Quik Stop Markets, Inc.

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

RECEIVED

10:54 am, Aug 01, 2012

Alameda County
Environmental Health

July 26, 2012

Ms. Karel Detterman, PG
Hazardous Materials Specialist
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 2012 Semiannual Groundwater Monitoring Report

Dear Ms. Detterman:

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

Sincerely,
QUIK STOP MARKETS, INC.

M. Karvelot

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 27, 2012 Project No. 191546

Ms. Karel Detterman, PG
Hazardous Materials Specialist
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 2012

Dear Ms. Detterman:

Enclosed is a copy of the *Second Quarter 2012 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 E. Scheiner

Jonathan Scheiner
Project Manager

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

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2300 Clayton Road, Suite 610
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July 27, 2012

Project No. 191546

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 2012

Dear Mr. Karvelot:

This *Second Quarter 2012 Semiannual Groundwater Monitoring Report* presents the results of the Second Quarter 2012 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 19, 2012. 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 122.73 feet above mean sea level (MSL) in MW-6 at the south end of the study area to 130.65 feet above MSL in MW-3 in the north, with an average elevation of 127.16 feet above MSL. Groundwater flow direction was predominantly to the southwest at a gradient of 0.034 feet per foot in the northern portion of the study area, and approximately 0.024 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). Surface topography is 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 19, 2012, 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 117 gallons of purge water and equipment rinsate were generated during groundwater sampling activities conducted on June 19, 2012. The purge water was stored onsite in two 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 2012 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 [µg/L]) to 140 µg/L (MW-4). MTBE concentrations ranged from non-detect (<0.50 µg/L) to 70 µg/L (MW-7), and TBA concentrations ranged from non-detect (<10 µg/L) to 300 µg/L (MW-4) during this sampling event. No other analytes were detected above their respective reporting limits.

2.3 Discussion

The Second Quarter 2012 monitoring event represents the ninth monitoring with the expanded well network (i.e., including offsite wells MW-4 through MW-7), and is also the ninth 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 2011 monitoring event.

The presence of a detectable level of TPH-G was reported in the southern (downgradient) Site area, in wells MW-4 and MW-7. TBA was also detected in both downgradient wells MW-1 and MW-4 located immediately beyond the southern Site perimeter.

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-7, at a concentration that is generally consistent with previously reported levels.

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 was evaluated and defined during the Additional Soil and Groundwater Investigation, completed in December 2011 (TRC, January 2012).

3.0 LIST OF ATTACHMENTS

Figure 1:	Vicinity Map
Figure 2:	Groundwater Elevation Contour Map, June 19, 2012
Figure 3:	Dissolved-Phase Constituent Concentrations, June 19, 2012
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 E. Scheiner

