



Customer-Focused Solutions

Alameda County

SEP 25 2002

Project 41-0236

September 20, 2002

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

Environmental Health

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

RE: QUARTERLY GROUNDWATER MONITORING REPORT, THIRD QUARTER 2002

Dear Mr. Hwang:

Enclosed is a copy of the *Third Quarter 2002 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,

Tracy L. Walker, RG
Associate

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



Customer-Focused Solutions

September 20, 2002

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

RE: QUARTERLY GROUNDWATER MONITORING REPORT, THIRD QUARTER 2002

Dear Mr. Karvelot:

This *Third Quarter 2002 Groundwater Monitoring Progress Report* presents the results of the Third Quarter 2002 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 July 29, 2002. Groundwater elevations averaged 127.96 feet above mean sea level (MSL). Groundwater flow direction was to the southwest at a gradient of 0.082 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 July 29, 2002, 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.

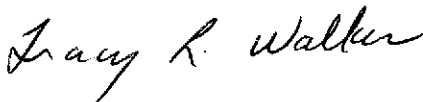
Approximately 24 gallons of purge water was generated during groundwater sampling activities conducted on July 29, 2002. The purge water was stored onsite in Department of Transportation-approved 55-gallon drums pending disposal.

3.0 LIST OF ATTACHMENTS

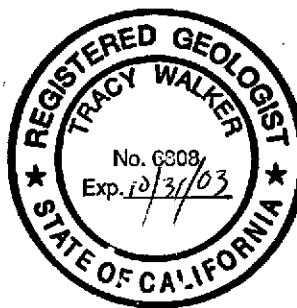
- Figure 1: Vicinity Map
- Figure 2: Groundwater Elevation Contour Map, July 29, 2002
- Figure 3: Dissolved-Phase Hydrocarbon Concentrations, July 29, 2002
- Table 1: Summary of Groundwater Levels and Chemical Analysis
- Appendix A: General Field Procedures, Official Laboratory Reports, and Chain of Custody Records

If you have any questions regarding this report, please call me at (925) 688-2476.

Sincerely,



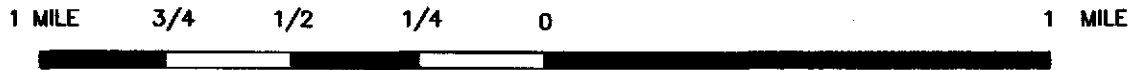
Tracy L. Walker, RG
Associate



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

The ongoing project services summarized in this report have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the findings and professional opinions presented in this report. The findings are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.

