Quik Stop Markets, Inc.

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

January 29, 2014

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: Fourth Quarter 2013 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.

Roger Batra

Roger Batra
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

January 29, 2014 Project No. 201892

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
FOURTH QUARTER 2013

Dear Ms. Detterman:

Enclosed is a copy of the *Fourth Quarter 2013 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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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
FOURTH QUARTER 2013

Dear Mr. Karvelot:

This *Fourth Quarter 2013 Semiannual Groundwater Monitoring Report* presents the results of the Fourth Quarter 2013 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 December 27, 2013. 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 121.34 feet above mean sea level (MSL) in MW-6 at the south end of the study area to 129.17 feet above MSL in MW-3 in the north, with an average elevation of 125.45 feet above MSL. Groundwater flow direction was predominantly to the southwest at a gradient of 0.046 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. Groundwater flow direction and gradient remains consistent with historical trends.

2.0 GROUNDWATER SAMPLING

2.1 Field Sampling and Analytical Testing

On December 27, 2013, 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 75 gallons of purge water and equipment rinsate were generated during groundwater sampling activities conducted on December 27, 2013. 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

Fourth Quarter 2013 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 1,200 µg/L (MW-4). MTBE concentrations ranged from non-detect (<0.50 µg/L) to 370 µg/L (MW-7), and TBA concentrations ranged from non-detect (<10 µg/L) to 930 µg/L (MW-4) during this sampling event. Total Xylenes were detected in MW-4 at 1.6 µg/L. No other analytes were detected above their respective reporting limits.

2.3 Discussion

The Fourth Quarter 2013 monitoring event represents the twelfth monitoring with the expanded well network (i.e., including offsite wells MW-4 through MW-7), and is also the twelfth 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 Second Quarter 2013 monitoring event.

The presence of a detectable level of TPH-G was reported in the southern (downgradient) offsite area, in well MW-4 and MW-7. TBA was also detected in downgradient wells MW-1 and MW-4 located 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 of 370 µg/L.

Overall diminishing trends are apparent for TPH-G in wells where detectable levels have been historically reported (i.e., downgradient, near Site well MW-1). 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. Apparent localized increases in TPH-G and MTBE noted in downgradient (MW-4) and cross-gradient (MW-7) wells are likely attributed to anomalously low drought-related groundwater conditions, an observation common at many similar sites during the current prolonged dry weather conditions.

As concluded in the Site Conceptual Model (SCM), 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).

Consideration of case closure based on the findings of the SCM, Additional Soil and Groundwater Investigation and ongoing site monitoring has been indicated by the ACDEH in a letter, dated December 30, 2013. Pending input received during the current required public comment period (scheduled to end on February 27, 2014), well decommissioning is planned to occur.

3.0 LIST OF ATTACHMENTS

Figure 1:	Vicinity Map
Figure 2:	Groundwater Elevation Contour Map, December 27, 2013
Figure 3:	Dissolved-Phase Constituent Concentrations, December 27, 2013
Table 1:	Summary of Groundwater Levels and Chemical Analysis
Appendix:	General Field Procedures, Field Measurement Forms, Official Laboratory Reports, and Chain of Custody Records

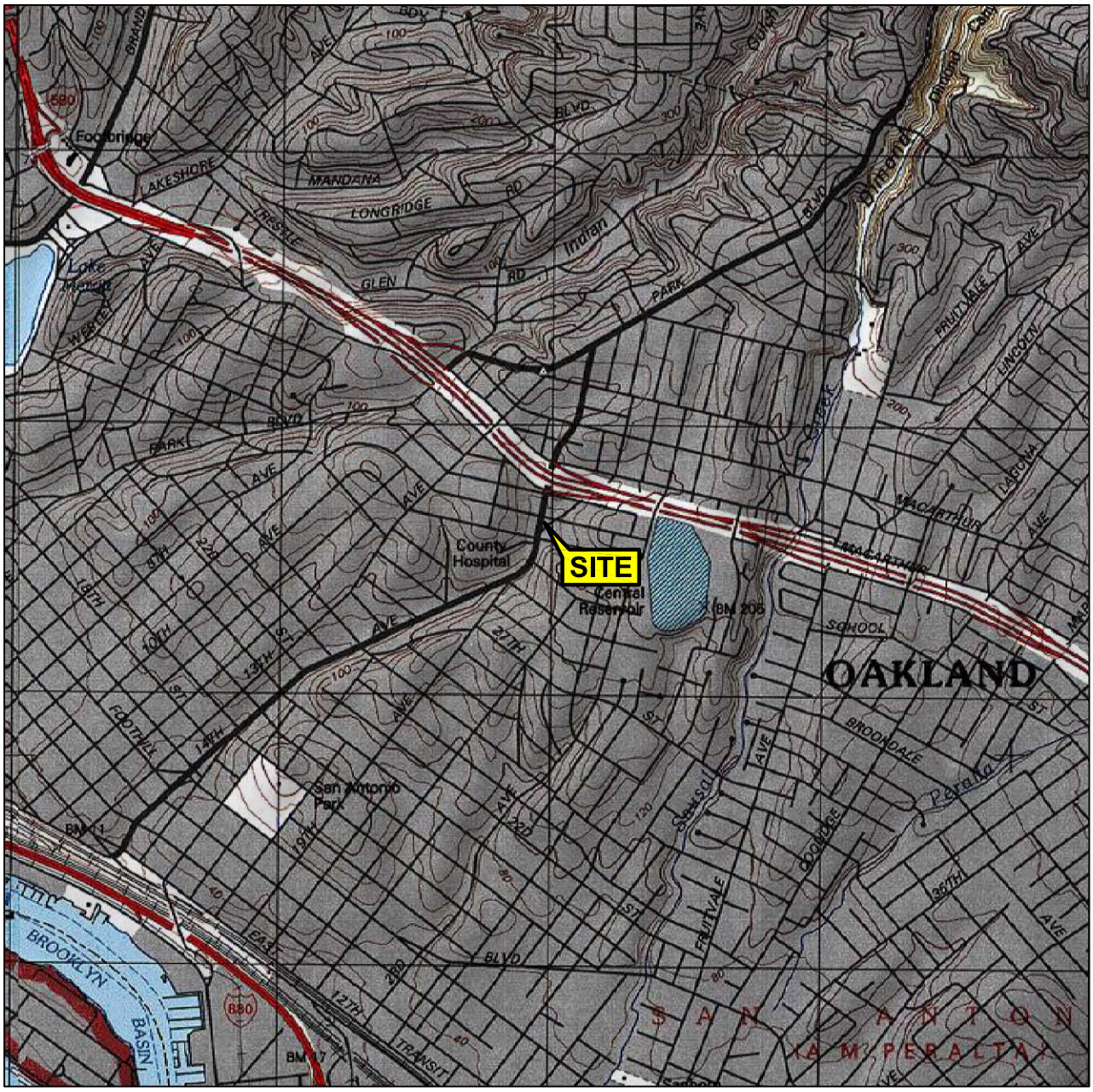
If you have any questions regarding this report, please call me at (925) 688-2473.