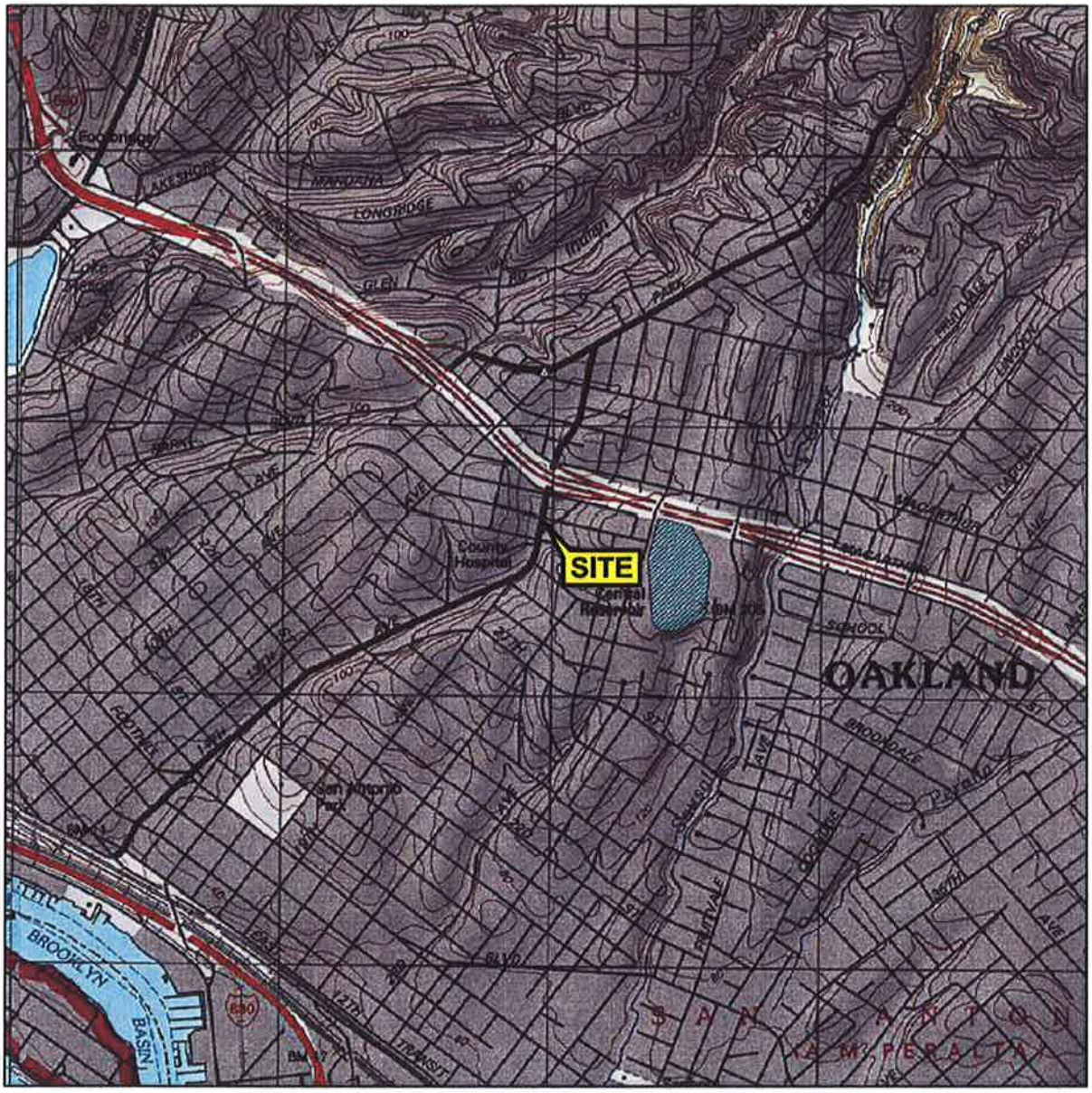
Jonathan Scheiner
Project Manager

Rachelle Clair

Rachelle Clair, P.G.
Project Geologist

TRC

FIGURES



1 MILE 3/4 1/2 1/4 0 1 MILE

SCALE 1 : 24,000

N

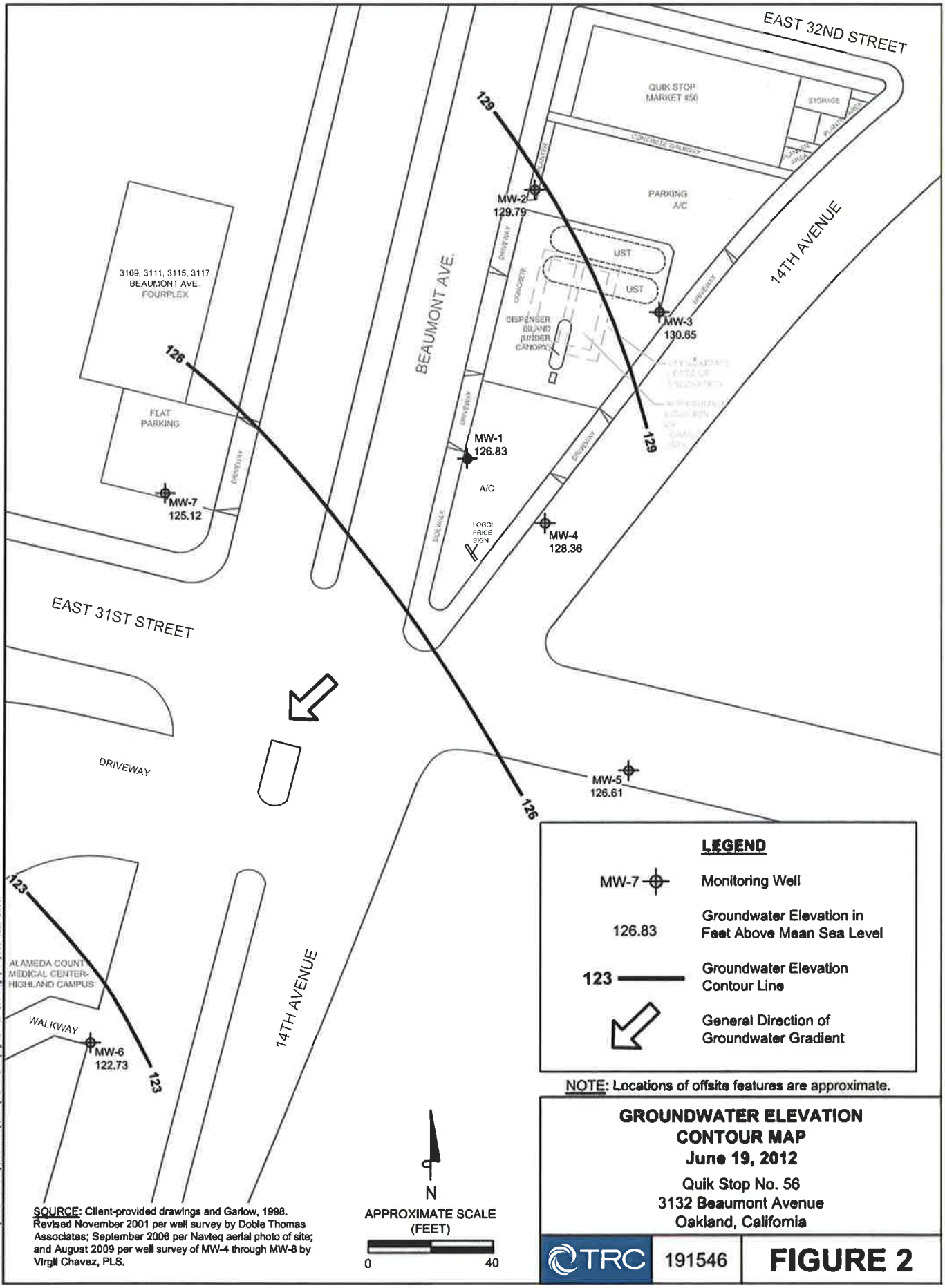
SOURCE:
United States Geological Survey
7.5 Minute Topographic Maps:
Oakland East and
Oakland West Quadrangles

