_

Special Instructions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Alpha Analytical, Inc.

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## ANALYTICAL REPORT

TRC-Alton Geoscience  
1590 Solano Way Suite A  
Concord, CA 94520

Attn: Jonathan Scheiner  
Phone: (925) 688-2473  
Fax: (925) 688-0388  
Date Received : 06/11/11

Job: Quik Stop 56

GC/MSD by Direct Injection  
EPA Method SW8260B-DI

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: <b>MW-2</b> Lab ID : TRC11061322-01A Ethanol Date Sampled 06/09/11 10:32	ND	5.0 µg/L	06/13/11	06/13/11
Client ID: <b>MW-3</b> Lab ID : TRC11061322-02A Ethanol Date Sampled 06/09/11 10:40	ND	5.0 µg/L	06/13/11	06/13/11
Client ID: <b>MW-1</b> Lab ID : TRC11061322-03A Ethanol Date Sampled 06/09/11 09:37	ND	5.0 µg/L	06/13/11	06/13/11
Client ID: <b>MW-5</b> Lab ID : TRC11061322-04A Ethanol Date Sampled 06/09/11 10:00	ND	5.0 µg/L	06/13/11	06/13/11
Client ID: <b>MW-4</b> Lab ID : TRC11061322-05A Ethanol Date Sampled 06/09/11 09:48	ND	5.0 µg/L	06/13/11	06/13/11
Client ID: <b>MW-7</b> Lab ID : TRC11061322-06A Ethanol Date Sampled 06/09/11 10:10	ND	5.0 µg/L	06/13/11	06/13/11
Client ID: <b>MW-6</b> Lab ID : TRC11061322-07A Ethanol Date Sampled 06/09/11 10:20	ND	5.0 µg/L	06/13/11	06/13/11

ND = Not Detected

*Roger Scholl*      *Randy Gardner*      *Walter Hinchman*

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

  
6/23/11

**Report Date**



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## ANALYTICAL REPORT

TRC-Alton Geoscience  
1590 Solano Way Suite A  
Concord, CA 94520

Attn: Jonathan Scheiner  
Phone: (925) 688-2473  
Fax: (925) 688-0388  
Date Received : 06/11/11

Job: Quik Stop 56

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B  
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed	
Client ID :	<b>MW-2</b>					
Lab ID :	TRC11061322-01A	TPH-P (GRO)	ND	0.050 mg/L	06/15/11	06/15/11
Date Sampled	06/09/11 10:32	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/15/11	06/15/11
		Methyl tert-butyl ether (MTBE)	0.92	0.50 µg/L	06/15/11	06/15/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/15/11	06/15/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/15/11	06/15/11
		Benzene	ND	0.50 µg/L	06/15/11	06/15/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/15/11	06/15/11
		Toluene	ND	0.50 µg/L	06/15/11	06/15/11
		Ethylbenzene	ND	0.50 µg/L	06/15/11	06/15/11
		Xylenes, Total	ND	0.50 µg/L	06/15/11	06/15/11
Client ID :	<b>MW-3</b>					
Lab ID :	TRC11061322-02A	TPH-P (GRO)	ND	0.050 mg/L	06/15/11	06/15/11
Date Sampled	06/09/11 10:40	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/15/11	06/15/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	06/15/11	06/15/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/15/11	06/15/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/15/11	06/15/11
		Benzene	ND	0.50 µg/L	06/15/11	06/15/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/15/11	06/15/11
		Toluene	ND	0.50 µg/L	06/15/11	06/15/11
		Ethylbenzene	ND	0.50 µg/L	06/15/11	06/15/11
		Xylenes, Total	ND	0.50 µg/L	06/15/11	06/15/11
Client ID :	<b>MW-1</b>					
Lab ID :	TRC11061322-03A	TPH-P (GRO)	0.24	0.10 mg/L	06/17/11	06/17/11
Date Sampled	06/09/11 09:37	Tertiary Butyl Alcohol (TBA)	1,700	10 µg/L	06/17/11	06/17/11
		Methyl tert-butyl ether (MTBE)	500	0.50 µg/L	06/17/11	06/17/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/17/11	06/17/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/17/11	06/17/11
		Benzene	ND	0.50 µg/L	06/17/11	06/17/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/17/11	06/17/11
		Toluene	ND	0.50 µg/L	06/17/11	06/17/11
		Ethylbenzene	ND	0.50 µg/L	06/17/11	06/17/11
		Xylenes, Total	ND	0.50 µg/L	06/17/11	06/17/11





