

Quik Stop Markets, Inc.

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

RECEIVED

11:00 am, Aug 26, 2010

Alameda County
Environmental Health

August 24, 2010

Mr. Steve Plunkett
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: Quarterly Groundwater Monitoring Report – Second Quarter 2010

Dear Mr. Plunkett:

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

Sincerely,
QUIK STOP MARKETS, INC.



Mike Karvelot
Director of Environmental Affairs



1590 Solano Way
#A
Concord, CA 94520

925.688.1200 PHONE
925.688.0388 FAX

www.TRCsolutions.com

July 30, 2010

Project No. 174867

Mr. Steven Plunkett
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: QUARTERLY GROUNDWATER MONITORING REPORT
SECOND QUARTER 2010

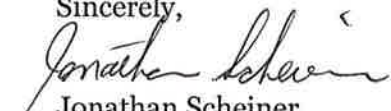
Dear Mr. Plunkett:

Enclosed is a copy of the *Second Quarter 2010 Quarterly Groundwater Monitoring Report* for the property located at 3132 Beaumont Avenue in Oakland, California. This report is submitted on behalf of Quik Stop Markets, Inc.

Please direct all questions and correspondence to:

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

Sincerely,


Jonathan Scheiner
Project Manager

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



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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: QUARTERLY GROUNDWATER MONITORING REPORT
SECOND QUARTER 2010

Dear Mr. Karvelot:

This *Second Quarter 2010 Quarterly Groundwater Monitoring Report* presents the results of the Second Quarter 2010 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 8, 2010. Refer to Table 1 for fluid-level monitoring data, and to Figure 2 for a groundwater elevation contour map based on the fluid-level measurements. A description of fluid-level monitoring procedures is included in the Appendix.

Groundwater elevations range between 123.05 feet above mean sea level (MSL) in MW-6 at the south end of the study area to 131.31 feet above MSL in MW-3 in the north, with an average elevation of 127.39 feet above MSL. Groundwater flow direction was predominantly to the southwest at a gradient of 0.071 feet per foot in the northern portion of the study area, and approximately 0.025 feet per foot over the entire extent of the well network (i.e., extending to MW-6 at the southern end of the study area). South-southeastern and western components of groundwater flow are also evident at the west and east portions of the well network, respectively. The observed variation in groundwater flow direction and gradient may be attributed to local topography, with 14th Avenue (Beaumont Avenue) forming a north-south depression relative to the steeply trending perpendicular

QUARTERLY GROUNDWATER MONITORING REPORT, SECOND QUARTER 2010

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

July 30, 2010

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

2.0 GROUNDWATER SAMPLING

2.1 Field Sampling and Analytical Testing

On June 8, 2010, 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 69 gallons of purge water and equipment rinsate were generated during groundwater sampling activities conducted on June 8, 2010. 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 2010 groundwater analytical results are summarized in Table 1 and Figure 3. TPH-G concentrations reported during this event ranged from non-detect (<50 micrograms per liter [$\mu\text{g/L}$]) to 370 $\mu\text{g/L}$ (MW-4). MTBE concentrations ranged from non-detect (<0.50 $\mu\text{g/L}$) to 500 $\mu\text{g/L}$ (MW-1), and TBA concentrations ranged from non-detect (<10 $\mu\text{g/L}$) to 3,500 $\mu\text{g/L}$ (MW-1) during this sampling event. Xylene was detected at 0.68 $\mu\text{g/L}$ in MW-4. No other analytes were detected above their respective reporting limits.

2.3 Discussion

The Second Quarter 2010 monitoring event represents the fourth monitoring with the expanded well network (i.e., including offsite wells MW-4 through MW-7), and is also the fourth 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 First Quarter 2010 monitoring event.

The presence of a detectable level of TPH-G was reported in the southern (downgradient) Site area, in well MW-4. TBA was 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-1, which is consistent with historical results.

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

The spatial pattern of MTBE in groundwater has not been defined, but will be the subject of ongoing investigation as part of the required Site Conceptual Model currently being developed per ACDEH request.

3.0 LIST OF ATTACHMENTS

- Figure 1: Vicinity Map
- Figure 2: Groundwater Elevation Contour Map, June 8, 2010
- Figure 3: Dissolved-Phase Constituent Concentrations, June 8, 2010
- Table 1: Summary of Groundwater Levels and Chemical Analysis
- Appendix: General Field Procedures, Field Measurement Forms, Official Laboratory Reports, and Chain of Custody Records