FIGURES



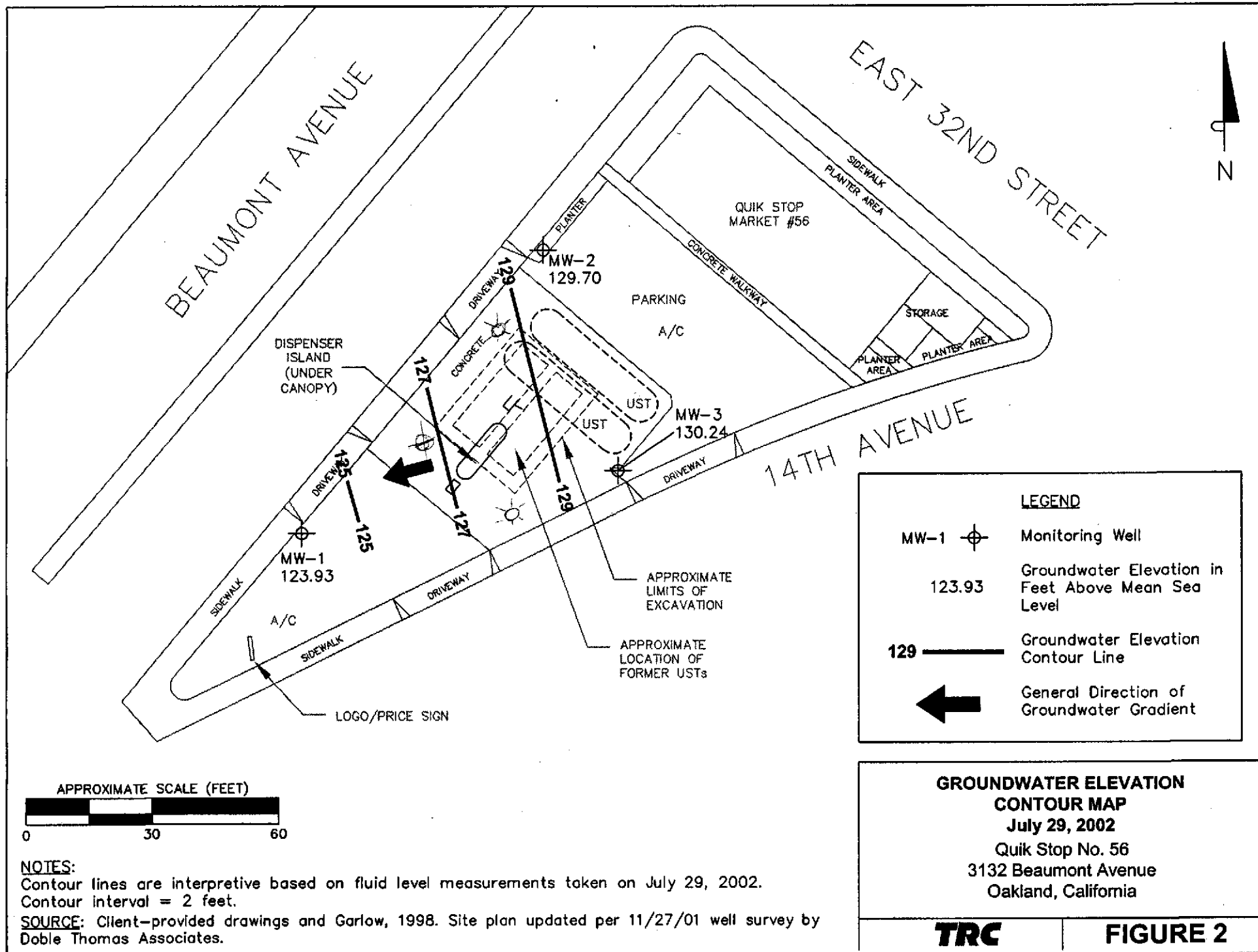
SCALE 1 : 24,000

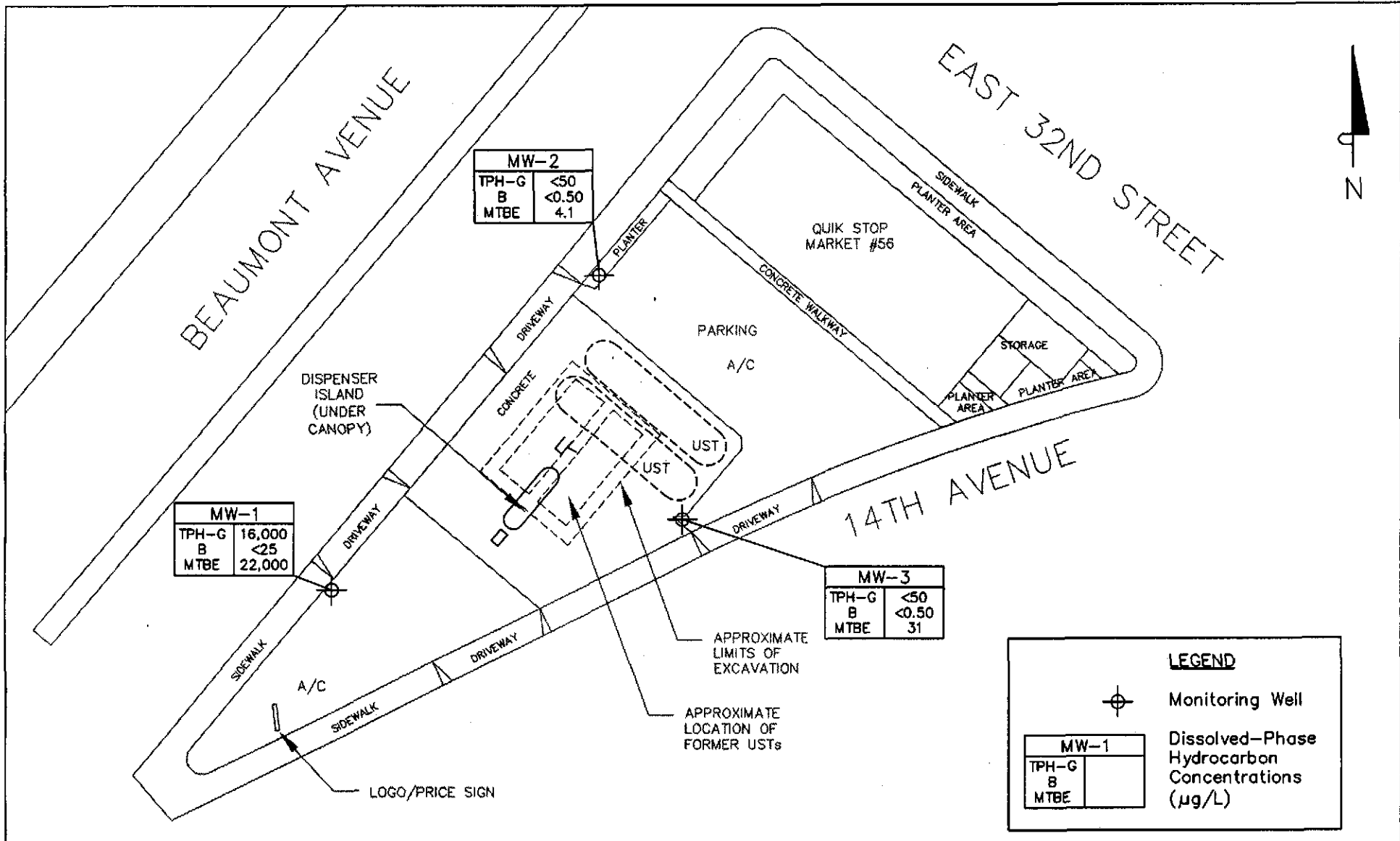


SOURCE:
United States Geological Survey
7.5 Minute Topographic Maps:
Oakland East and
Oakland West Quadrangles

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

TRC **FIGURE 1**





MW-2	
TPH-G	<50
B	<0.50
MTBE	4.1

MW-1	
TPH-G	16,000
B	<25
MTBE	22,000

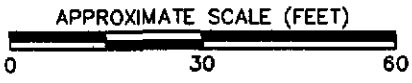
MW-3	
TPH-G	<50
B	<0.50
MTBE	31

LEGEND

⊕ Monitoring Well

MW-1	
TPH-G	
B	
MTBE	

Dissolved-Phase Hydrocarbon Concentrations (µg/L)



NOTES:
 Results are based on laboratory analysis of groundwater samples collected on July 29, 2002. µg/L = micrograms per liter; TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; MTBE = methyl tert butyl ether; < = not detected at or above the stated method detection limit.
 SOURCE: Client-provided drawings and Garlow, 1998. Site plan updated per 11/27/01 well survey by Doble Thomas Associates.

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
 July 29, 2002
 Quik Stop No. 56
 3132 Beaumont Avenue
 Oakland, California

TRC **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 Elevation (ft-MSL)	Depth to Water (feet)	Groundwater		TPH-G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260 (µg/L)	DO (mg/L)
				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-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-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	—

