

RO 123

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Customer-Focused Solutions

January 30, 2004

Project 41-0236

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

Alameda County
FEB 03 2004
Environmental Health

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

RE: QUARTERLY GROUNDWATER MONITORING REPORT, FOURTH QUARTER 2003

Dear Mr. Hwang:

Enclosed is a copy of the *Fourth Quarter 2003 Quarterly Groundwater Monitoring Report* for the property located at 3132 Beaumont Avenue in Oakland, California. This report is submitted on behalf of our client, 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
Associate

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

Ro 123



Customer-Focused Solutions

January 30, 2004

Project 41-0236

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

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

Alameda County
FEB 03 2004
Environmental Health

RE: QUARTERLY GROUNDWATER MONITORING REPORT, FOURTH QUARTER 2003

Dear Mr. Karvelot:

This *Fourth Quarter 2003 Groundwater Monitoring Report* presents the results of the Fourth Quarter 2003 fluid level monitoring and groundwater sampling at the above-referenced site. The work at this 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

Fluid levels were measured in onsite monitoring wells MW-1, MW-2 and MW-3 on December 24, 2003. Groundwater elevations averaged 128.85 feet above mean sea level (MSL). Groundwater flow direction was to the west at a gradient of 0.07 foot-per-foot. Refer to Table 1 for fluid-level monitoring data. Figure 2 is a groundwater elevation contour map based on the fluid-level measurements. A description of fluid-level monitoring procedures is included in Appendix A.

2.0 GROUNDWATER SAMPLING

On December 24, 2003, groundwater samples were collected from onsite wells MW-1, MW-2 and MW-3. Groundwater samples were submitted to a state-certified laboratory for analysis of total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tert-butyl ether (MTBE), using EPA Methods 8015B and 8260B. Refer to Table 1 and Figure 3 for a summary of analytical results. General Field Procedures, Official Laboratory Reports and Chain of Custody Documents are included in the Appendix.

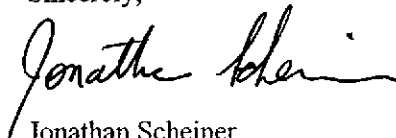
Approximately 53 gallons of purge water was generated during groundwater sampling activities conducted on December 24, 2003. The purge water was stored onsite in one Department of Transportation-approved 55-gallon drum pending disposal.

3.0 LIST OF ATTACHMENTS

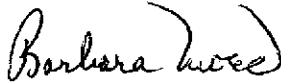
- Figure 1: Vicinity Map
- Figure 2: Groundwater Elevation Contour Map, December 24, 2003
- Figure 3: Dissolved-Phase Hydrocarbon Concentrations, December 24, 2003
- Table 1: Summary of Groundwater Levels and Chemical Analysis
- Appendix A: General Field Procedures, Official Laboratory Reports, and Chain of Custody Records