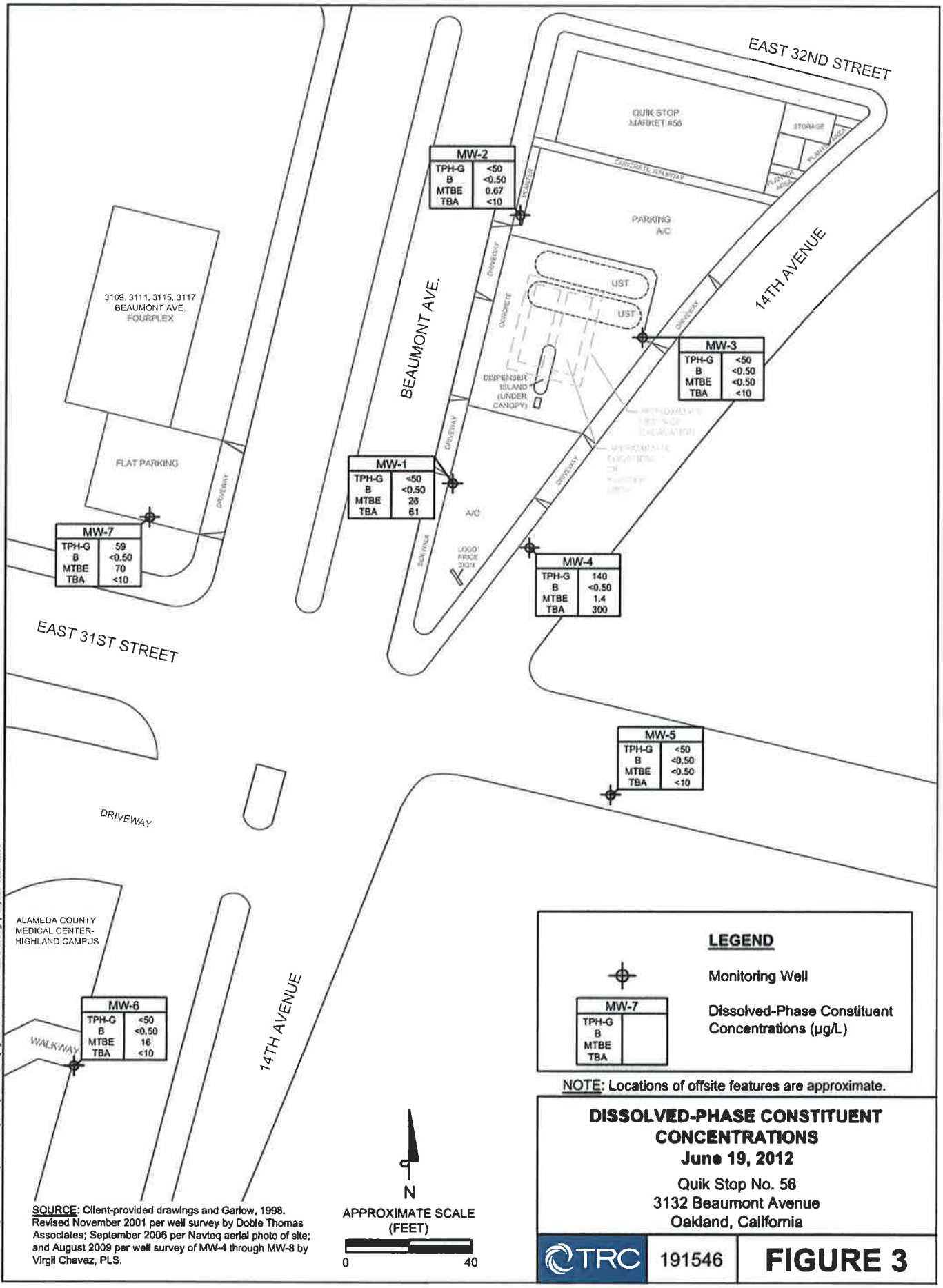
VICINITY MAP

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

TRC

FIGURE 1


EAST 32ND STREET
QUIK STOP MARKET #56
STORAGE
CONCRETE DRIVEWAY
PARKING
A/C
MW-2
129.79
129
UST
UST
DISPENSER ISLAND (UNDER CANOPY)
MW-3
130.85
14TH AVENUE
BEAUMONT AVE.
3109, 3111, 3115, 3117
BEAUMONT AVE.
FOURPLEX
126
FLAT PARKING
MW-7
125.12
MW-1
126.83
A/C
LOGO PRICE SIGN
MW-4
128.36
EAST 31ST STREET
DRIVEWAY
MW-5
126.61
126
123
ALAMEDA COUNTY MEDICAL CENTER-HIGHLAND CAMPUS
WALKWAY
MW-6
122.73
123
14TH AVENUE
LEGEND
MW-7
Monitoring Well
126.83
Groundwater Elevation in Feet Above Mean Sea Level
123
Groundwater Elevation Contour Line
General Direction of Groundwater Gradient
NOTE: Locations of offsite features are approximate.
N
APPROXIMATE SCALE (FEET)
0
40
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.
GROUNDWATER ELEVATION CONTOUR MAP
June 19, 2012
Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California
TRC
191546
FIGURE 2
FILE NAME: Z:\Gca Stations\QUIKSTOP\Qs56\2012 GMS\Fig2_GW_2012.dwg | Layout Tab: 8x11



NOTE: Locations of offsite features are approximate.

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.

DISSOLVED-PHASE CONSTITUENT CONCENTRATIONS
June 19, 2012

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

TRC | 191546 | **FIGURE 3**

FILE NAME: Z:\Gas Stations\QUIKSTOP\Qs56\2012 QMS\Fig3_Diss-ConstituentT_2012.dwg | Layout Tab: 8x11

TABLE

Table 1

Summary of Groundwater Levels and Chemical Analysis

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

Sample ID	Date	Top of Casing Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (feet)	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)
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	—
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	—
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	—
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	—
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	—
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	—
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	—
MW-1	12/05/11	134.13	10.70	123.43	130	<0.50	<0.50	<0.50	<0.50	220	<5.0	370	<1.0	<1.0	<1.0	—
MW-1	06/19/12	134.13	7.30	126.83	<50	<0.50	<0.50	<0.50	<0.50	26	<5.0	61	<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 Casing Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (feet)	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)
MW-2	03/02/00	132.63	5.88	126.75	<50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—	—	—	1.45