Sincerely,

Jonathan Scheiner
Project Manager

Rachelle Clair, P.G.
Project Geologist

FIGURES



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

SCALE 1 : 24,000

N

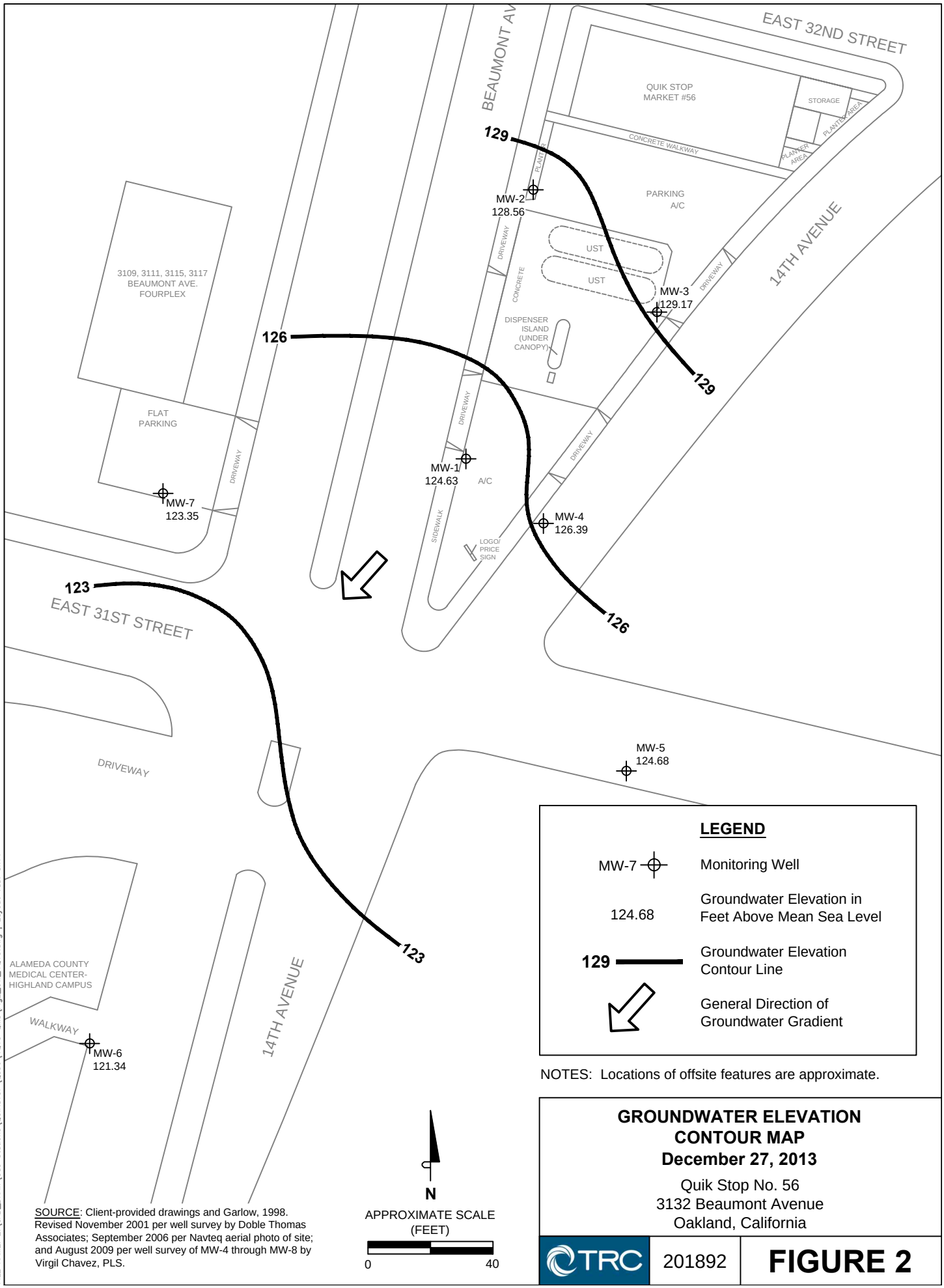
SOURCE:
United States Geological Survey
7.5 Minute Topographic Maps:
Oakland East and
Oakland West Quadrangles