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

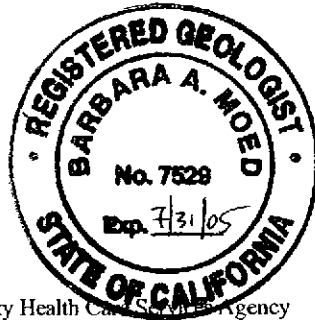
Sincerely,



Jonathan Scheiner
Associate



Barbara Moed, R.G.
Senior Project Geologist



cc: Mr. Don Hwang, Alameda County Health Care Services Agency

FIGURES



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



SCALE 1 : 24,000



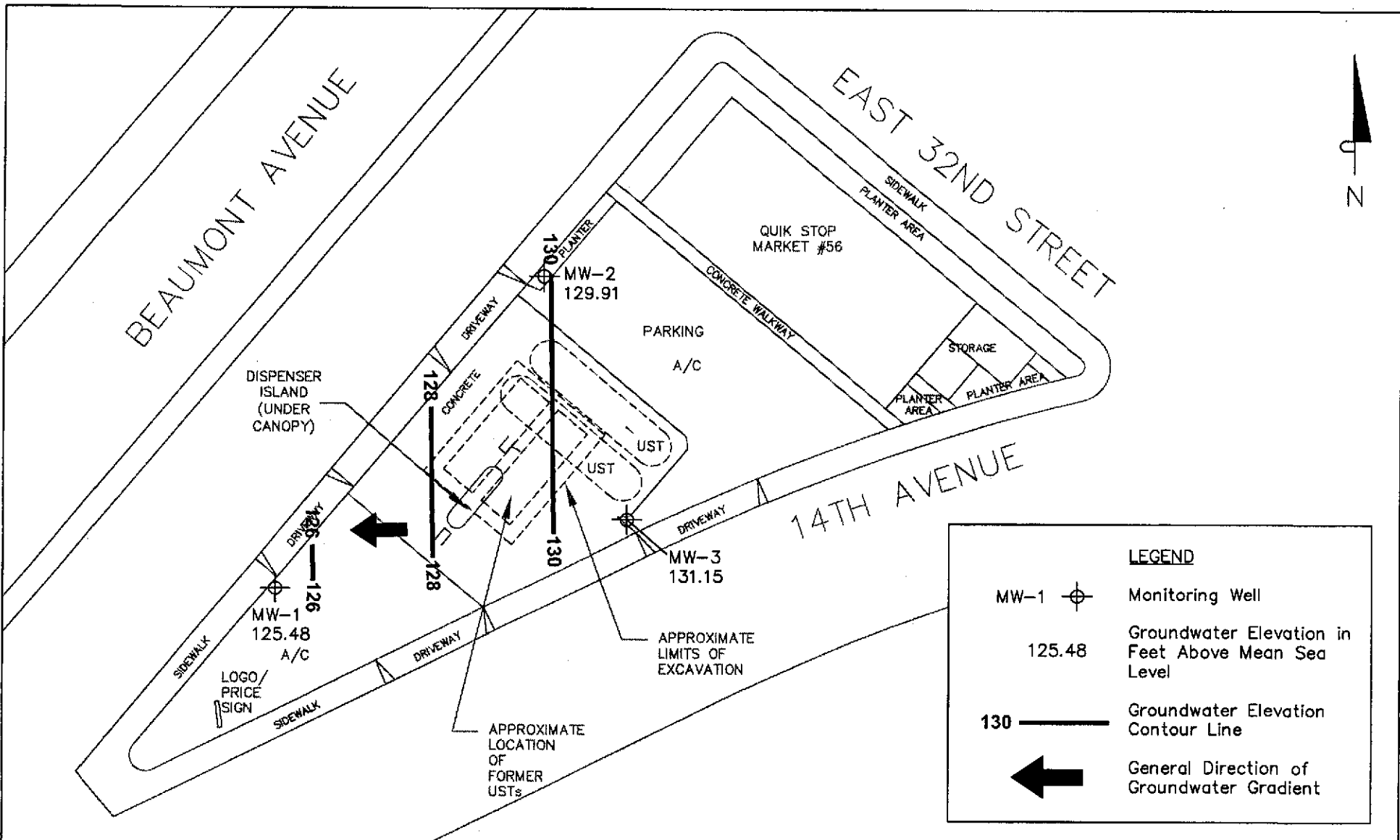
SOURCE:
 United States Geological Survey
 7.5 Minute Topographic Maps:
 Oakland East and
 Oakland West Quadrangles