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-2	12/05/11	135.16	5.48	129.68	<50	<0.50	<0.50	<0.50	<0.50	0.70	<5.0	<10	<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 Casing Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (feet)	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)
MW-2	06/19/12	135.16	5.37	129.79	<50	<0.50	<0.50	<0.50	<0.50	0.67	<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
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	—	—	—	—	—	—
MW-3	12/17/04	136.35	5.20	131.15	<50	<0.50	<0.50	<0.50	<0.50	1.6	—	—	—	—	—	—
MW-3	03/10/05	136.35	4.42	131.93	<50	<0.50	<0.50	<0.50	<0.50	3.8	—	—	—	—	—	—
MW-3	06/09/05	136.35	4.98	131.37	<50	<0.50	<0.50	<0.50	<0.50	3.6	—	—	—	—	—	—
MW-3	09/13/05	136.35	6.42	129.93	<50	<0.50	<0.50	<0.50	<0.50	11	—	—	—	—	—	—
MW-3	12/06/05	136.35	5.35	131.00	<50	<0.50	<0.50	<0.50	<0.50	1.4	—	—	—	—	—	—
MW-3	03/29/06	136.35	4.01	132.34	<50	<0.50	<0.50	<0.50	<0.50	3.2	—	—	—	—	—	—
MW-3	06/29/06	136.35	5.41	130.94	<50	<0.50	<0.50	<0.50	<0.50	3.5	<5.0	—	—	—	—	—
MW-3	09/21/06	136.35	6.31	130.04	<50	<0.50	<0.50	<0.50	<0.50	2.1	<5.0	—	—	—	—	—
MW-3	12/08/06	136.35	5.75	130.60	<50	<0.50	<0.50	<0.50	<0.50	1.6	<5.0	—	—	—	—	—
MW-3	03/28/07	136.35	5.09	131.26	<50	<0.50	<0.50	<0.50	<0.50	2.0	<5.0	—	—	—	—	—
MW-3	06/14/07	136.35	5.47	130.88	<50	<0.50	<0.50	<0.50	<0.50	1.1	<5.0	—	—	—	—	—
MW-3	09/06/07	136.35	6.35	130.00	<50	<0.50	<0.50	<0.50	<0.50	2.4	<5.0	—	—	—	—	—
MW-3	12/31/07	136.35	5.21	131.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—
MW-3	03/18/08	136.35	5.59	130.76	<50	<0.50	<0.50	<0.50	<0.50	0.77	<5.0	—	—	—	—	—
MW-3	06/30/08	136.35	6.16	130.19	<50	<0.50	<0.50	<0.50	<0.50	0.68	<5.0	—	—	—	—	—
MW-3	09/26/08	136.35	6.84	129.51	<50	<0.50	<0.50	<0.50	<0.50	0.54	<5.0	—	—	—	—	—
MW-3	11/25/08	136.35	6.37	129.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—
MW-3	03/09/09	136.35	4.19	132.16	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—
MW-3	06/29/09	136.35	5.94	130.41	<50	<0.50	<0.50	<0.50	<0.50	0.68	<5.0	—	—	—	—	—
MW-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	—
MW-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	—
MW-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	—
MW-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	—
MW-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	—
MW-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	—
MW-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	—