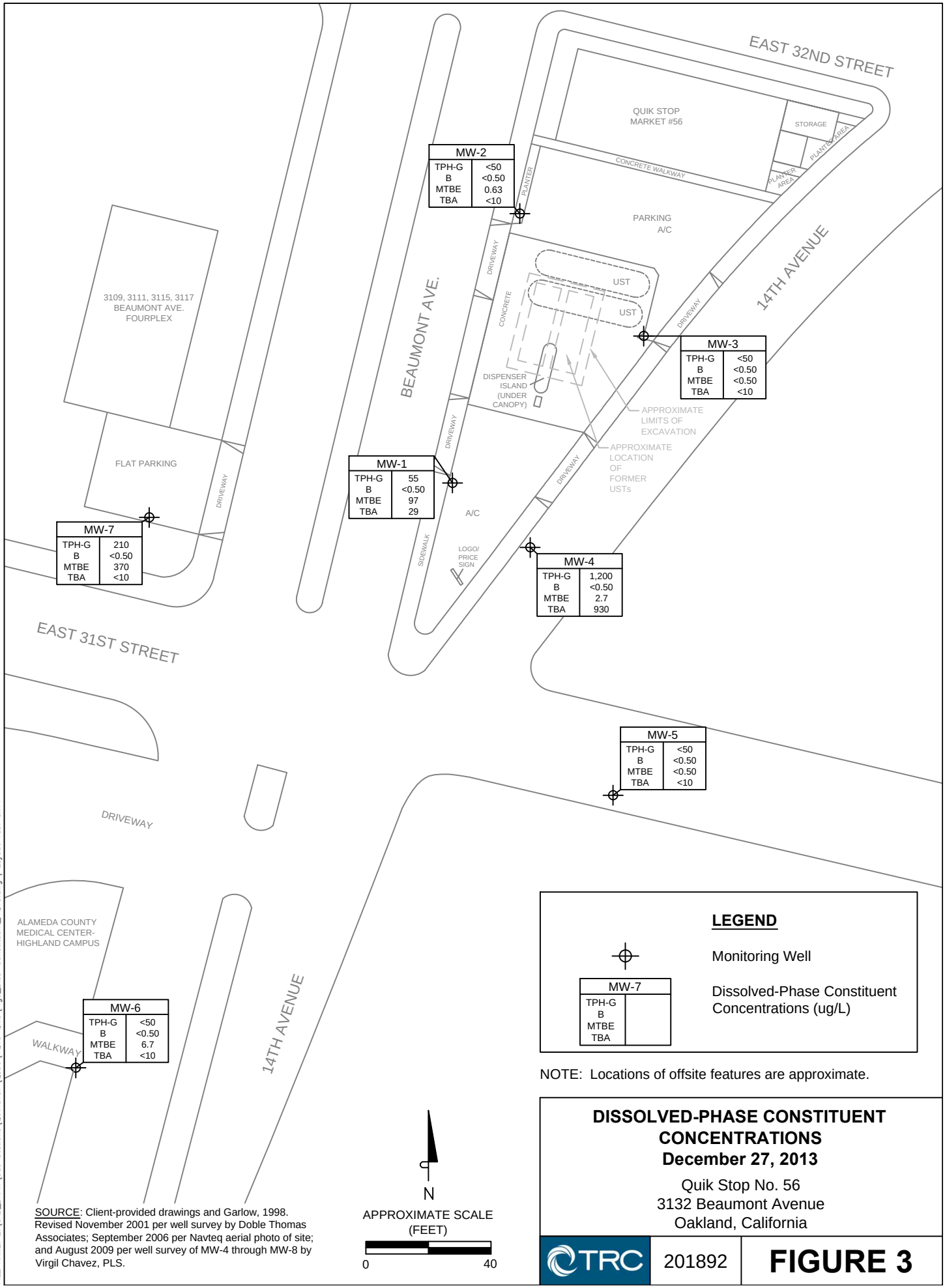
VICINITY MAP

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

TRC

FIGURE 1


EAST 32ND STREET
BEAUMONT AV
QUIK STOP MARKET #56
STORAGE
PLANTER AREA
CONCRETE WALKWAY
PARKING A/C
129
MW-2 128.56
DRIVEWAY
CONCRETE
UST
UST
MW-3 129.17
14TH AVENUE
3109, 3111, 3115, 3117 BEAUMONT AVE. FOURPLEX
DISPENSER ISLAND (UNDER CANOPY)
126
FLAT PARKING
MW-1 124.63
A/C
MW-7 123.35
MW-4 126.39
SIDEWALK
LOGO/ PRICE SIGN
123
EAST 31ST STREET
MW-5 124.68
DRIVEWAY
ALAMEDA COUNTY MEDICAL CENTER-HIGHLAND CAMPUS
WALKWAY
MW-6 121.34
14TH AVENUE
N
APPROXIMATE SCALE (FEET)
0
40
LEGEND
MW-7
Monitoring Well
124.68
Groundwater Elevation in Feet Above Mean Sea Level
129
Groundwater Elevation Contour Line
General Direction of Groundwater Gradient
NOTES: 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.
GROUNDWATER ELEVATION CONTOUR MAP
December 27, 2013
Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California
TRC
201892
FIGURE 2
FILE NAME: Z:\CAD_DRAW\Gas Stations\QUIKSTOP\Qs56\4Q13 QMS\Fig2_GW_4Q13.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
December 27, 2013