VICINITY MAP




Quik Stop No. 56
 3132 Beaumont Avenue
 Oakland, California

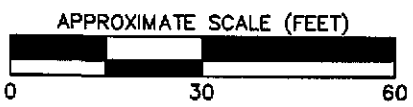
TRC

FIGURE 1



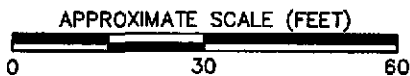
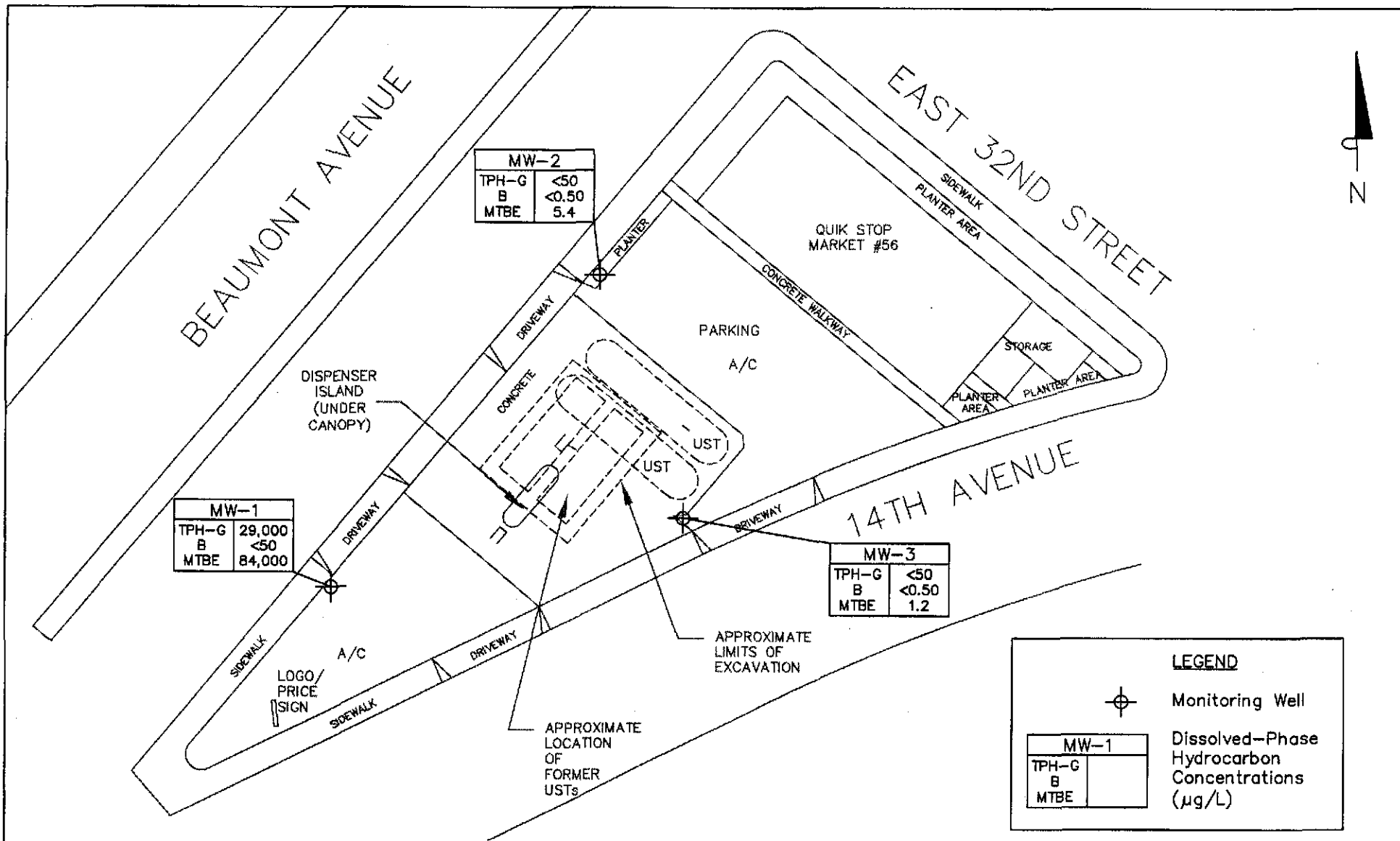
LEGEND

- MW-1  Monitoring Well
- 125.48 Groundwater Elevation in Feet Above Mean Sea Level
- 130  Groundwater Elevation Contour Line
-  General Direction of Groundwater Gradient



NOTES:
 Contour lines are interpretive based on fluid level measurements taken on December 24, 2003. Contour interval = 2 feet.
SOURCE: Client-provided drawings and Garlow, 1998. Site plan updated per 11/27/01 well survey by Doble Thomas Associates.