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

Sincerely,



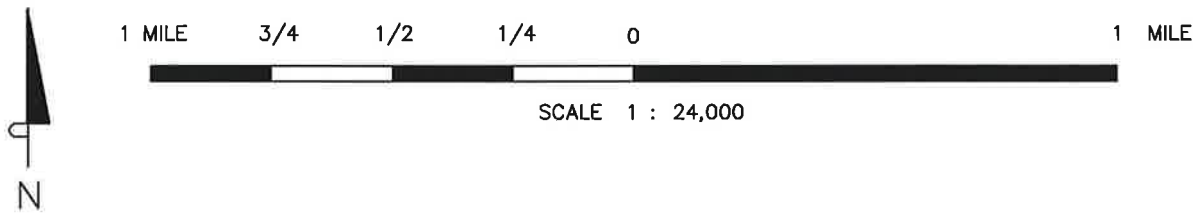
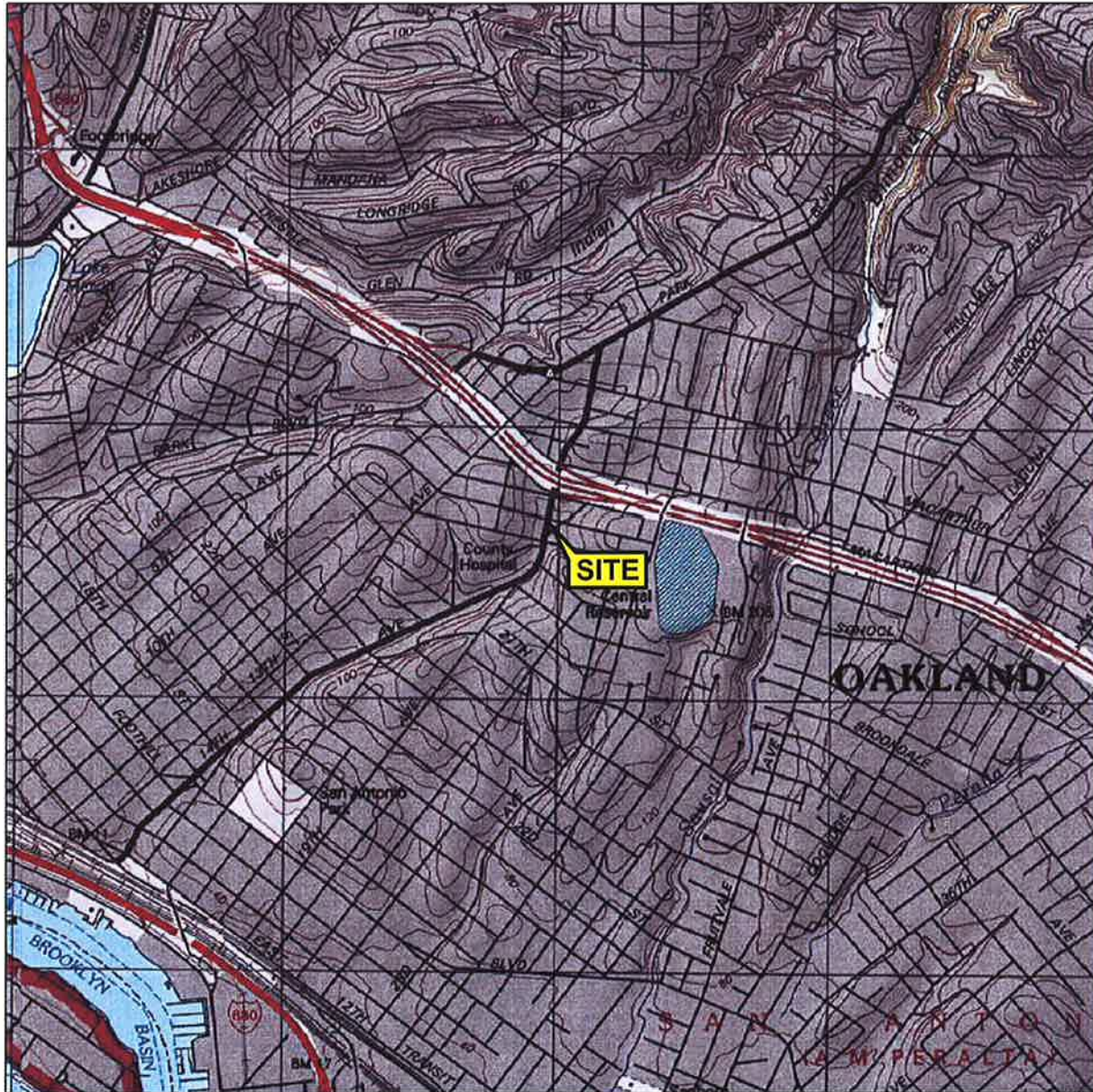
Jonathan Scheiner
Project Manager