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

TRC | 201892 | **FIGURE 3**

FILE NAME: Z:\CAD_DRAW\Gas Stations\QUIKSTOP\Qs56\4Q13 QMS\Fig3_Diss-Constituent_4Q13.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-1	12/04/12	134.13	8.57	125.56	<50	<0.50	<0.50	<0.50	<0.50	23	<5.0	36	<1.0	<1.0	<1.0	—
MW-1	06/21/13	134.13	9.62	124.51	<50	<0.50	<0.50	<0.50	<0.50	8.4	<5.0	18	<1.0	<1.0	<1.0	—
MW-1	12/27/13	134.13	9.50	124.63	55	<0.50	<0.50	<0.50	<0.50	97	<5.0	29	<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
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	—

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	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	—
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-2	12/04/12	135.16	5.35	129.81	<50	<0.50	<0.50	<0.50	<0.50	0.57	<5.0	<10	<1.0	<1.0	<1.0	—
MW-2	06/21/13	135.16	6.37	128.79	<50	<0.50	<0.50	<0.50	<0.50	0.60	<5.0	<10	<1.0	<1.0	<1.0	—
MW-2	12/27/13	135.16	6.60	128.56	<50	<0.50	<0.50	<0.50	<0.50	0.63	<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	—

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	12/08/09	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	—
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-3	12/04/12	136.35	4.88	131.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-3	06/21/13	136.35	6.71	129.64	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-3	12/27/13	136.35	7.18	129.17	<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-4	12/04/12	133.59	4.53	129.06	460	<0.50	<0.50	<0.50	0.90	2.3	<5.0	400	<1.0	<1.0	<1.0	—
MW-4	06/21/13	133.59	6.57	127.02	580	0.63	<0.50	<0.50	<0.50	4.0	<5.0	1,500	<1.0	<1.0	<1.0	—
MW-4	12/27/13	133.59	7.20	126.39	1,200	<0.50	<0.50	<0.50	1.6	2.7	<5.0	930	<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-5	12/04/12	133.58	5.00	128.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	06/21/13	133.58	8.55	125.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<10	<1.0	<1.0	<1.0	—
MW-5	12/27/13	133.58	8.90	124.68	<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	—

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-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-6	12/04/12	128.83	6.52	122.31	<50	<0.50	<0.50	<0.50	<0.50	6.6	<5.0	<10	<1.0	<1.0	<1.0	—
MW-6	06/21/13	128.83	7.58	121.25	<50	<0.50	<0.50	<0.50	<0.50	3.5	<5.0	33	<1.0	<1.0	<1.0	—
MW-6	12/27/13	128.83	7.49	121.34	<50	<0.50	<0.50	<0.50	<0.50	6.7	<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	—
MW-7	12/04/12	134.37	10.63	123.74	84	<0.50	<0.50	<0.50	<0.50	120	<5.0	<10	<1.0	<1.0	<1.0	—
MW-7*	06/21/13	134.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-7	12/27/13	134.37	11.02	123.35	210	<0.50	<0.50	<0.50	<0.50	370	<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
* = well inaccessible

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 **a**re 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.

TRC Alton Geoscience, Northern California Operations

FLUID MEASUREMENT FIELD FORM

Project No.: 201892

Station No.: Quik Stop #56

TRC Alton Personnel: J. Chidester

Date: 12/27/13

Well Number	Screen Interval	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	Dissolved O_2 (mg/L)	Comments Time Gauged
MW-2		6.60				29.83		2" 0811
MW-3		7.18				30.23		2" 0813
MW-1		9.50				29.93		2" 0816
MW-5		8.90				10.18		2" 0800
MW-7		11.02				24.80		2" 0825
MW-6		7.49				19.65		2" 0803
MW-4		7.20				14.68		2" 0819

GROUNDWATER SAMPLING RECORD

Project No.: 201892
Project Name: Quik Stop #56
Weather: Sunny

Date: 12/23/13
Personnel: J. Chidester
Page: 1 of 7

Well Name:	MW-2
Chain-of-Custody No.:	
Measuring Point:	TOC
Screened Interval (ft):	
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	6.60
(b) Measured Total Depth (ft)	29.83
(c) Height of Water Column (ft) = b – a	23.23
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	3.72

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 11.25

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
0841			4	17.0	7.44	1163					
			8	19.5	7.18	1162					
0846			12	20.0	6.95	1178					

Sample Time:	1053
Comments:	

GROUNDWATER SAMPLING RECORD

Project No.: 201892
Project Name: Quik Stop #56
Weather: Sunny

Date: 12/27/13
Personnel: J. Chidester
Page: 2 of 7

Well Name:	MW-3
Chain-of-Custody No.:	
Measuring Point:	
Screened Interval (ft):	TOC
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	7.18
(b) Measured Total Depth (ft)	30.23
(c) Height of Water Column (ft) = b – a	23.05
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	3.69

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 11.79

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
0859			4	17.6	6.97	902.0					
			8	17.9	6.92	841.3					
0906			12	19.7	6.82	894.9					

Sample Time:	1110
Comments:	

GROUNDWATER SAMPLING RECORD

Project No.: 201892
Project Name: Quik Stop #56
Weather: Sunny

Date: 12/27/13
Personnel: J. Chidester
Page: 3 of 7

Well Name:	MW-1
Chain-of-Custody No.:	
Measuring Point:	TOC
Screened Interval (ft):	
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	9.50
(b) Measured Total Depth (ft)	29.93
(c) Height of Water Column (ft) = b – a	20.43
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	3.27