GROUNDWATER ELEVATION CONTOUR MAP
 December 24, 2003
 Quik Stop No. 56
 3132 Beaumont Avenue
 Oakland, California



NOTES:
 Results are based on laboratory analysis of groundwater samples collected on December 24, 2003. $\mu\text{g/L}$ = micrograms per liter; TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; MTBE = methyl tert butyl ether; < = not detected at or above the reported method detection limit.

SOURCE: Client-provided drawings and Garlow, 1998. Site plan updated per 11/27/01 well survey by Doble Thomas Associates.

LEGEND									
	Monitoring Well								
<table border="1" data-bbox="1501 1089 1669 1192"> <tr><th colspan="2">MW-1</th></tr> <tr><td>TPH-G</td><td></td></tr> <tr><td>B</td><td></td></tr> <tr><td>MTBE</td><td></td></tr> </table>	MW-1		TPH-G		B		MTBE		Dissolved-Phase Hydrocarbon Concentrations ($\mu\text{g/L}$)
MW-1									
TPH-G									
B									
MTBE									

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
 December 24, 2003
 Quik Stop No. 56
 3132 Beaumont Avenue
 Oakland, California

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)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (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	8,600	<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-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	<0.50	6.6	—
MW-2	12/24/03	135.16	5.25	129.91	<50	<0.50	<0.50	<0.50	<0.50	5.4	—
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	129.79	<50	<0.50	<0.50	<0.50	<0.50	5.8	—
MW-3	01/06/04	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	—

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
 MTBE = methyl tert butyl ether
 DO = dissolved oxygen
 < = not detected at or above the stated detection limit

APPENDIX A

**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.

GROUND WATER SAMPLING FIELD NOTES

Site: Quick Stop 56 Project No.: 41023607 Sampled By: J. Chidester Date: 12/24/03

Well No. MW-2 Purge Method: 2" electric
 Total Depth (feet) 29.92 Depth to Product (feet): -
 Depth to Water (feet): 5.25 Product Recovered (gallons): -
 Water Column (feet): 24.67 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 10.18 1 Well Volume (gallons): 3.95

Well No. MW-3 Purge Method: 2" electric
 Total Depth (feet) 30.69 Depth to Product (feet): -
 Depth to Water (feet): 5.20 Product Recovered (gallons): -
 Water Column (feet): 25.49 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 10.30 1 Well Volume (gallons): 4.08

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temper- ature (F, C)	pH
1015						
	1025					
Total Purged			12	Time Sampled		1040
Comments: <u>TOO WET FOR HYDAC</u>						
Turbidity= <u>READINGS</u>						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temper- ature (F, C)	pH
1050						
	1109					
Total Purged			12	Time Sampled		1130
Comments:						
Turbidity=						

Well No. MW-1 Purge Method: 2" electric
 Total Depth (feet) 30.05 Depth to Product (feet): -
 Depth to Water (feet): 8.65 Product Recovered (gallons): -
 Water Column (feet): 21.40 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 12.93 1 Well Volume (gallons): 3.42

Well No. _____ Purge Method: _____
 Total Depth (feet) _____ Depth to Product (feet): _____
 Depth to Water (feet): _____ Product Recovered (gallons): _____
 Water Column (feet): _____ Casing Diameter (Inches): _____
 80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temper- ature (F, C)	pH
1140						
	1200					
Total Purged			10	Time Sampled		1230
Comments:						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temper- ature (F, C)	pH
Total Purged				Time Sampled		
Comments:						
Turbidity=						