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Client ID : **MW-5**

Lab ID :	TRC11061322-04A	TPH-P (GRO)	ND	0.050 mg/L	06/15/11	06/15/11
Date Sampled	06/09/11 10:00	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/15/11	06/15/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	06/15/11	06/15/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/15/11	06/15/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/15/11	06/15/11
		Benzene	ND	0.50 µg/L	06/15/11	06/15/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/15/11	06/15/11
		Toluene	ND	0.50 µg/L	06/15/11	06/15/11
		Ethylbenzene	ND	0.50 µg/L	06/15/11	06/15/11
		Xylenes, Total	ND	0.50 µg/L	06/15/11	06/15/11

Client ID : **MW-4**

Lab ID :	TRC11061322-05A	TPH-P (GRO)	0.32	0.050 mg/L	06/15/11	06/15/11
Date Sampled	06/09/11 09:48	Tertiary Butyl Alcohol (TBA)	350	10 µg/L	06/15/11	06/15/11
		Methyl tert-butyl ether (MTBE)	2.0	0.50 µg/L	06/15/11	06/15/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/15/11	06/15/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/15/11	06/15/11
		Benzene	ND	0.50 µg/L	06/15/11	06/15/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/15/11	06/15/11
		Toluene	ND	0.50 µg/L	06/15/11	06/15/11
		Ethylbenzene	ND	0.50 µg/L	06/15/11	06/15/11
		Xylenes, Total	ND	0.50 µg/L	06/15/11	06/15/11

Client ID : **MW-7**

Lab ID :	TRC11061322-06A	TPH-P (GRO)	ND	0.050 mg/L	06/15/11	06/15/11
Date Sampled	06/09/11 10:10	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/15/11	06/15/11
		Methyl tert-butyl ether (MTBE)	51	0.50 µg/L	06/15/11	06/15/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/15/11	06/15/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/15/11	06/15/11
		Benzene	ND	0.50 µg/L	06/15/11	06/15/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/15/11	06/15/11
		Toluene	ND	0.50 µg/L	06/15/11	06/15/11
		Ethylbenzene	ND	0.50 µg/L	06/15/11	06/15/11
		Xylenes, Total	ND	0.50 µg/L	06/15/11	06/15/11

Client ID : **MW-6**

Lab ID :	TRC11061322-07A	TPH-P (GRO)	ND	0.050 mg/L	06/15/11	06/15/11
Date Sampled	06/09/11 10:20	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/15/11	06/15/11
		Methyl tert-butyl ether (MTBE)	39	0.50 µg/L	06/15/11	06/15/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/15/11	06/15/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/15/11	06/15/11
		Benzene	ND	0.50 µg/L	06/15/11	06/15/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/15/11	06/15/11
		Toluene	ND	0.50 µg/L	06/15/11	06/15/11
		Ethylbenzene	ND	0.50 µg/L	06/15/11	06/15/11
		Xylenes, Total	ND	0.50 µg/L	06/15/11	06/15/11



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Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

*Roger Scholl*

*Randy Gardner*

*Walter Hinchman*

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
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*6/23/11*

**Report Date**



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## VOC Sample Preservation Report

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**Work Order:** TRC11061322

**Job:** Quik Stop 56

---

Alpha's Sample ID	Client's Sample ID	Matrix	pH
11061322-01A	MW-2	Aqueous	2
11061322-02A	MW-3	Aqueous	2
11061322-03A	MW-1	Aqueous	2
11061322-04A	MW-5	Aqueous	2
11061322-05A	MW-4	Aqueous	2
11061322-06A	MW-7	Aqueous	2
11061322-07A	MW-6	Aqueous	2

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Date:  
21-Jun-11

## QC Summary Report

Work Order:  
11061322

### Method Blank

Method Blank		Type: MBLK	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEM\MS11\DATA\110613\11061309.D			Batch ID: 26710			Analysis Date: 06/13/2011 15:27				
Sample ID: MBLK-26710	Units: µg/L		Run ID: MSD_11_110613A			Prep Date: 06/13/2011 13:30				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	ND	5								
Surr: Hexafluoro-2-propanol	566		500		113	61	134			