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.

FLUID MEASUREMENT FIELD FORM

Project No.: 41023606

TRC Alton Personnel: J. Chidester

Station No.: Quick Stop #56

Date: 7/29/02

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
MW-2		5.46				29.92		2"
MW-3		6.11				30.69		2"
MW-1		10.20				30.05		2"

GROUND WATER SAMPLING FIELD NOTES

Site: Quick Stop #56 Project No.: 41023606 Sampled By: J. Chidester Date: 7/29/02

Well No. MW-2 Purge Method: 2" electric
 Total Depth (feet): 29.92 Depth to Product (feet): -
 Depth to Water (feet): 5.46 Product Recovered (gallons): -
 Water Column (feet): 24.46 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 10.35 1 Well Volume (gallons): 3.91

Well No. MW-3 Purge Method: 2" electric
 Total Depth (feet): 30.69 Depth to Product (feet): -
 Depth to Water (feet): 6.11 Product Recovered (gallons): -
 Water Column (feet): 24.58 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 11.03 1 Well Volume (gallons): 3.93

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1253				1.10	76.3	6.34
				1.08	75.9	6.38
	1259			1.11	76.7	6.38
Total Purged			7	Time Sampled		1420

Comments: Ran Dry @ 7 gal.
 Turbidity=

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1312				0.84	75.9	6.56
				0.84	75.7	6.63
	1318			0.83	76.4	6.63
Total Purged			7	Time Sampled		1440