Well No. _____ Purge Method: _____
 Total Depth (feet) _____ Depth to Product (feet): _____
 Depth to Water (feet): _____ Product Recovered (gallons): _____
 Water Column (feet): _____ Casing Diameter (Inches): _____
 80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____

Well No. _____ Purge Method: _____
 Total Depth (feet) _____ Depth to Product (feet): _____
 Depth to Water (feet): _____ Product Recovered (gallons): _____
 Water Column (feet): _____ Casing Diameter (Inches): _____
 80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temper- ature (F, C)	pH
Total Purged				Time Sampled		
Comments:						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temper- ature (F, C)	pH
Total Purged				Time Sampled		
Comments:						
Turbidity=						



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
5052 Commercial Circle
Concord, CA 94520

Attn: Chris Brown
Phone (925) 688-1200
Fax: (925) 688-0388
Date Received 12/31/03

Job#: 41023607-TA04/Quick Stop #56

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

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH Purgeable	ND	50 µg/L	12/24/03	01/02/04
MW-2	Methyl tert-butyl ether (MTBE)	5.4	0.50 µg/L	12/24/03	01/02/04
Lab ID :	Benzene	ND	0.50 µg/L	12/24/03	01/02/04
TRC03123143-01A	Toluene	ND	0.50 µg/L	12/24/03	01/02/04
	Ethylbenzene	ND	0.50 µg/L	12/24/03	01/02/04
	Xylenes, Total	ND	0.50 µg/L	12/24/03	01/02/04
Client ID :	TPH Purgeable	ND	50 µg/L	12/24/03	01/02/04
MW-3	Methyl tert-butyl ether (MTBE)	1.2	0.50 µg/L	12/24/03	01/02/04
Lab ID :	Benzene	ND	0.50 µg/L	12/24/03	01/02/04
TRC03123143-02A	Toluene	ND	0.50 µg/L	12/24/03	01/02/04
	Ethylbenzene	ND	0.50 µg/L	12/24/03	01/02/04
	Xylenes, Total	ND	0.50 µg/L	12/24/03	01/02/04
Client ID :	TPH Purgeable	29,000	10,000 µg/L	12/24/03	01/02/04
MW-1	Methyl tert-butyl ether (MTBE)	84,000	50 µg/L	12/24/03	01/02/04
Lab ID :	Benzene	ND	V	50 µg/L	12/24/03
TRC03123143-03A	Toluene	ND	V	50 µg/L	12/24/03
	Ethylbenzene	ND	V	50 µg/L	12/24/03
	Xylenes, Total	ND	V	50 µg/L	12/24/03

Reported in micrograms per liter, per client request.

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

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 / Wichita, KS • (316) 722-5890 / info@alpha-analytical.com

1/14/04

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

VOC pH Report

Work Order TRC03123143

Project: 41023607-TA04/Quick Stop #56

Alpha's Sample ID	Client's Sample ID	Matrix	pH
03123143-01A	MW-2	Aqueous	2
03123143-02A	MW-3	Aqueous	2
03123143-03A	MW-1	Aqueous	2

1/14/04
Report Date

Billing Information:

Name Quick Stop # 56
 Address 3132 Beaumont Ave.
 City, State, Zip Oakland, CA
 Phone Number _____ Fax _____



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

CA

Analyses Required

04082

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sampled by James Chidester	Report Attention Chris Brown	Total and type of containers ** See below	Analyses Required							REMARKS	
							TPH-G	BTEX	MTBE						
1040	12/30/03	AQ	TRC03023143-01			4 VOA's	X	X	X						
1130	↓	↓	02			↓	X	X	X						
1230	↓	↓	03			↓	X	X	X						

ADDITIONAL INSTRUCTIONS:

STD TAT

Signature	Print Name	Company	Date	Time
Relinquished by <i>James Chidester</i>	James Chidester	TRC	12/30/03	1200
Received by <i>D. Baker</i>	D. Baker	Alpha	12/31/03	1015
Relinquished by				
Received by				
Relinquished by				
Received by				

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other ** 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.