### Laboratory Control Spike

Laboratory Control Spike		Type: LCS	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEM\MS11\DATA\110613\11061305.D			Batch ID: 26710			Analysis Date: 06/13/2011 14:11				
Sample ID: LCS-26710	Units: µg/L		Run ID: MSD_11_110613A			Prep Date: 06/13/2011 13:30				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	275	5	250		110	62	150			
Surr: Hexafluoro-2-propanol	559		500		112	61	134			

### Sample Matrix Spike

Sample Matrix Spike		Type: MS	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEM\MS11\DATA\110613\11061307.D			Batch ID: 26710			Analysis Date: 06/13/2011 14:48				
Sample ID: 11061320-02AMS	Units: µg/L		Run ID: MSD_11_110613A			Prep Date: 06/13/2011 13:30				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	307	5	250	0	123	56	153			
Surr: Hexafluoro-2-propanol	567		500		113	61	134			

### Sample Matrix Spike Duplicate

Sample Matrix Spike Duplicate		Type: MSD	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEM\MS11\DATA\110613\11061308.D			Batch ID: 26710			Analysis Date: 06/13/2011 15:07				
Sample ID: 11061320-02AMSD	Units: µg/L		Run ID: MSD_11_110613A			Prep Date: 06/13/2011 13:30				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	310	5	250	0	124	56	153	307.3	0.9(40)	
Surr: Hexafluoro-2-propanol	565		500		113	61	134			

### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



# Alpha Analytical, Inc.

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Date:  
21-Jun-11

## QC Summary Report

Work Order:  
11061322

### Method Blank

File ID: 11061507.D	Type: MBLK	Test Code: EPA Method SW8015B/C	Batch ID: MS12W0615B	Analysis Date: 06/15/2011 11:20						
Sample ID: MBLK MS12W0615B	Units : mg/L	Run ID: MSD_12_110615A	Prep Date: 06/15/2011 11:20							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.05								
Surr: 1,2-Dichloroethane-d4	0.0101		0.01		101	70	130			
Surr: Toluene-d8	0.01		0.01		100	70	130			
Surr: 4-Bromofluorobenzene	0.00977		0.01		98	70	130			

### Laboratory Control Spike

File ID: 11061505.D	Type: LCS	Test Code: EPA Method SW8015B/C	Batch ID: MS12W0615B	Analysis Date: 06/15/2011 10:34						
Sample ID: GLCS MS12W0615B	Units : mg/L	Run ID: MSD_12_110615A	Prep Date: 06/15/2011 10:34							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.398	0.05	0.4		99.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.0097		0.01		97	70	130			
Surr: Toluene-d8	0.0101		0.01		101	70	130			
Surr: 4-Bromofluorobenzene	0.0107		0.01		107	70	130			

### Sample Matrix Spike

File ID: 11061517.D	Type: MS	Test Code: EPA Method SW8015B/C	Batch ID: MS12W0615B	Analysis Date: 06/15/2011 15:09						
Sample ID: 11061404-02AGS	Units : mg/L	Run ID: MSD_12_110615A	Prep Date: 06/15/2011 15:09							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.83	0.25	2	0	92	51	144			
Surr: 1,2-Dichloroethane-d4	0.0505		0.05		101	70	130			
Surr: Toluene-d8	0.049		0.05		98	70	130			
Surr: 4-Bromofluorobenzene	0.0554		0.05		111	70	130			

### Sample Matrix Spike Duplicate

File ID: 11061518.D	Type: MSD	Test Code: EPA Method SW8015B/C	Batch ID: MS12W0615B	Analysis Date: 06/15/2011 15:32						
Sample ID: 11061404-02AGSD	Units : mg/L	Run ID: MSD_12_110615A	Prep Date: 06/15/2011 15:32							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.8	0.25	2	0	90	51	144	1.832	1.5(29)	
Surr: 1,2-Dichloroethane-d4	0.0509		0.05		102	70	130			
Surr: Toluene-d8	0.0498		0.05		99.7	70	130			
Surr: 4-Bromofluorobenzene	0.0535		0.05		107	70	130			

### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date:  
21-Jun-11

## QC Summary Report

Work Order:  
11061322

### Method Blank

Type: MBLK Test Code: EPA Method SW8260B

File ID: 11061507.D

Batch ID: MS12W0615A

Analysis Date: 06/15/2011 11:20

Sample ID: MBLK MS12W0615A

Units: µg/L

Run ID: MSD\_12\_110615A

Prep Date: 06/15/2011 11:20

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
Xylenes, Total	ND	0.5								
Surr: 1,2-Dichloroethane-d4	10.1		10		101	70	130			
Surr: Toluene-d8	10		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.77		10		98	70	130			

