

JUL 17 2003

Environmental Health

July 15, 2003

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

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

RE: QUARTERLY GROUNDWATER MONITORING REPORT, SECOND QUARTER 2003

Dear Mr. Hwang:

Enclosed is a copy of the Second *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.



Customer-Focused Solutions

July 15, 2003

Alameda County Project 41-0236

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

JUL 17 2003

Environmental Health

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

RE: QUARTERLY GROUNDWATER MONITORING REPORT, SECOND QUARTER 2003

Dear Mr. Karvelot:

This *Second Quarter 2003 Groundwater Monitoring Report* presents the results of the Second 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 June 6, 2003. Groundwater elevations averaged 128.99 feet above mean sea level (MSL). Groundwater flow direction was to the southwest at a gradient of 0.066 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 June 6, 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 50 gallons of purge water was generated during groundwater sampling activities conducted on June 6, 2003. The purge water was stored onsite in one Department of Transportation-approved 55-gallon drum pending disposal.

JUL 17 2003

3.0 LIST OF ATTACHMENTS

Environmental Health

- Figure 1: Vicinity Map
- Figure 2: Groundwater Elevation Contour Map, June 6, 2003
- Figure 3: Dissolved-Phase Hydrocarbon Concentrations, June 6, 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.

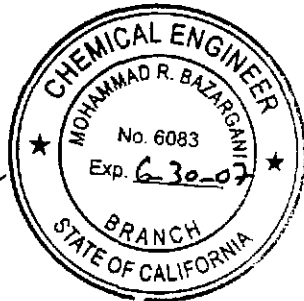
Sincerely,



Jonathan Scheiner
Associate



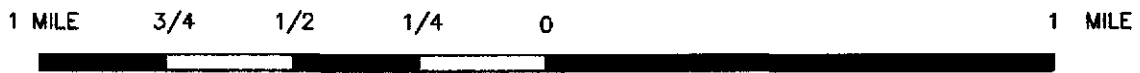
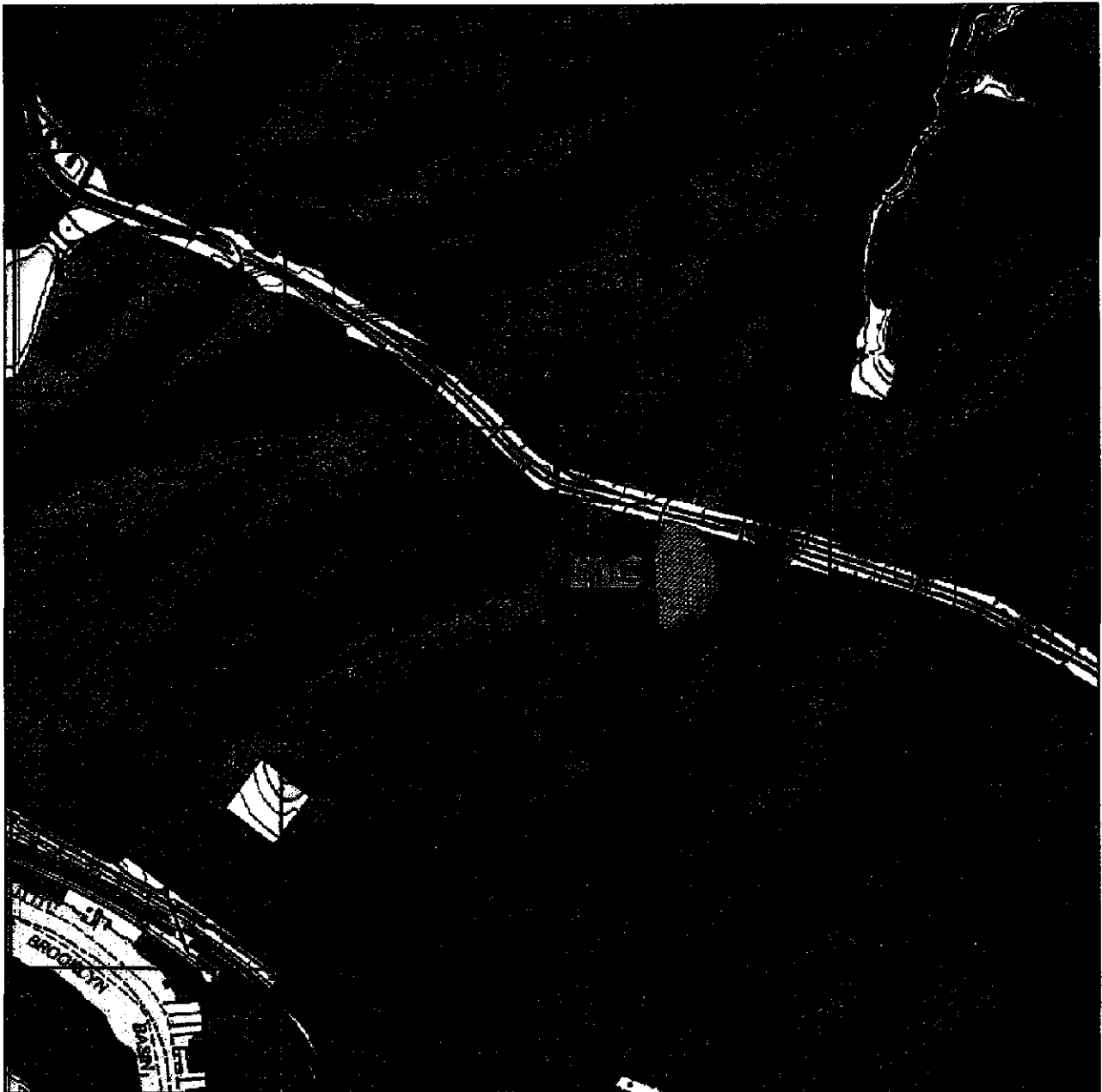
Mohammad Bazargani P.E.
Associate