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 13.59

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
1023			4	18.9	6.90	860.5					
			7	20.4	6.72	909.4					
1028			10	21.3	6.66	902.0					

Sample Time:	1150
Comments:	

GROUNDWATER SAMPLING RECORD

Project No.: 201892
Project Name: Quik Stop #56
Weather: Sunny

Date: 12/27/13
Personnel: J. Chidester
Page: 4 of 7

Well Name:	MW-5
Chain-of-Custody No.:	
Measuring Point:	TOC
Screened Interval (ft):	
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	8.90
(b) Measured Total Depth (ft)	10.18
(c) Height of Water Column (ft) = b – a	1.28
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	0.20

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 9.16

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
0948			0.25	16.5	7.31	361.7					
			0.5	17.5	6.97	326.4					
	0952		0.75	17.7	6.78	322.4					

Sample Time:	1010
Comments:	Hand Bail.

GROUNDWATER SAMPLING RECORD

Project No.: 201892 Date: 12/27/13

Project Name: Quik Stop #56 Personnel: J. Chidester

Weather: Sunny Page: 5 of 7

Well Name:	MW-7
Chain-of-Custody No.:	
Measuring Point:	TOC
Screened Interval (ft):	
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	11.02
(b) Measured Total Depth (ft)	24.80
(c) Height of Water Column (ft) = b – a	13.78
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	2.20

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 13.78

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
0922			3	17.4	6.95	1633					
			5	18.0	6.89	1386					
0925			7	19.6	6.75	1770					

Sample Time:	1130
Comments:	

GROUNDWATER SAMPLING RECORD

Project No.: 201892
Project Name: Quik Stop #56
Weather: Sunny

Date: 12/27/13
Personnel: J. Chidester
Page: 6 of 7

Well Name:	MW-6
Chain-of-Custody No.:	
Measuring Point:	Toc
Screened Interval (ft):	
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	7.49
(b) Measured Total Depth (ft)	19.65
(c) Height of Water Column (ft) = b – a	12.16
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	1.93

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 9.92

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
0933			2	17.7	7.23	841.4					
			4	17.6	7.09	815.4					
0935			6	18.9	6.98	868.0					

Sample Time:	1145
Comments:	

GROUNDWATER SAMPLING RECORD

Project No.: 201892
Project Name: Quik Stop #56
Weather: Sunny

Date: 12/27/13
Personnel: J. Chidester
Page: 7 of 7

Well Name:	MW-4
Chain-of-Custody No.:	
Measuring Point:	TOC
Screened Interval (ft):	
Depth to bottom (fbg):	

(a) Initial Water Level (ft)	7.20
(b) Measured Total Depth (ft)	14.68
(c) Height of Water Column (ft) = b – a	7.48
(d) Casing Diameter (in)	2"
(e) Casing Volume (gal) = con × c Conversion (con) (ft to gal)	1.20

WELLHEAD CONDITIONS	
Casing:	Good
Lock:	Good
Standing Water:	None
Comments/Required Maintenance:	None. 80% Recharge Depth = 8.70

Time	Intake Depth (ft bmp)	Depth to Water (ft bmp)	Cum. Vol. Purged (gal)	Temp. (°C)	pH	Specific Cond. (µmhos/cm)	DO (mg/L)	Redox (mV)	Color	Turbidity	Flow Rate
1036			1.5	17.6	6.94	786.5					
			3	18.9	6.82	823.0					
			4.5	19.7	6.76	821.8					

Sample Time:	1200
Comments:	

EI

Environmental Instruments Leasing Company 1-800-648-9355

Calibration and Components Checklist
PH, conductivity, ORP, Temperature

Oakton Instrument ID # _____ pH, Conductivity, Temperature
Hanna Instrument ID #_____ pH, Conductivity, Temperature Model # _____
Myron L Instrument ID # 250 pH, Conductivity, ORP, Temperature

Components

Date Out: 12/24/13 Date In: _____

Meter: ✓	_____ Meter
Probe: ✓	_____ Probe
PH 4,7,10 Sol: _____	_____ pH 4,7,10, Solution
1413 uS/cm Sol: _____	_____ 1413 uS/cm Solution
12880 uS/cm Sol: _____	_____ 12880 uS/cm Solution
Distilled Water: _____	_____ Distilled Water
Manual: ✓	_____ Manual
Case: ✓	_____ Case
Calibration Sheet: ✓	_____ Calibration Sheet

Calibration Solutions Used

7.01 Buffer pH ✓	7.10 Meter Response
4.01 Buffer pH ✓	4.10 Meter Response
10.00 Buffer PH ✓	9.96 Meter Response
1413 uS/cm Cond. ✓	1413 Meter Response
12880 uS/cm Cond. _____	_____ Meter Response
Temperature ✓	_____ Meter Response
ORP ✓	_____ Meter Response

Inspected & Calibrated By: [signature] Date: 12/24/13

Note: This unit has been tested and is in proper working condition. This unit has been cleaned and should be returned in the same condition. Any components missing upon return of this instrument shall be billed at the current price. If the unit is returned overly dirty or damaged a service order will be issued and your account will be billed. Should the unit malfunction you must notify EILCO within 24 hours or you will be billed for the time the unit was in your possession.