Table 1

Summary of Groundwater Levels and Chemical Analysis

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

Sample ID	Date	Top of Casing Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (feet)	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)
MW-3	12/05/11	136.35	5.91	130.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-3	06/19/12	136.35	5.70	130.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<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	—
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	—
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	—
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-4	12/05/11	133.59	5.48	128.11	510	<0.50	<0.50	<0.50	0.69	2.3	<5.0	790	<1.0	<1.0	4.2	—
MW-4	06/19/12	133.59	5.23	128.36	140	<0.50	<0.50	<0.50	<0.50	1.4	<5.0	300	<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-5	12/05/11	133.58	7.00	126.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	06/19/12	133.58	6.97	126.61	<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-6	12/05/11	128.83	6.34	122.49	<50	<0.50	<0.50	<0.50	<0.50	21	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	06/19/12	128.83	6.10	122.73	<50	<0.50	<0.50	<0.50	<0.50	16	<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	—
MW-7	12/05/11	134.37	9.54	124.83	<50	<0.50	<0.50	<0.50	<0.50	59	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7	06/19/12	134.37	9.25	125.12	59	<0.50	<0.50	<0.50	<0.50	70	<5.0	<10	<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 Casing Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (feet)	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)

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 #:** 191546 / TA01 **Date:** 6/19/12

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	0632	29.90	5.37	—	—	1151	2" Allowed wells to stabilize for 1 Hour
MW-3	X	0636	30.30	5.70	—	—	1140	2"
MW-1	X	0640	30.01	7.30	—	—	1120	2"
MW-5	X	0644	10.22	6.97	—	—	1207	2"
MW-7	X	0649	29.80	9.25	—	—	1105	2"
MW-6	X	0656	19.73	6.10	—	—	1226	2"
MW-4	X	0701	14.76	5.23	—	—	1128	2"

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

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: Quik Stop 56 Project No.: 191546/TA01 Date: 6/19/12

Well No. MW-2 Purge Method: SUB

Depth to Water (feet): 5.37 Depth to Product (feet): —

Total Depth (feet) 29.90 LPH & Water Recovered (gallons): —

Water Column (feet): 24.53 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 10.27 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0903			4	1156	22.1	6.47			
			8	1257	21.1	6.21			
	0908		12	1238	20.8	6.12			

Static at Time Sampled	Total Gallons Purged	Sample Time
5.55	12	1151

Comments:

Well No. MW-3 Purge Method: SUB

Depth to Water (feet): 5.70 Depth to Product (feet): —

Total Depth (feet) 30.30 LPH & Water Recovered (gallons): —

Water Column (feet): 24.60 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 10.62 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0846			4	915.9	22.0	6.65			
			8	861.1	21.0	6.39			
	0851		12	867.2	20.5	6.23			

Static at Time Sampled	Total Gallons Purged	Sample Time
5.91	12	1140

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: Quik Stop 56 Project No.: 191546/TA01 Date: 6/19/12

Well No. MW-1 Purge Method: SUB

Depth to Water (feet): 7.30 Depth to Product (feet): —

Total Depth (feet) 30.01 LPH & Water Recovered (gallons): —

Water Column (feet): 22.71 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 11.84 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0826			4	867.2	20.3	6.10			
			8	912.0	20.6	5.95			
	0831		12	902.7	20.7	5.89			

Static at Time Sampled	Total Gallons Purged	Sample Time
1005	12	1120

Comments:

Well No. MW-5 Purge Method: HB

Depth to Water (feet): 6.97 Depth to Product (feet): —

Total Depth (feet) 10.22 LPH & Water Recovered (gallons): —

Water Column (feet): 3.25 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 7.62 1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0933			1	309.6	21.2	7.37			
			2	294.7	20.7	6.89			
	0939		3	297.3	20.4	6.55			

Static at Time Sampled	Total Gallons Purged	Sample Time
7.00	3	1207

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: QUIK STOP 56 Project No.: 191546/TA01 Date: 6/19/12

Well No. MW-7 Purge Method: HB

Depth to Water (feet): 9.25 Depth to Product (feet): —

Total Depth (feet) 24.80 LPH & Water Recovered (gallons): —

Water Column (feet): 15.55 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 12.36 1 Well Volume (gallons): 3

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F ~~C~~)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0750			3	1760	19.2	7.69			
			6	1750	19.1	7.25			
	0801		9	1747	19.1	7.05			

Static at Time Sampled	Total Gallons Purged	Sample Time
9.70	9	1105

Comments:

Well No. MW-6 Purge Method: HB

Depth to Water (feet): 6.10 Depth to Product (feet): —

Total Depth (feet) 19.73 LPH & Water Recovered (gallons): —

Water Column (feet): 13.63 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 8.82 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F ~~,C~~)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0952			2	926.0	20.2	6.36			
			4	927.6	19.7	6.44			
	1001		6	925.9	20.0	6.36			