Keith Woodburne, P.G.
Senior Project Geologist



FIGURES

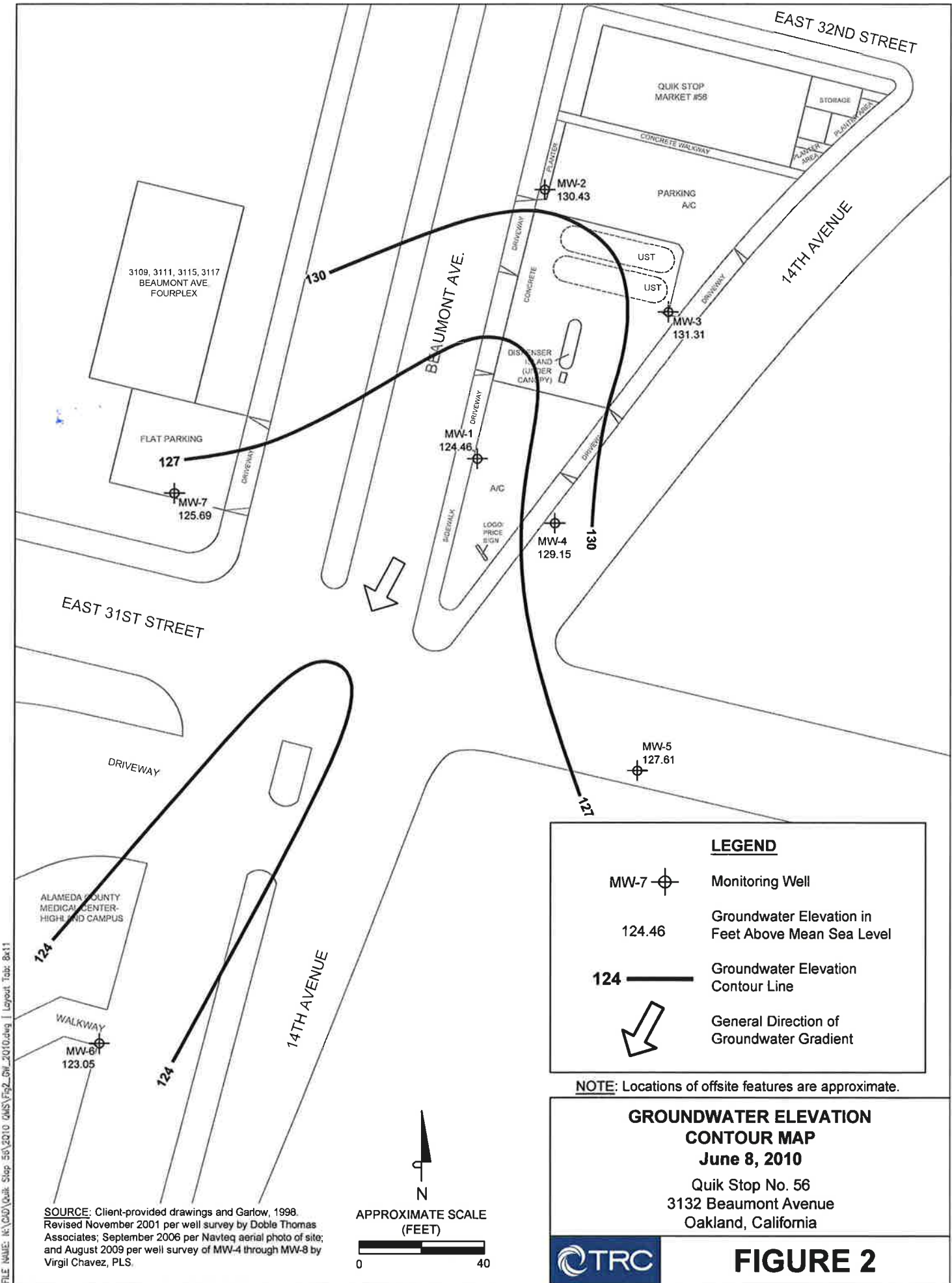


SOURCE:
 United States Geological Survey
 7.5 Minute Topographic Maps:
 Oakland East and
 Oakland West Quadrangles