5650 Imhoff Drive, Suite A, Concord, CA. 94520 Phone 800/648-9355
Fax 925/686-4608

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(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 : 12/31/13

Job: 201892-TA03/Quik 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 : TRC13123144-01A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 10:55				
Client ID: **MW-3**				
Lab ID : TRC13123144-02A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 11:10				
Client ID: **MW-1**				
Lab ID : TRC13123144-03A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 11:50				
Client ID: **MW-5**				
Lab ID : TRC13123144-04A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 10:10				
Client ID: **MW-7**				
Lab ID : TRC13123144-05A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 11:30				
Client ID: **MW-6**				
Lab ID : TRC13123144-06A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 11:45				
Client ID: **MW-4**				
Lab ID : TRC13123144-07A Ethanol	ND	5.0 µg/L	01/08/14	01/08/14
Date Sampled 12/27/13 12:00				

ND = Not Detected

ACLASS ACCREDITED DoD ELAP

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.

1/14/14
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(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 : 12/31/13

Job: 201892-TA03/Quik Stop #56

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

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-2**					
Lab ID :	TRC13123144-01A	TPH-P (GRO)	ND	0.050 mg/L	01/03/14	01/03/14
Date Sampled	12/27/13 10:55	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/03/14	01/03/14
		Methyl tert-butyl ether (MTBE)	0.63	0.50 µg/L	01/03/14	01/03/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/03/14	01/03/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/03/14	01/03/14
		Benzene	ND	0.50 µg/L	01/03/14	01/03/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/03/14	01/03/14
		Toluene	ND	0.50 µg/L	01/03/14	01/03/14
		Ethylbenzene	ND	0.50 µg/L	01/03/14	01/03/14
		Xylenes, Total	ND	0.50 µg/L	01/03/14	01/03/14
Client ID :	**MW-3**					
Lab ID :	TRC13123144-02A	TPH-P (GRO)	ND	0.050 mg/L	01/03/14	01/03/14
Date Sampled	12/27/13 11:10	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/03/14	01/03/14
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/03/14	01/03/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/03/14	01/03/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/03/14	01/03/14
		Benzene	ND	0.50 µg/L	01/03/14	01/03/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/03/14	01/03/14
		Toluene	ND	0.50 µg/L	01/03/14	01/03/14
		Ethylbenzene	ND	0.50 µg/L	01/03/14	01/03/14
		Xylenes, Total	ND	0.50 µg/L	01/03/14	01/03/14
Client ID :	**MW-1**					
Lab ID :	TRC13123144-03A	TPH-P (GRO)	0.055	0.050 mg/L	01/03/14	01/03/14
Date Sampled	12/27/13 11:50	Tertiary Butyl Alcohol (TBA)	29	10 µg/L	01/03/14	01/03/14
		Methyl tert-butyl ether (MTBE)	97	0.50 µg/L	01/03/14	01/03/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/03/14	01/03/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/03/14	01/03/14
		Benzene	ND	0.50 µg/L	01/03/14	01/03/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/03/14	01/03/14
		Toluene	ND	0.50 µg/L	01/03/14	01/03/14
		Ethylbenzene	ND	0.50 µg/L	01/03/14	01/03/14
		Xylenes, Total	ND	0.50 µg/L	01/03/14	01/03/14

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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Client ID :	**MW-5**					
Lab ID :	TRC13123144-04A	TPH-P (GRO)	ND	0.050 mg/L	01/03/14	01/03/14
Date Sampled	12/27/13 10:10	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/03/14	01/03/14
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/03/14	01/03/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/03/14	01/03/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/03/14	01/03/14
		Benzene	ND	0.50 µg/L	01/03/14	01/03/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/03/14	01/03/14
		Toluene	ND	0.50 µg/L	01/03/14	01/03/14
		Ethylbenzene	ND	0.50 µg/L	01/03/14	01/03/14
		Xylenes, Total	ND	0.50 µg/L	01/03/14	01/03/14
Client ID :	**MW-7**					
Lab ID :	TRC13123144-05A	TPH-P (GRO)	0.21	0.10 mg/L	01/04/14	01/04/14
Date Sampled	12/27/13 11:30	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/04/14	01/04/14
		Methyl tert-butyl ether (MTBE)	370	0.50 µg/L	01/04/14	01/04/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/04/14	01/04/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/04/14	01/04/14
		Benzene	ND	0.50 µg/L	01/04/14	01/04/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/04/14	01/04/14
		Toluene	ND	0.50 µg/L	01/04/14	01/04/14
		Ethylbenzene	ND	0.50 µg/L	01/04/14	01/04/14
		Xylenes, Total	ND	0.50 µg/L	01/04/14	01/04/14
Client ID :	**MW-6**					
Lab ID :	TRC13123144-06A	TPH-P (GRO)	ND	0.050 mg/L	01/04/14	01/04/14
Date Sampled	12/27/13 11:45	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/04/14	01/04/14
		Methyl tert-butyl ether (MTBE)	6.7	0.50 µg/L	01/04/14	01/04/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/04/14	01/04/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/04/14	01/04/14
		Benzene	ND	0.50 µg/L	01/04/14	01/04/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/04/14	01/04/14
		Toluene	ND	0.50 µg/L	01/04/14	01/04/14
		Ethylbenzene	ND	0.50 µg/L	01/04/14	01/04/14
		Xylenes, Total	ND	0.50 µg/L	01/04/14	01/04/14
Client ID :	**MW-4**					
Lab ID :	TRC13123144-07A	TPH-P (GRO)	1.2	0.10 mg/L	01/04/14	01/04/14
Date Sampled	12/27/13 12:00	Tertiary Butyl Alcohol (TBA)	930	10 µg/L	01/04/14	01/04/14
		Methyl tert-butyl ether (MTBE)	2.7	0.50 µg/L	01/04/14	01/04/14
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/04/14	01/04/14
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/04/14	01/04/14
		Benzene	ND	0.50 µg/L	01/04/14	01/04/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/04/14	01/04/14
		Toluene	ND	0.50 µg/L	01/04/14	01/04/14
		Ethylbenzene	ND	0.50 µg/L	01/04/14	01/04/14
		Xylenes, Total	1.6	0.50 µg/L	01/04/14	01/04/14

Alpha Analytical, Inc.