Static at Time Sampled	Total Gallons Purged	Sample Time
6.22	6	1226

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: Quik Stop 56 Project No.: 191546/TA01 Date: 6/19/12

Well No. MW-4 Purge Method: S HB

Depth to Water (feet): 5.23 Depth to Product (feet): —

Total Depth (feet) 14.76 LPH & Water Recovered (gallons): —

Water Column (feet): 9.53 Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 7.13 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F (C))	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0816			2	683.3	19.4	7.23			
			4	677.1	19.9	6.32			
	0819		6	668.4	20.0	6.61			

Static at Time Sampled	Total Gallons Purged	Sample Time
5.27		1128

Comments: 6

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	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									

Static at Time Sampled	Total Gallons Purged	Sample Time

Comments:

TRC

DRUM INVENTORY FIELD SHEET

CLIENT: TRC

PROJECT NUMBER: 191546 **DATE:** 6/19/12

SITE #: Quik Stop 56

ADDRESS: 3132 Beaumont Ave.

CITY: Oakland

ACTIVE STATION: Yes ✓ No

DRUMS EMPTY: **DRUMS FULL:** 2

DRUMS LABELED: Yes ✓ No

TOTAL GALLONS GENERATED: 117

DRUMS LEFT ONSITE: Yes ✓ No

SPECIAL INSTRUCTIONS: gallons purged 61 + 56 gallons of Decon water Totaling 117 gallons Left on SITE

Technician: JOE

METER CALIBRATION LOG

CLIENT NAME: TRC

SITE #: Quik Stop 56

LOCATION: 3132 Beaumont 56

METER BRAND NAME: Ultrameter II

METER MODEL #: 6208075

ALTON METER #: 0451

CALIBRATION STANDARD EXP. DATE: 6/19

CALIBRATED BY: JOE

DATE: 6/19/12

METER BRAND NAME:

METER MODEL #:

ALTON METER #:

CALIBRATION STANDARD EXP. DATE: 6/19

SITE INITIAL CALIBRATION		
	Standard	Final Calibrated Values
pH	4.00	4.00
pH	7.00	7.00
pH	10.00	10.00
Conductivity	~~1000~~ 1412	1413
Conductivity	10000	
Turbidity	1.0	
Turbidity	10.0	

POST SAMPLING STANDARD MEASUREMENTS		
	Standard	Measured Values
pH	4.00	
pH	7.00	
pH	10.00	
Conductivity	1000	
Conductivity	10000	
Turbidity	1.0	
Turbidity	10.0	

REMARKS:

SIGNATURE: Joe D Sons

Page 1 of 1

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

TRC-Alton Geoscience
One Concord Center
Concord, CA 94520

Attn: Jonathan Scheiner
Phone: (925) 688-2473
Fax: (925) 688-0388
Date Received : 06/21/12

Job: Quick Stop 56

GC/MSD by Direct Injection
EPA Method SW8260B-DI

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-2**				
Lab ID : TRC12062144-01A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 11:51				
Client ID: **MW-3**				
Lab ID : TRC12062144-02A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 11:40				
Client ID: **MW-1**				
Lab ID : TRC12062144-03A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 11:20				
Client ID: **MW-5**				
Lab ID : TRC12062144-04A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 12:07				
Client ID: **MW-7**				
Lab ID : TRC12062144-05A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 11:05				
Client ID: **MW-6**				
Lab ID : TRC12062144-06A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 12:26				
Client ID: **MW-4**				
Lab ID : TRC12062144-07A Ethanol	ND	5.0 µg/L	06/26/12	06/26/12
Date Sampled 06/19/12 11:28				

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) 281-4848 · Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
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.

7/3/12
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

TRC-Alton Geoscience
One Concord Center
Concord, CA 94520

Attn: Jonathan Scheiner
Phone: (925) 688-2473
Fax: (925) 688-0388
Date Received : 06/21/12

Job: Quick 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 :	**MW-2**					
Lab ID :	TRC12062144-01A	TPH-P (GRO)	ND	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 11:51	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	0.67	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12
Client ID :	**MW-3**					
Lab ID :	TRC12062144-02A	TPH-P (GRO)	ND	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 11:40	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12
Client ID :	**MW-1**					
Lab ID :	TRC12062144-03A	TPH-P (GRO)	ND	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 11:20	Tertiary Butyl Alcohol (TBA)	61	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	26	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12

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Client ID :	**MW-5**					
Lab ID :	TRC12062144-04A	TPH-P (GRO)	ND	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 12:07	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12
Client ID :	**MW-7**					
Lab ID :	TRC12062144-05A	TPH-P (GRO)	0.059	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 11:05	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	70	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12
Client ID :	**MW-6**					
Lab ID :	TRC12062144-06A	TPH-P (GRO)	ND	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 12:26	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	16	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12
Client ID :	**MW-4**					
Lab ID :	TRC12062144-07A	TPH-P (GRO)	0.14	0.050 mg/L	06/28/12	06/28/12
Date Sampled	06/19/12 11:28	Tertiary Butyl Alcohol (TBA)	300	10 µg/L	06/28/12	06/28/12
		Methyl tert-butyl ether (MTBE)	1.4	0.50 µg/L	06/28/12	06/28/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/28/12	06/28/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/28/12	06/28/12
		Benzene	ND	0.50 µg/L	06/28/12	06/28/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/28/12	06/28/12
		Toluene	ND	0.50 µg/L	06/28/12	06/28/12
		Ethylbenzene	ND	0.50 µg/L	06/28/12	06/28/12
		Xylenes, Total	ND	0.50 µg/L	06/28/12	06/28/12