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



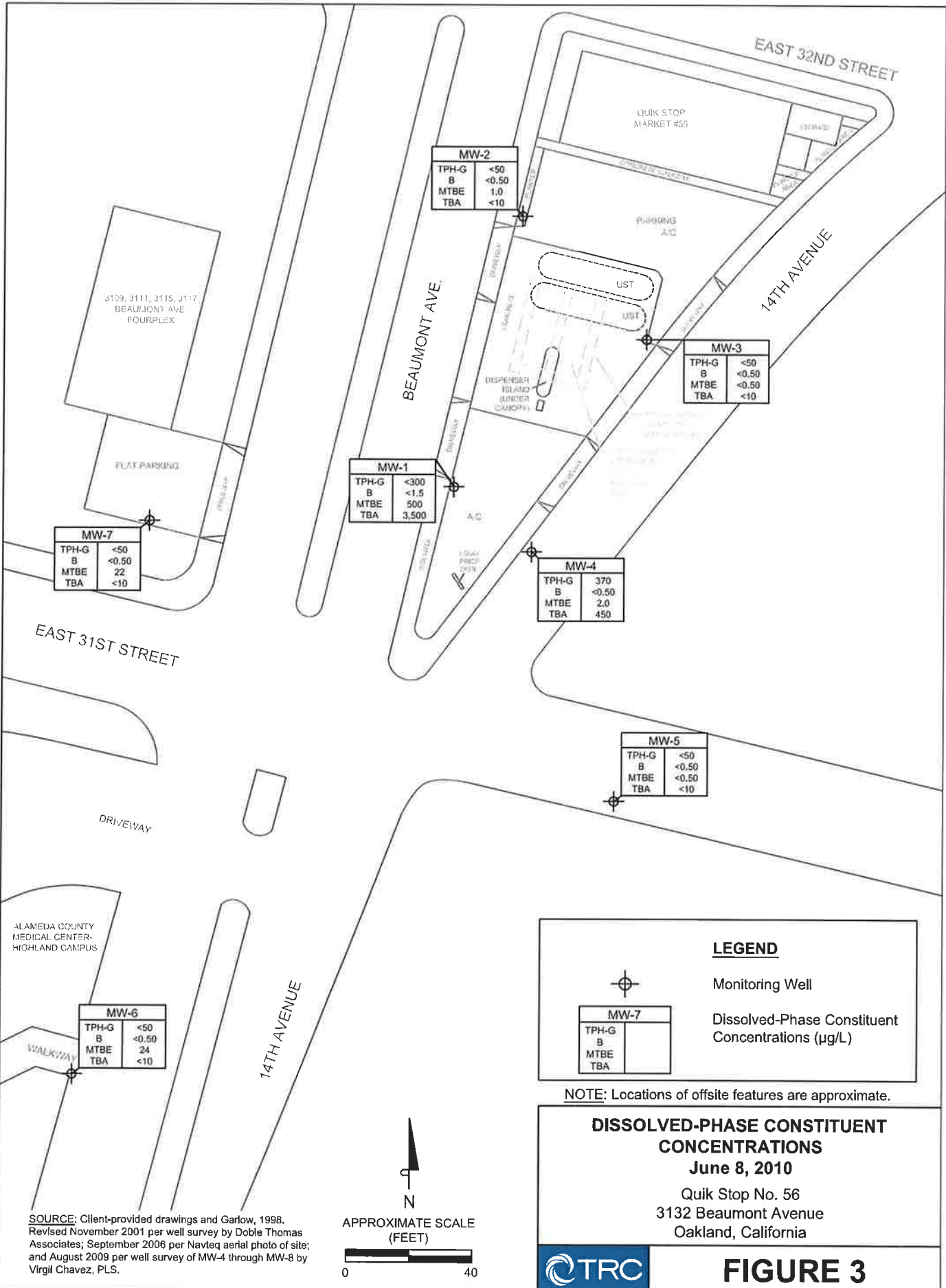
FIGURE 1



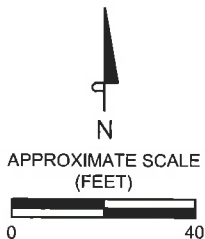
FILE NAME: H:\CAD\Quik Stop 56\2010 DMS\Fig2_GW_2010.dwg | Layout Tab: 8x11

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.

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.



LEGEND

Monitoring Well

Dissolved-Phase Constituent Concentrations (µg/L)

NOTE: Locations of offsite features are approximate.

DISSOLVED-PHASE CONSTITUENT CONCENTRATIONS
June 8, 2010
 Quik Stop No. 56
 3132 Beaumont Avenue
 Oakland, California



FIGURE 3

TABLE

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

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

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	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-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	—	—	—	—	—	—	

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	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-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-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-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	—

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

Sample ID	Date	Top of Casing	Depth to	Groundwater	TPH-G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260 (µg/L)	Ethanol (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	DO (mg/L)
		Elevation (ft-MSL)	Water (feet)	Elevation (feet)												
MW-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-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	—

NOTES:

ft-MSL = feet above mean sea level	MTBE = methyl tert butyl ether
µg/L = micrograms per liter	TBA = tertiary butyl alcohol
mg/L = milligrams per liter	DIPE = di-isopropyl ether
TPH-G = total petroleum hydrocarbons as gasoline	ETBE = ethyl tertiary butyl ether
DO = dissolved oxygen	TAME = tertiary amyl methyl ether
< = not detected at or above the stated detection limit	

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.

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidner

Site: Quick Stop 56

Project No.: 174867

Date: 06/08/10

Well No. MW-1

Purge Method: Sub

Depth to Water (feet): 9.67

Depth to Product (feet):

Total Depth (feet): 30.10

LPH & Water Recovered (gallons):

Water Column (feet): 20.43

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 13.76

1 Well Volume (gallons): 4

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0948			4	978.2	19.9	6.66			
			8	955.4	20.1	6.58			
	0954		12	997.4	20.3	6.49			
Static at Time Sampled			Total Gallons Purged			Sample Time			
13.75			12			1115			
Comments:									

Well No. MW-6

Purge Method: Sub

Depth to Water (feet): 5.78

Depth to Product (feet):

Total Depth (feet): 19.74

LPH & Water Recovered (gallons):

Water Column (feet): 13.96

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 8.57

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0819			3	1047	17.7	6.84			
	0823		6	1117	18.0	6.78			
0826	0829		9	1113	19.3	6.81			
Static at Time Sampled			Total Gallons Purged			Sample Time			
8.57			9			0848			
Comments: <u>Dry at 6 gallons, recharged quickly</u>									

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidler

Site: Quick Stop 56

Project No.: 174867

Date: 06/08/10

Well No. MW-5

Purge Method: HB

Depth to Water (feet): 5.97

Depth to Product (feet):

Total Depth (feet): 10.23

LPH & Water Recovered (gallons):