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

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

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.

1/14/14

Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order: TRC13123144 **Job:** 201892-TA03/Quik Stop #56

Alpha's Sample ID	Client's Sample ID	Matrix	pH
13123144-01A	MW-2	Aqueous	2
13123144-02A	MW-3	Aqueous	2
13123144-03A	MW-1	Aqueous	2
13123144-04A	MW-5	Aqueous	2
13123144-05A	MW-7	Aqueous	2
13123144-06A	MW-6	Aqueous	2
13123144-07A	MW-4	Aqueous	2

1/14/14

Report Date

Alpha Analytical, Inc.

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Date: *14-Jan-14*

QC Summary Report

Work Order: 13123144

Method Blank

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

File ID: **14010807.D** Batch ID: **32273** Analysis Date: **01/08/2014 17:02**

Sample ID: **MBLK-32273** Units : **µg/L** Run ID: **MSD_14_140108A** Prep Date: **01/08/2014 17:00**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	ND	5								
Surr: Hexafluoro-2-propanol	563		500		113	58	133			

Laboratory Control Spike

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

File ID: **14010817.D** Batch ID: **32273** Analysis Date: **01/08/2014 18:07**

Sample ID: **LCS-32273** Units : **µg/L** Run ID: **MSD_14_140108A** Prep Date: **01/08/2014 17:00**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	201	5	250		81	66	152			
Surr: Hexafluoro-2-propanol	292		500		58	58	133			

Sample Matrix Spike

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

File ID: **14010826.D** Batch ID: **32273** Analysis Date: **01/08/2014 19:07**

Sample ID: **13123144-07AMS** Units : **µg/L** Run ID: **MSD_14_140108A** Prep Date: **01/08/2014 17:00**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	199	5	250	0	80	63	152			
Surr: Hexafluoro-2-propanol	356		500		71	58	133			

Sample Matrix Spike Duplicate

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

File ID: **14010827.D** Batch ID: **32273** Analysis Date: **01/08/2014 19:19**

Sample ID: **13123144-07AMSD** Units : **µg/L** Run ID: **MSD_14_140108A** Prep Date: **01/08/2014 17:00**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	241	5	250	0	96	63	152	198.9	19.0(26)	
Surr: Hexafluoro-2-propanol	446		500		89	58	133			

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: *14-Jan-14*

QC Summary Report

Work Order: 13123144

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14010309.D** Batch ID: **MS09W0103B** Analysis Date: **01/03/2014 17:00**

Sample ID: **MBLK MS09W0103B** Units : **mg/L** Run ID: **MSD_09_140103A** Prep Date: **01/03/2014 17:00**

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	0.0108		0.01		108	70	130			
Surr: Toluene-d8	0.0101		0.01		101	70	130			
Surr: 4-Bromofluorobenzene	0.00991		0.01		99	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14010308.D** Batch ID: **MS09W0103B** Analysis Date: **01/03/2014 16:37**

Sample ID: **GLCS MS09W0103B** Units : **mg/L** Run ID: **MSD_09_140103A** Prep Date: **01/03/2014 16:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.422	0.05	0.4		105	70	130			
Surr: 1,2-Dichloroethane-d4	0.0107		0.01		107	70	130			
Surr: Toluene-d8	0.00992		0.01		99	70	130			
Surr: 4-Bromofluorobenzene	0.0101		0.01		101	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14010612.D** Batch ID: **MS09W0103B** Analysis Date: **01/06/2014 15:07**

Sample ID: **13123142-05AGS** Units : **mg/L** Run ID: **MSD_09_140103A** Prep Date: **01/06/2014 15:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.96	0.25	2	0	98	54	143			
Surr: 1,2-Dichloroethane-d4	0.0534		0.05		107	70	130			
Surr: Toluene-d8	0.0492		0.05		98	70	130			
Surr: 4-Bromofluorobenzene	0.0507		0.05		101	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14010613.D** Batch ID: **MS09W0103B** Analysis Date: **01/06/2014 15:30**

Sample ID: **13123142-05AGSD** Units : **mg/L** Run ID: **MSD_09_140103A** Prep Date: **01/06/2014 15:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.57	0.25	2	0	128	54	143	1.955	27.0(23)	R5
Surr: 1,2-Dichloroethane-d4	0.0497		0.05		99	70	130			
Surr: Toluene-d8	0.0467		0.05		93	70	130			
Surr: 4-Bromofluorobenzene	0.0501		0.05		100	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.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Alpha Analytical, Inc.