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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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7/3/12

Report Date

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VOC Sample Preservation Report

Work Order: TRC12062144 **Job:** Quick Stop 56

Alpha's Sample ID	Client's Sample ID	Matrix	pH
12062144-01A	MW-2	Aqueous	2
12062144-02A	MW-3	Aqueous	2
12062144-03A	MW-1	Aqueous	2
12062144-04A	MW-5	Aqueous	2
12062144-05A	MW-7	Aqueous	2
12062144-06A	MW-6	Aqueous	2
12062144-07A	MW-4	Aqueous	2

7/3/12

Report Date

Alpha Analytical, Inc.

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Date: *29-Jun-12*

QC Summary Report

Work Order: 12062144

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\120626\12062608.D** Batch ID: **28983** Analysis Date: **06/26/2012 14:04**

Sample ID: **MBLK-28983** Units : **µg/L** Run ID: **MSD_11_120626A** Prep Date: **06/26/2012 11:03**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	ND	5								
Surr: Hexafluoro-2-propanol	443		500		89	61	134			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\120626\12062604.D** Batch ID: **28983** Analysis Date: **06/26/2012 12:47**

Sample ID: **LCS-28983** Units : **µg/L** Run ID: **MSD_11_120626A** Prep Date: **06/26/2012 11:03**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	325	5	250		130	62	150			
Surr: Hexafluoro-2-propanol	444		500		89	61	134			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\120626\12062606.D** Batch ID: **28983** Analysis Date: **06/26/2012 13:27**

Sample ID: **12062144-02AMS** Units : **µg/L** Run ID: **MSD_11_120626A** Prep Date: **06/26/2012 11:03**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	327	5	250	0	131	56	153			
Surr: Hexafluoro-2-propanol	432		500		86	61	134			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\120626\12062607.D** Batch ID: **28983** Analysis Date: **06/26/2012 13:45**

Sample ID: **12062144-02AMSD** Units : **µg/L** Run ID: **MSD_11_120626A** Prep Date: **06/26/2012 11:03**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	310	5	250	0	124	56	153	326.6	5.2(40)	
Surr: Hexafluoro-2-propanol	451		500		90	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: *03-Jul-12*

QC Summary Report

Work Order: 12062144

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **12062804.D** Batch ID: **MS12W0628B** Analysis Date: **06/28/2012 12:53**

Sample ID: **MBLK MS12W0628B** Units : **mg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 12:53**

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	0.0103		0.01		103	70	130			
Surr: Toluene-d8	0.0103		0.01		103	70	130			
Surr: 4-Bromofluorobenzene	0.00952		0.01		95	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **12062802.D** Batch ID: **MS12W0628B** Analysis Date: **06/28/2012 11:57**

Sample ID: **GLCS MS12W0628B** Units : **mg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 11:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.442	0.05	0.4		110	70	130			
Surr: 1,2-Dichloroethane-d4	0.0124		0.01		124	70	130			
Surr: Toluene-d8	0.00896		0.01		90	70	130			
Surr: 4-Bromofluorobenzene	0.00765		0.01		77	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8015B/C**

File ID: **12062816.D** Batch ID: **MS12W0628B** Analysis Date: **06/28/2012 17:32**

Sample ID: **12062144-01AGS** Units : **mg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 17:32**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.71	0.25	2	0	85	51	144			
Surr: 1,2-Dichloroethane-d4	0.0603		0.05		121	70	130			
Surr: Toluene-d8	0.0459		0.05		92	70	130			
Surr: 4-Bromofluorobenzene	0.0397		0.05		79	70	130			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **12062817.D** Batch ID: **MS12W0628B** Analysis Date: **06/28/2012 17:55**

Sample ID: **12062144-01AGSD** Units : **mg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 17:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.82	0.25	2	0	91	51	144	1.706	6.2(29)	
Surr: 1,2-Dichloroethane-d4	0.0606		0.05		121	70	130			
Surr: Toluene-d8	0.0459		0.05		92	70	130			
Surr: 4-Bromofluorobenzene	0.0393		0.05		79	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: 03-Jul-12

QC Summary Report

Work Order: 12062144

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **12062804.D** Batch ID: **MS12W0628A** Analysis Date: **06/28/2012 12:53**

Sample ID: **MBLK MS12W0628A** Units : **µg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 12:53**

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	10.3		10		103	70	130			
Surr: Toluene-d8	10.3		10		103	70	130			
Surr: 4-Bromofluorobenzene	9.52		10		95	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **12062803.D** Batch ID: **MS12W0628A** Analysis Date: **06/28/2012 12:20**