Water Column (feet): 4.26

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 6.82

1 Well Volume (gallons): 1

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0925			1	295.4	18.2	6.76			
			2	293.2	18.3	6.63			
	0930		3	288.1	18.5	6.54			
Static at Time Sampled			Total Gallons Purged			Sample Time			
6.07			3			1049			
Comments:									

Well No. MW-4

Purge Method: HB

Depth to Water (feet): 4.44

Depth to Product (feet):

Total Depth (feet): 14.77

LPH & Water Recovered (gallons):

Water Column (feet): 10.33

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 6.51

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0933			2	650.5	19.2	6.39			
			4	686.9	19.3	6.59			
	0941		6	690.9	19.4	6.65			
Static at Time Sampled			Total Gallons Purged			Sample Time			
4.52			6			1104			
Comments:									

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidars

Site: Quick Stop 56

Project No.: 174867

Date: 06/08/16

Well No. MW-2

Purge Method: Sub

Depth to Water (feet): 4.73

Depth to Product (feet): —

Total Depth (feet): 29.98

LPH & Water Recovered (gallons): —

Water Column (feet): 25.25

Casing Diameter (Inches): 2

80% Recharge Depth(feet): ~~3.43~~ 9.78

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0745			5	1234	19.3	6.10			
			10	1298	19.4	6.11			
	0751		15	1302	19.3	6.24			
Static at Time Sampled			Total Gallons Purged			Sample Time			
4.98			15			1017			
Comments:									

Well No. MW-3

Purge Method: Sub

Depth to Water (feet): 5.04

Depth to Product (feet): —

Total Depth (feet): 30.35

LPH & Water Recovered (gallons): —

Water Column (feet): 25.31

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 10.10

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0759			5	1043	18.0	6.63			
			10	1035	19.4	6.65			
	0807		15	1035	19.5	6.73			
Static at Time Sampled			Total Gallons Purged			Sample Time			
5.07			15			1027			
Comments:									



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
1590 Solano Way Suite A
Concord, CA 94520

Attn: Jonathan Scheiner
Phone: (925) 688-2473
Fax: (925) 688-0388
Date Received : 06/10/10

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 : TRC10061043-01A Ethanol Date Sampled 06/08/10 10:17	ND	5.0 µg/L	06/14/10 10:49	06/14/10
Client ID: MW-3 Lab ID : TRC10061043-02A Ethanol Date Sampled 06/08/10 10:27	ND	5.0 µg/L	06/14/10 10:49	06/14/10
Client ID: MW-1 Lab ID : TRC10061043-03A Ethanol Date Sampled 06/08/10 11:15	ND	5.0 µg/L	06/14/10 10:49	06/14/10
Client ID: MW-6 Lab ID : TRC10061043-04A Ethanol Date Sampled 06/08/10 08:48	ND	5.0 µg/L	06/14/10 10:49	06/14/10
Client ID: MW-5 Lab ID : TRC10061043-05A Ethanol Date Sampled 06/08/10 10:49	ND	5.0 µg/L	06/14/10 10:49	06/14/10
Client ID: MW-4 Lab ID : TRC10061043-06A Ethanol Date Sampled 06/08/10 11:04	ND	5.0 µg/L	06/14/10 10:49	06/14/10
Client ID: MW-7 Lab ID : TRC10061043-07A Ethanol Date Sampled 06/08/10 11:15	ND	5.0 µg/L	06/14/10 10:49	06/14/10

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

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

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

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

PS

6/23/10

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
1590 Solano Way Suite A
Concord, CA 94520

Attn: Jonathan Scheiner
Phone: (925) 688-2473
Fax: (925) 688-0388
Date Received : 06/10/10

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 : TRC10061043-01A	TPH-P (GRO)	ND	0.050 mg/L	06/18/10	06/18/10	
Date Sampled 06/08/10 10:17	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/18/10	06/18/10	
	Methyl tert-butyl ether (MTBE)	1.0	0.50 µg/L	06/18/10	06/18/10	
	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/18/10	06/18/10	
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/18/10	06/18/10	
	Benzene	ND	0.50 µg/L	06/18/10	06/18/10	
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/18/10	06/18/10	
	Toluene	ND	0.50 µg/L	06/18/10	06/18/10	
	Ethylbenzene	ND	0.50 µg/L	06/18/10	06/18/10	
	Xylenes, Total	ND	0.50 µg/L	06/18/10	06/18/10	
Client ID : MW-3						
Lab ID : TRC10061043-02A	TPH-P (GRO)	ND	0.050 mg/L	06/18/10	06/18/10	
Date Sampled 06/08/10 10:27	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/18/10	06/18/10	
	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	06/18/10	06/18/10	
	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/18/10	06/18/10	
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/18/10	06/18/10	
	Benzene	ND	0.50 µg/L	06/18/10	06/18/10	
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/18/10	06/18/10	
	Toluene	ND	0.50 µg/L	06/18/10	06/18/10	
	Ethylbenzene	ND	0.50 µg/L	06/18/10	06/18/10	
	Xylenes, Total	ND	0.50 µg/L	06/18/10	06/18/10	
Client ID : MW-1						
Lab ID : TRC10061043-03A	TPH-P (GRO)	ND	V	0.30 mg/L	06/18/10	06/18/10
Date Sampled 06/08/10 11:15	Tertiary Butyl Alcohol (TBA)	3,500		30 µg/L	06/18/10	06/18/10
	Methyl tert-butyl ether (MTBE)	500		1.5 µg/L	06/18/10	06/18/10
	Di-isopropyl Ether (DIPE)	ND	V	3.0 µg/L	06/18/10	06/18/10
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	3.0 µg/L	06/18/10	06/18/10
	Benzene	ND	V	1.5 µg/L	06/18/10	06/18/10
	Tertiary Amyl Methyl Ether (TAME)	ND	V	3.0 µg/L	06/18/10	06/18/10
	Toluene	ND	V	1.5 µg/L	06/18/10	06/18/10
	Ethylbenzene	ND	V	1.5 µg/L	06/18/10	06/18/10
	Xylenes, Total	ND	V	1.5 µg/L	06/18/10	06/18/10