Comments: Ran Dry @ 7 gal.
 Turbidity=

Well No. MW-1 Purge Method: 2" electric
 Total Depth (feet): 30.05 Depth to Product (feet): -
 Depth to Water (feet): 10.20 Product Recovered (gallons): -
 Water Column (feet): 19.85 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 14.17 1 Well Volume (gallons): 3.18

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)	Conductivity (uS/cm)	Temperature (F, C)	pH
1342				0.82	78.2	6.46
				0.74	76.2	6.49
	1347			0.64	76.6	6.53
Total Purged			10	Time Sampled		1500

Comments: _____
 Turbidity=

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (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)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		

Comments: _____
 Turbidity=

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		

Comments: _____
 Turbidity=

Billing Information:

Name _____
 Address _____
 City, State, Zip _____
 Phone Number _____ Fax _____



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

Analyses Required

Client Name		P.O. #	Job #									REMARKS					
TRC			41023606														
Address		PWS #	DWR #														
5052 Commercial Circle																	
City, State, Zip		Phone #	Fax #														
Concord, CA 94520		925-688-1200	925-688-0388														
Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sampled by	Report Attention	Total and type of containers ** See below	TPH-G	BTEX	MTBE								
1420	7/29/02	AQ	02080103-01	J. Chidester	Tracy Walker	4VOA	X	X	X								Quick Stop #56
1440	7/29/02	AQ	-02			4VOA	X	X	X								
1500	7/29/02	AQ	-03			4VOA	X	X	X								

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by <i>James Chidester</i>	James Chidester	TRC	7/31/02	1400
Received by <i>Tracy Walker</i>	T. Debiavanni	Alpha	8/1/02	10:20
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 is the property of the laboratory and is to be used only for the samples received by the laboratory with this report. The liability of the laboratory is limited to the amount paid for the report.



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: Tracy Walker
Phone: (925) 688-1200
Fax: (925) 688-0388

Job#: 41023606/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	Date	Date	
			Limit	Sampled	Analyzed	
Client ID :	TPH Purgeable	ND	50 µg/L	07/29/02	08/02/02	
MW-2	Methyl tert-butyl ether (MTBE)	4.1	0.50 µg/L	07/29/02	08/02/02	
Lab ID :	Benzene	ND	0.50 µg/L	07/29/02	08/02/02	
TRC02080163-01A	Toluene	ND	0.50 µg/L	07/29/02	08/02/02	
	Ethylbenzene	ND	0.50 µg/L	07/29/02	08/02/02	
	Xylenes, Total	ND	0.50 µg/L	07/29/02	08/02/02	
	TPH Purgeable	ND	50 µg/L	07/29/02	08/02/02	
Client ID :	TPH Purgeable	ND	50 µg/L	07/29/02	08/02/02	
MW-3	Methyl tert-butyl ether (MTBE)	31	0.50 µg/L	07/29/02	08/02/02	
Lab ID :	Benzene	ND	0.50 µg/L	07/29/02	08/02/02	
TRC02080163-02A	Toluene	ND	0.50 µg/L	07/29/02	08/02/02	
	Ethylbenzene	ND	0.50 µg/L	07/29/02	08/02/02	
	Xylenes, Total	ND	0.50 µg/L	07/29/02	08/02/02	
	TPH Purgeable	16,000	5,000 µg/L	07/29/02	08/02/02	
Client ID :	TPH Purgeable	16,000	5,000 µg/L	07/29/02	08/02/02	
MW-1	Methyl tert-butyl ether (MTBE)	22,000	25 µg/L	07/29/02	08/02/02	
Lab ID :	Benzene	ND	V	25 µg/L	07/29/02	08/02/02
TRC02080163-03A	Toluene	ND	V	25 µg/L	07/29/02	08/02/02
	Ethylbenzene	ND	V	25 µg/L	07/29/02	08/02/02
	Xylenes, Total	ND	V	25 µg/L	07/29/02	08/02/02

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

8/14/02

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: TRC02080163

Project: 41023606/Quick Stop #56

Alpha's Sample ID	Client's Sample ID	Matrix	pH
02080163-01A	MW-2	Aqueous	2
02080163-02A	MW-3	Aqueous	2
02080163-03A	MW-1	Aqueous	2

8/14/02
Report Date

1 of 1