Sample ID: **LCS MS12W0628A** Units : **µg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 12:20**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	8.97	0.5	10		90	65	140			
Benzene	9.36	0.5	10		94	70	130			
Toluene	9.27	0.5	10		93	80	120			
Ethylbenzene	9.73	0.5	10		97	80	120			
Xylenes, Total	19	0.5	20		95	70	130			
Surr: 1,2-Dichloroethane-d4	12.6		10		126	70	130			
Surr: Toluene-d8	9.15		10		92	70	130			
Surr: 4-Bromofluorobenzene	7.68		10		77	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **12062814.D** Batch ID: **MS12W0628A** Analysis Date: **06/28/2012 16:47**

Sample ID: **12062144-01AMS** Units : **µg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 16:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	46.2	1.3	50	0.67	91	47	150			
Benzene	45.9	1.3	50	0	92	59	138			
Toluene	45.4	1.3	50	0	91	68	130			
Ethylbenzene	46.9	1.3	50	0	94	68	130			
Xylenes, Total	93.1	1.3	100	0	93	70	130			
Surr: 1,2-Dichloroethane-d4	62.8		50		126	70	130			
Surr: Toluene-d8	45.8		50		92	70	130			
Surr: 4-Bromofluorobenzene	37.3		50		75	70	130			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **12062815.D** Batch ID: **MS12W0628A** Analysis Date: **06/28/2012 17:10**

Sample ID: **12062144-01AMSD** Units : **µg/L** Run ID: **MSD_12_120628B** Prep Date: **06/28/2012 17:10**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	47.8	1.3	50	0.67	94	47	150	46.19	3.3(40)	
Benzene	48.1	1.3	50	0	96	59	138	45.87	4.7(21)	
Toluene	47.1	1.3	50	0	94	68	130	45.4	3.7(20)	
Ethylbenzene	49.5	1.3	50	0	99	68	130	46.85	5.4(20)	
Xylenes, Total	98.1	1.3	100	0	98	70	130	93.11	5.2(20)	
Surr: 1,2-Dichloroethane-d4	64		50		128	70	130			
Surr: Toluene-d8	44.6		50		89	70	130			
Surr: 4-Bromofluorobenzene	37.5		50		75	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 :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

CA

WorkOrder : TRC12062144

Report Due By : 5:00 PM On : 05-Jul-12

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

Client:
TRC-Alton Geoscience
One Concord Center
2300 Clayton Rd., Ste. 610
Concord, CA 94520

EDD Required : **Yes**

Sampled by : Joe Lewis

PO :

Client's COC # : 19858 Job : Quick Stop 56

Cooler Temp	Samples Received	Date Printed
0 °C	21-Jun-12	**21-Jun-12**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests ALCOHOL_W	TPH/P_W	VOC_W						Sample Remarks
TRC12062144-01A	MW-2	AQ	06/19/12 11:51	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						
TRC12062144-02A	MW-3	AQ	06/19/12 11:40	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						
TRC12062144-03A	MW-1	AQ	06/19/12 11:20	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						
TRC12062144-04A	MW-5	AQ	06/19/12 12:07	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						
TRC12062144-05A	MW-7	AQ	06/19/12 11:05	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						
TRC12062144-06A	MW-6	AQ	06/19/12 12:26	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						
TRC12062144-07A	MW-4	AQ	06/19/12 11:28	6	0	9	Low Level EtOH	GAS-C	BTEX OXY_C						

Comments: Security seals intact. Frozen ice. Total Xylenes. :

	Signature	Print Name	Company	Date/Time
Logged in by:		Sarah Nen	**Alpha Analytical, Inc.**	6/21/12 1328

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

Billing Information:
Name TRC Solutions
Address 2300 Clayton RD.
City, State, Zip Concord, CA 94520
Phone Number 925-688-1200 Fax 925-688-0333

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 ____

Page # 1 of 1

Client Name TRC Solutions	P.O. #	Job # Quik Stop 56
Address 2300 Clayton RD	EMail Address Jscheiner@trcsol.com	
City, State, Zip Concord, CA 94520	Phone # 925-688-1200	Fax # 925-688-0333

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by Joe Lewis / Lab ID Number (Office Use Only)	Report Attention Jonathan Scheiner / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPH-G by 8260B	BTEX/MTBE/Oxys by 8260B	Ethanol by 8260B					Required QC Level? I II III IV / EDD/EDF? YES ✓ NO ____ / Global ID # T0600477475 / REMARKS
1151	6/19	OT	TRC12002144-01A	MW-2	STD	N	6-V	X	X	X					Send EDF to
1140			02A	MW-3											Jonathan Scheiner
1120			03A	MW-1											at jscheiner@trcsol.com
1207			04A	MW-5											
1103			05A	MW-7											
1226			06A	MW-6											
1135			07A	MW-4											

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		Rick Rodriguez	TRC	6/20/12	1045
Received by	Edlama M. Fmciano	Edlama M. Fmciano	Alpha	6.20.12	1045
Relinquished by					
Received by		Sarah Neri	Alpha	6/21/12	1305
Relinquished by					
Received by					

*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.