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Client ID :	MW-6					
Lab ID :	TRC10061043-04A	TPH-P (GRO)	ND	0.050 mg/L	06/18/10	06/18/10
Date Sampled	06/08/10 08:48	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/18/10	06/18/10
		Methyl tert-butyl ether (MTBE)	24	0.50 µg/L	06/18/10	06/18/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/18/10	06/18/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/18/10	06/18/10
		Benzene	ND	0.50 µg/L	06/18/10	06/18/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/18/10	06/18/10
		Toluene	ND	0.50 µg/L	06/18/10	06/18/10
		Ethylbenzene	ND	0.50 µg/L	06/18/10	06/18/10
		Xylenes, Total	ND	0.50 µg/L	06/18/10	06/18/10
Client ID :	MW-5					
Lab ID :	TRC10061043-05A	TPH-P (GRO)	ND	0.050 mg/L	06/18/10	06/18/10
Date Sampled	06/08/10 10:49	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/18/10	06/18/10
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	06/18/10	06/18/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/18/10	06/18/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/18/10	06/18/10
		Benzene	ND	0.50 µg/L	06/18/10	06/18/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/18/10	06/18/10
		Toluene	ND	0.50 µg/L	06/18/10	06/18/10
		Ethylbenzene	ND	0.50 µg/L	06/18/10	06/18/10
		Xylenes, Total	ND	0.50 µg/L	06/18/10	06/18/10
Client ID :	MW-4					
Lab ID :	TRC10061043-06A	TPH-P (GRO)	0.37	0.050 mg/L	06/18/10	06/18/10
Date Sampled	06/08/10 11:04	Tertiary Butyl Alcohol (TBA)	450	10 µg/L	06/18/10	06/18/10
		Methyl tert-butyl ether (MTBE)	2.0	0.50 µg/L	06/18/10	06/18/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/18/10	06/18/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/18/10	06/18/10
		Benzene	ND	0.50 µg/L	06/18/10	06/18/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/18/10	06/18/10
		Toluene	ND	0.50 µg/L	06/18/10	06/18/10
		Ethylbenzene	ND	0.50 µg/L	06/18/10	06/18/10
		Xylenes, Total	0.68	0.50 µg/L	06/18/10	06/18/10
Client ID :	MW-7					
Lab ID :	TRC10061043-07A	TPH-P (GRO)	ND	0.050 mg/L	06/18/10	06/18/10
Date Sampled	06/08/10 11:15	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	06/18/10	06/18/10
		Methyl tert-butyl ether (MTBE)	22	0.50 µg/L	06/18/10	06/18/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	06/18/10	06/18/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	06/18/10	06/18/10
		Benzene	ND	0.50 µg/L	06/18/10	06/18/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	06/18/10	06/18/10
		Toluene	ND	0.50 µg/L	06/18/10	06/18/10
		Ethylbenzene	ND	0.50 µg/L	06/18/10	06/18/10
		Xylenes, Total	ND	0.50 µg/L	06/18/10	06/18/10



Alpha Analytical, Inc.

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Gasoline Range Organics (GRO) C4-C13

V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

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

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

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

PS

6/23/10

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

Date:
23-Jun-10

QC Summary Report

Work Order:
10061043

Method Blank

File ID: C:\HPCHEM\MS11\DATA\100614\10061409.D	Type: MBLK	Test Code: EPA Method SW8260B-DI	Batch ID: 24463	Analysis Date: 06/14/2010 17:56						
Sample ID: MBLK-24463	Units : µg/L	Run ID: MSD_11_100614A	Prep Date: 06/14/2010 10:49							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	ND	5								
Surr: Hexafluoro-2-propanol	363		500		73	70	130			

Laboratory Control Spike

File ID: C:\HPCHEM\MS11\DATA\100614\10061405.D	Type: LCS	Test Code: EPA Method SW8260B-DI	Batch ID: 24463	Analysis Date: 06/14/2010 15:22						
Sample ID: LCS-24463	Units : µg/L	Run ID: MSD_11_100614A	Prep Date: 06/14/2010 10:49							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	231	5	250		92	70	142			
Surr: Hexafluoro-2-propanol	395		500		79	70	130			