### Laboratory Control Spike

Type: LCS Test Code: EPA Method SW8260B

File ID: 11061506.D

Batch ID: MS12W0615A

Analysis Date: 06/15/2011 10:57

Sample ID: LCS MS12W0615A

Units: µg/L

Run ID: MSD\_12\_110615A

Prep Date: 06/15/2011 10:57

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.57	0.5	10		96	65	140			
Benzene	8.88	0.5	10		89	70	130			
Toluene	8.49	0.5	10		85	80	120			
Ethylbenzene	9.26	0.5	10		93	80	120			
Xylenes, Total	18	0.5	20		90	70	130			
Surr: 1,2-Dichloroethane-d4	10.7		10		107	70	130			
Surr: Toluene-d8	9.85		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

### Sample Matrix Spike

Type: MS Test Code: EPA Method SW8260B

File ID: 11061515.D

Batch ID: MS12W0615A

Analysis Date: 06/15/2011 14:24

Sample ID: 11061404-02AMS

Units: µg/L

Run ID: MSD\_12\_110615A

Prep Date: 06/15/2011 14:24

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	78.9	1.3	50	25.34	107	47	150			
Benzene	45.9	1.3	50	0	92	59	138			
Toluene	42.7	1.3	50	0	85	68	130			
Ethylbenzene	49.5	1.3	50	0	99	68	130			
Xylenes, Total	96	1.3	100	0	96	70	130			
Surr: 1,2-Dichloroethane-d4	54.6		50		109	70	130			
Surr: Toluene-d8	46.3		50		93	70	130			
Surr: 4-Bromofluorobenzene	52.6		50		105	70	130			

### Sample Matrix Spike Duplicate

Type: MSD Test Code: EPA Method SW8260B

File ID: 11061516.D

Batch ID: MS12W0615A

Analysis Date: 06/15/2011 14:46

Sample ID: 11061404-02AMSD

Units: µg/L

Run ID: MSD\_12\_110615A

Prep Date: 06/15/2011 14:46

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	80.9	1.3	50	25.34	111	47	150	78.85	2.6(40)	
Benzene	45.5	1.3	50	0	91	59	138	45.88	0.8(21)	
Toluene	43.1	1.3	50	0	86	68	130	42.69	1.0(20)	
Ethylbenzene	48	1.3	50	0	96	68	130	49.51	3.1(20)	
Xylenes, Total	94.8	1.3	100	0	95	70	130	96.04	1.3(20)	
Surr: 1,2-Dichloroethane-d4	56.6		50		113	70	130			
Surr: Toluene-d8	47.6		50		95	70	130			
Surr: 4-Bromofluorobenzene	53		50		106	70	130			

### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

**Billing Information:**

Name TRC  
 Address 1590 Solano Way Suite A  
 City, State, Zip Concord, CA 94520  
 Phone Number 925-688-1200 Fax 925-688-0388



Samples Collected From Which State?  
 AZ \_\_\_ CA  NV \_\_\_ WA \_\_\_  
 ID \_\_\_ OR \_\_\_ OTHER \_\_\_

19080

Page # 1 of 1

Client Name			P.O. #	Job #	Analyses Required								Required QC Level?	
TRC			34191	QUICK STOP 56										I II III IV
Address			E-Mail Address									EDD / EDF? YES <input checked="" type="checkbox"/> NO ___		
1590 Solano Way Suite A			jscheiner@trcsolutions.com									Global ID # <u>T06019774175</u>		
City, State, Zip			Phone #	Fax #									REMARKS	
Concord, CA 94520			925-688-1200	925-688-0388										
Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by	Report Attention	TAT	Field Filtered	Total and type of containers ** See below							
			JOE LEWIS	Jonathan Scheiner										
			Lab ID Number (Office Use Only)	Sample Description										
1032	4/9/11	OT	TRC11061322-01	MW-2	STD	N/A	G-V	X	X	X				Send eJF to
1040			02	MW-3										Jonathan Scheiner
0937			03	MW-1										at jscheiner@trcsolutions.com
1000			04	MW-5										
0948			05	MW-4										
1010			06	MW-7										
1020			07	MW-6										