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Date: *14-Jan-14*

QC Summary Report

Work Order: 13123144

Method Blank

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

File ID: **14010309.D** Batch ID: **MS09W0103A** Analysis Date: **01/03/2014 17:00**

Sample ID: **MBLK MS09W0103A** Units : **µg/L** Run ID: **MSD_09_140103A** Prep Date: **01/03/2014 17:00**

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	10.8		10		108	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	9.91		10		99	70	130			

Laboratory Control Spike

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

File ID: **14010307.D** Batch ID: **MS09W0103A** Analysis Date: **01/03/2014 16:15**

Sample ID: **LCS MS09W0103A** Units : **µg/L** Run ID: **MSD_09_140103A** Prep Date: **01/03/2014 16:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	7.7	0.5	10		77	63	137			
Benzene	9.6	0.5	10		96	70	130			
Toluene	9.71	0.5	10		97	80	120			
Ethylbenzene	10.2	0.5	10		102	80	120			
Xylenes, Total	20.5	0.5	20		103	70	130			
Surr: 1,2-Dichloroethane-d4	9.55		10		96	70	130			
Surr: Toluene-d8	9.67		10		97	70	130			
Surr: 4-Bromofluorobenzene	9.95		10		100	70	130			

Sample Matrix Spike

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

File ID: **14010610.D** Batch ID: **MS09W0103A** Analysis Date: **01/06/2014 14:22**

Sample ID: **13123142-05AMS** Units : **µg/L** Run ID: **MSD_09_140103A** Prep Date: **01/06/2014 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	102	1.3	50	75.19	53	56	140			M2
Benzene	51	1.3	50	0	102	67	134			
Toluene	50.1	1.3	50	0	100	38	130			
Ethylbenzene	50.1	1.3	50	0	100	70	130			
Xylenes, Total	99.5	1.3	100	0	99.5	70	130			
Surr: 1,2-Dichloroethane-d4	53.6		50		107	70	130			
Surr: Toluene-d8	49.8		50		99.7	70	130			
Surr: 4-Bromofluorobenzene	49.6		50		99	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14010611.D** Batch ID: **MS09W0103A** Analysis Date: **01/06/2014 14:45**

Sample ID: **13123142-05AMSD** Units : **µg/L** Run ID: **MSD_09_140103A** Prep Date: **01/06/2014 14:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	89.8	1.3	50	75.19	29	56	140	101.6	12.4(40)	M2
Benzene	53.1	1.3	50	0	106	67	134	51	4.0(21)	
Toluene	51.4	1.3	50	0	103	38	130	50.05	2.7(20)	
Ethylbenzene	54.9	1.3	50	0	110	70	130	50.08	9.2(20)	
Xylenes, Total	111	1.3	100	0	111	70	130	99.52	10.6(22)	
Surr: 1,2-Dichloroethane-d4	47.6		50		95	70	130			
Surr: Toluene-d8	46.2		50		92	70	130			
Surr: 4-Bromofluorobenzene	49.2		50		98	70	130			

Alpha Analytical, Inc.

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Date: *14-Jan-14*

QC Summary Report

Work Order: 13123144

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.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

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 : TRC13123144

Report Due By : 5:00 PM On : 15-Jan-14

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 64549

Client's COC # : 16258 Job : 201892-TA03/Quik Stop #56

Cooler Temp	Samples Received	Date Printed
0 °C	31-Dec-13	31-Dec-13

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
TRC13123144-01A	MW-2	AQ	12/27/13 10:55	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						
TRC13123144-02A	MW-3	AQ	12/27/13 11:10	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						
TRC13123144-03A	MW-1	AQ	12/27/13 11:50	3	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						3-HCl VOAs received broken. Limited sample volume.
TRC13123144-04A	MW-5	AQ	12/27/13 10:10	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						
TRC13123144-05A	MW-7	AQ	12/27/13 11:30	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						
TRC13123144-06A	MW-6	AQ	12/27/13 11:45	4	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						2-HCl VOAs received broken. Limited sample volume.
TRC13123144-07A	MW-4	AQ	12/27/13 12:00	2	0	10	Low Level EtOH	GAS-C	BTEX/OXY_C						4-HCl VOAs received broken. Limited sample volume.

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

	Signature	Print Name	Company	Date/Time
Logged in by:		Sandra Nevi	Alpha Analytical, Inc.	12/31/13 1130

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:

Company: TRC
Attn: Accounts Payable
Address: 21 Griffin Road North
City, State, Zip: Windsor, CT 06095
Phone Number: (860) 298-9692 Fax: (860) 298-6399

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044
Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

16258

Page # 1 of 1

Consultant/ Client Info:

Company: TRC
Address: 2300 Clayton Rd., Ste. 610
City, State, Zip: Concord CA 94520

Job and Purchase Order Info:

Job #: 201392 -TA03
Job Name: Quik Stop #56
P.O. #: 64549

Report Attention/Project Manager:

Name: Jonathan Scheiner
Email Address: jscheiner@trcsolutions.com
Phone #: (925) 688-2473
Cell #:

QC Deliverable Info:

EDD Required? (Yes) / No EDF Required? Yes / No
Global ID: T0601977417S
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR (CA) KS NV OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Analysis Requested: Field Filtered? Yes	Field Filtered? No	TPH-G by 8260B	BTEX, MTBE, 5 Oxys by 8260B	Ethanol by 8260B	Remarks
1055	12/27	AQ	TRC312314-01A	MW-2	STD	6V		X	X	X	X	
1110			02A	MW-3								
1150			03A	MW-1								
1010			04A	MW-5								
1130			05A	MW-7								
1145			06A	MW-6								
1200	↓	↓	07A	MW-4	↓	↓	↓	↓	↓	↓	↓	

ADDITIONAL INSTRUCTIONS: Please cc results to : jchidester@trcsolutions.com

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By:

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
	12/30/13	1300	Alpha	12/31/13	1120

* Key: AQ - Aqueous WA - Waste OT - Other So-Soil ** L - Liter V - VOA S-Soil Jar O - Orbo T - Tedlar B - Brass P - Plastic OT - Other

NOTE: Samples are discarded 60 days after sample receipt 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.