Sample Matrix Spike

File ID: C:\HPCHEM\MS11\DATA\100614\10061407.D	Type: MS	Test Code: EPA Method SW8260B-DI	Batch ID: 24463	Analysis Date: 06/14/2010 16:37						
Sample ID: 10061043-02AMS	Units : µg/L	Run ID: MSD_11_100614A	Prep Date: 06/14/2010 10:49							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	280	5	250	0	112	68	143			
Surr: Hexafluoro-2-propanol	490		500		98	70	130			

Sample Matrix Spike Duplicate

File ID: C:\HPCHEM\MS11\DATA\100614\10061408.D	Type: MSD	Test Code: EPA Method SW8260B-DI	Batch ID: 24463	Analysis Date: 06/14/2010 16:56						
Sample ID: 10061043-02AMSD	Units : µg/L	Run ID: MSD_11_100614A	Prep Date: 06/14/2010 10:49							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Ethanol	319	5	250	0	128	68	143	279.8	13.2(20)	
Surr: Hexafluoro-2-propanol	510		500		102	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.

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Date:
23-Jun-10

QC Summary Report

Work Order:
10061043

Method Blank

File ID: 10061804.D	Type: MBLK	Test Code: EPA Method SW8015	Batch ID: MS12W0618B	Analysis Date: 06/18/2010 09:56						
Sample ID: MBLK MS12W0618B	Units : mg/L	Run ID: MSD_12_100618A	Prep Date: 06/18/2010 09:56							
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	0.00878		0.01		88	70	130			
Surr: Toluene-d8	0.0102		0.01		102	70	130			
Surr: 4-Bromofluorobenzene	0.00906		0.01		91	70	130			

Laboratory Control Spike

File ID: 10061802.D	Type: LCS	Test Code: EPA Method SW8015	Batch ID: MS12W0618B	Analysis Date: 06/18/2010 09:10						
Sample ID: GLCS MS12W0618B	Units : mg/L	Run ID: MSD_12_100618A	Prep Date: 06/18/2010 09:10							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.375	0.05	0.4		94	70	130			
Surr: 1,2-Dichloroethane-d4	0.0089		0.01		89	70	130			
Surr: Toluene-d8	0.00984		0.01		98	70	130			
Surr: 4-Bromofluorobenzene	0.00977		0.01		98	70	130			

Sample Matrix Spike

File ID: 10061819.D	Type: MS	Test Code: EPA Method SW8015	Batch ID: MS12W0618B	Analysis Date: 06/18/2010 15:43						
Sample ID: 10061043-01AGS	Units : mg/L	Run ID: MSD_12_100618A	Prep Date: 06/18/2010 15:43							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.61	0.25	2	0	80	58	135			
Surr: 1,2-Dichloroethane-d4	0.0448		0.05		90	70	130			
Surr: Toluene-d8	0.0496		0.05		99	70	130			
Surr: 4-Bromofluorobenzene	0.0481		0.05		96	70	130			

Sample Matrix Spike Duplicate

File ID: 10061820.D	Type: MSD	Test Code: EPA Method SW8015	Batch ID: MS12W0618B	Analysis Date: 06/18/2010 16:06						
Sample ID: 10061043-01AGSD	Units : mg/L	Run ID: MSD_12_100618A	Prep Date: 06/18/2010 16:06							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.71	0.25	2	0	86	58	135	1.606	6.3(20)	
Surr: 1,2-Dichloroethane-d4	0.0449		0.05		90	70	130			
Surr: Toluene-d8	0.0498		0.05		99.6	70	130			
Surr: 4-Bromofluorobenzene	0.0489		0.05		98	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.

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Date:
23-Jun-10

QC Summary Report

Work Order:
10061043

Method Blank

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

File ID: **10061804.D**

Batch ID: **MS12W0618A**

Analysis Date: **06/18/2010 09:56**

Sample ID: **MBLK MS12W0618A**

Units: **µg/L**

Run ID: **MSD_12_100618A**

Prep Date: **06/18/2010 09:56**

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	8.78		10		88	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	9.06		10		91	70	130			

Laboratory Control Spike

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

File ID: **10061803.D**

Batch ID: **MS12W0618A**

Analysis Date: **06/18/2010 09:33**

Sample ID: **LCS MS12W0618A**

Units: **µg/L**

Run ID: **MSD_12_100618A**

Prep Date: **06/18/2010 09:33**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.66	0.5	10		97	62	136			
Benzene	11.3	0.5	10		113	70	130			
Toluene	10.8	0.5	10		108	80	120			
Ethylbenzene	10.4	0.5	10		104	80	120			
Xylenes, Total	21.1	0.5	20		105	70	130			
Surr: 1,2-Dichloroethane-d4	8.51		10		85	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	9.91		10		99	70	130			