**ADDITIONAL INSTRUCTIONS:**

Signature	Print Name	Company	Date	Time
<i>Joe O. Lewis</i>	JOE O. LEWIS	TRC	06/09/11	1400
<i>Lisa de Silva</i>	LISA de SILVA	ALPHA	6-10-11	10:30
<i>Lisa de Silva</i>	Lisa de Silva	ALPHA	6-10-11	1530
<i>K Murray</i>	K Murray	AM	6/13/11	1000

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other  
**NOTE:** Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

**Billing Information:**

Name TRC  
 Address 1590 Solano Way Suite A  
 City, State, Zip Concord, CA 94520  
 Phone Number 925-688-1200 Fax 925-688-0388



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

Samples Collected From Which State?  
 AZ \_\_\_ CA  NV \_\_\_ WA \_\_\_  
 ID \_\_\_ OR \_\_\_ OTHER \_\_\_

19080

Page # 1 of 1

Client Information							Analyses Required										Required QC Level?						
Client Name <u>TRC</u>			P.O. # <u>34191</u>		Job # <u>Quit STOP 56</u>												I II III IV						
Address <u>1590 Solano Way Suite A</u>			E-Mail Address <u>jscheiner@trcsolutions.com</u>														EDD / EDF? YES <input checked="" type="checkbox"/> NO ___						
City, State, Zip <u>Concord, CA 94520</u>			Phone # <u>925-688-1200</u>		Fax # <u>925-688-0388</u>												Global ID # <u>T0601977175</u>						
Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by	Report Attention	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below											REMARKS			
1032	6/9/11	OT	<u>JOE LEWIS</u>	<u>Jonathan Scheiner</u>		<u>MW-2</u>	<u>STD</u>	<u>N/A</u>	<u>6-V</u>	<u>X</u>	<u>X</u>	<u>X</u>											<u>Send edf to</u>
1040						<u>MW-3</u>																	<u>Jonathan Scheiner</u>
0937						<u>MW-1</u>																	<u>at jscheiner@trcsolutions.com</u>
1000						<u>MW-5</u>																	
0948						<u>MW-4</u>																	
1010						<u>MW-7</u>																	
1020						<u>MW-6</u>																	

**ADDITIONAL INSTRUCTIONS:**

Signature	Print Name	Company	Date	Time
<u>Joe O. Lewis</u>	<u>JOE O. LEWIS</u>	<u>TRC</u>	<u>06/09/11</u>	<u>1400</u>
<u>Lisa Desilva</u>	<u>LISA DESILVA</u>	<u>ALPHA</u>	<u>6-10-11</u>	<u>10:30</u>

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other  
**NOTE:** Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.



Billing Information :

Windsor, CT.

# CHAIN-OF-CUSTODY RECORD

# CA

## WorkOrder : TRC11061322

### Report Due By : 5:00 PM On : 24-Jun-11

### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Client:  
TRC-Alton Geoscience  
1590 Solano Way Suite A

Report Attention	Phone Number	E-Mail Address
Jonathan Scheiner	(925) 688-2473 x 236	jscheiner@trcsolutions.com

Concord, CA 94520

PO : 34191

Client's COC # : 19080

Job : Quik Stop 56

EDD Required : Yes

Sampled by : Joe Lewis

Cooler Temp	Samples Received	Date Printed
0 °C	11-Jun-11	13-Jun-11

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles			Requested Tests			Sample Remarks
				Alpha	Sub	TAT	ALCOHOL_W	TPHP_W	VOC_W	
TRC11061322-01A	MW-2	AQ	06/09/11 10:32	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	
TRC11061322-02A	MW-3	AQ	06/09/11 10:40	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	
TRC11061322-03A	MW-1	AQ	06/09/11 09:37	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	
TRC11061322-04A	MW-5	AQ	06/09/11 10:00	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	
TRC11061322-05A	MW-4	AQ	06/09/11 09:48	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	
TRC11061322-06A	MW-7	AQ	06/09/11 10:10	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	
TRC11061322-07A	MW-6	AQ	06/09/11 10:20	6	0	9	Low Level EtOH	GAS-C	BTEX/OXY_C	

Comments: Security seals intact. Frozen ice. Saturday delivery. Samples received 6/11/11 kept cold and secure until login on 6/13/11. Total Xylenes. :

Signature	Print Name	Company	Date/Time
<i>K Murray</i>	K Murray	Alpha Analytical, Inc.	6/13/11 1000

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)      Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other