Sample Matrix Spike

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

File ID: **10061817.D**

Batch ID: **MS12W0618A**

Analysis Date: **06/18/2010 14:57**

Sample ID: **10061043-01AMS**

Units: **µg/L**

Run ID: **MSD_12_100618A**

Prep Date: **06/18/2010 14:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	45	1.3	50	1.01	88	56	141			
Benzene	52.5	1.3	50	0	105	67	130			
Toluene	50.2	1.3	50	0	100	66	130			
Ethylbenzene	49.2	1.3	50	0	98	68	130			
Xylenes, Total	98.3	1.3	100	0	98	70	130			
Surr: 1,2-Dichloroethane-d4	44.1		50		88	70	130			
Surr: Toluene-d8	49.9		50		99.9	70	130			
Surr: 4-Bromofluorobenzene	49		50		98	70	130			

Sample Matrix Spike Duplicate

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

File ID: **10061818.D**

Batch ID: **MS12W0618A**

Analysis Date: **06/18/2010 15:20**

Sample ID: **10061043-01AMSD**

Units: **µg/L**

Run ID: **MSD_12_100618A**

Prep Date: **06/18/2010 15:20**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	46	1.3	50	1.01	90	56	141	45.02	2.1(20)	
Benzene	52.6	1.3	50	0	105	67	130	52.47	0.3(20)	
Toluene	50.1	1.3	50	0	100	66	130	50.2	0.3(20)	
Ethylbenzene	48.7	1.3	50	0	97	68	130	49.19	1.0(20)	
Xylenes, Total	99.2	1.3	100	0	99	70	130	98.25	1.0(20)	
Surr: 1,2-Dichloroethane-d4	44.3		50		89	70	130			
Surr: Toluene-d8	50.2		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.8		50		98	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.

CHAIN-OF-CUSTODY RECORD

CA

WorkOrder : TRC10061043

Report Due By : 5:00 PM On : 24-Jun-10

Alpha Analytical, Inc.

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

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

Client:
TRC-Alton Geoscience
1590 Solano Way Suite A

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

EDD Required : Yes

Sampled by : Client

Concord, CA 94520

PO : 24004

Client's COC # : 29488


Job : Quick Stop 56

Cooler Temp	Samples Received	Date Printed
4 °C	10-Jun-10	10-Jun-10

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

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles			Requested Tests					Sample Remarks			
				Alpha	Sub	TAT	ALCOHOL_W	TPH/P_W	VOC_W						
TRC10061043-01A	MW-2	AQ	06/08/10 10:17	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						
TRC10061043-02A	MW-3	AQ	06/08/10 10:27	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						
TRC10061043-03A	MW-1	AQ	06/08/10 11:15	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						
TRC10061043-04A	MW-6	AQ	06/08/10 08:48	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						
TRC10061043-05A	MW-5	AQ	06/08/10 10:49	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						
TRC10061043-06A	MW-4	AQ	06/08/10 11:04	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						
TRC10061043-07A	MW-7	AQ	06/08/10 11:15	6	0	10	Low Level EtOH	GAS-C	BTEX/OXY C						

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

Logged in by:	Signature	Print Name	Company	Date/Time
		Tara Dickenson	Alpha Analytical, Inc.	6/10/10 1029


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
 Address 1590 Solano way ste. A
 City, State, Zip Concord, CA 94520
 Phone Number 925 688 1200 Fax 925 688 0388

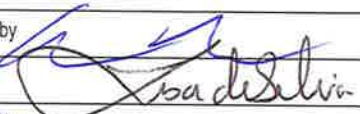
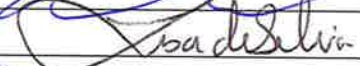



Alpha Analytical, Inc.
 255 Glendale Avenue, Suite 21
 Sparks, Nevada 89431-5778
 Phone (775) 355-1044
 Fax (775) 355-0406

Samples Collected From Which State? **29488**
 AZ CA NV WA
 ID OR OTHER Page # 1 of 1

Client Name		P.O. #		Job #		Analyses Required						Required QC Level?					
TRC		24004		Quick Stop 56		TPH-g by 8260B BTEX/MTEB/SOXYs 8260B Ethanol by 8260B						I II III IV					
Address		E-Mail Address		Phone #								Fax #		EDD / EDF? YES ___ NO ___			
1590 Solano way		Jsheiner@Trcsolutions.com		925 688-2473								925 688 0388		Global ID # _____			
Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by	Report Attention	TAT	Field Filtered	Total and type of containers ** See below	REMARKS									
			Lab ID Number <small>(Office Use Only)</small>	Sample Description													
1017	06/08/10	AQ	TRC100061043-01	MW-2	STD	N	6V	X	X	X							
1027				-02 MW-3													
1115				-03 MW-1													
0848				-04 MW-6													
1049				-05 MW-5													
1104				-06 MW-4													
1115				-07 MW-7													

ADDITIONAL INSTRUCTIONS: send edf to Jonathan Scheiner a Jsheiner@Trcsolutions.com

Signature	Print Name	Company	Date	Time
Relinquished by 	Andrew Vidners	TRC	06/08/10	1300
Received by 	LISA deSilva	ALPHA	6-9-10	11:15
Relinquished by 	Tara Dickinson	Alpha	6/10/10	1023
Received by				
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.