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



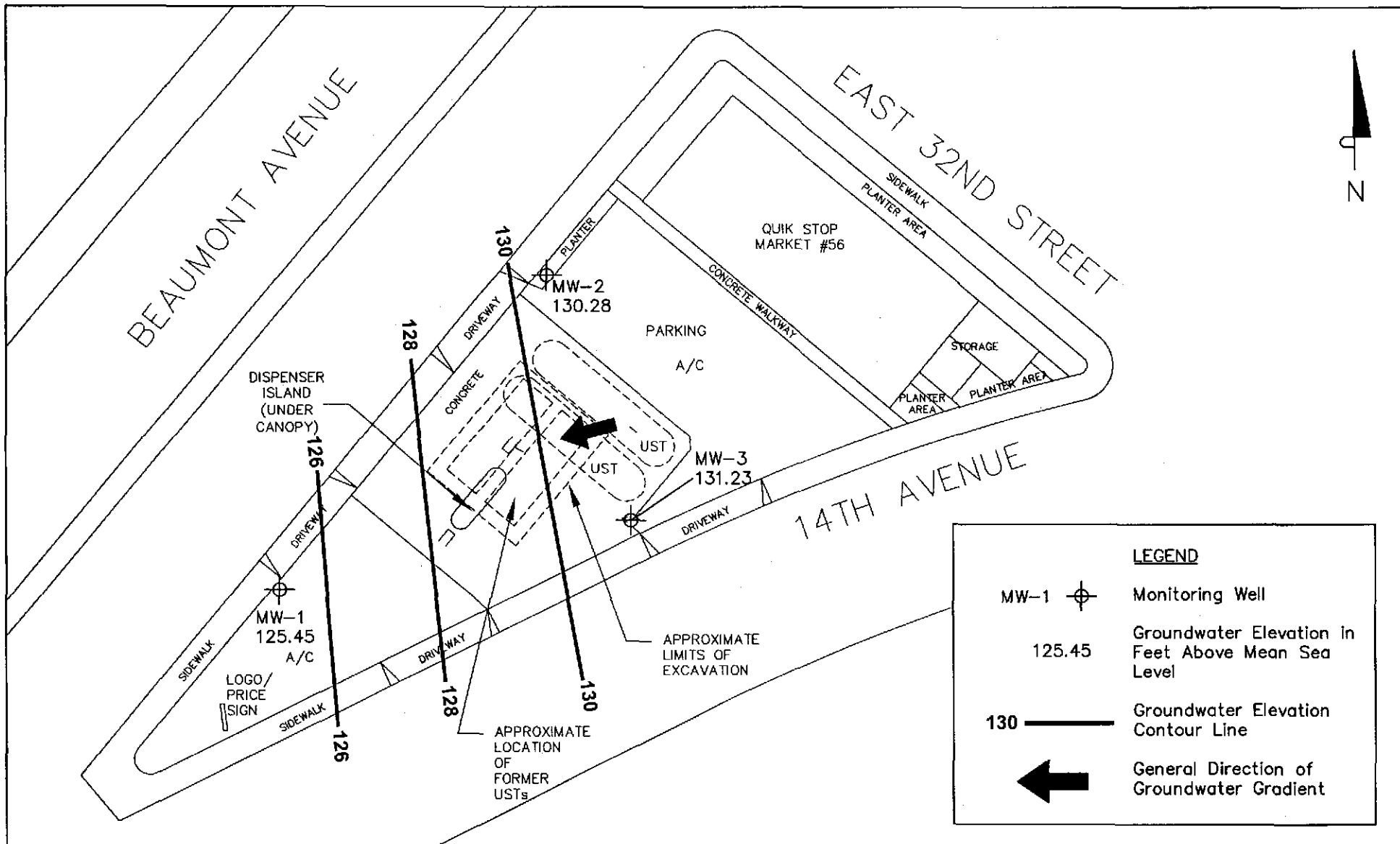
SCALE 1 : 24,000






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

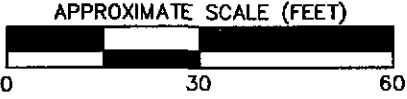
TRC | **FIGURE 1**



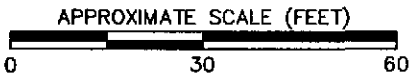
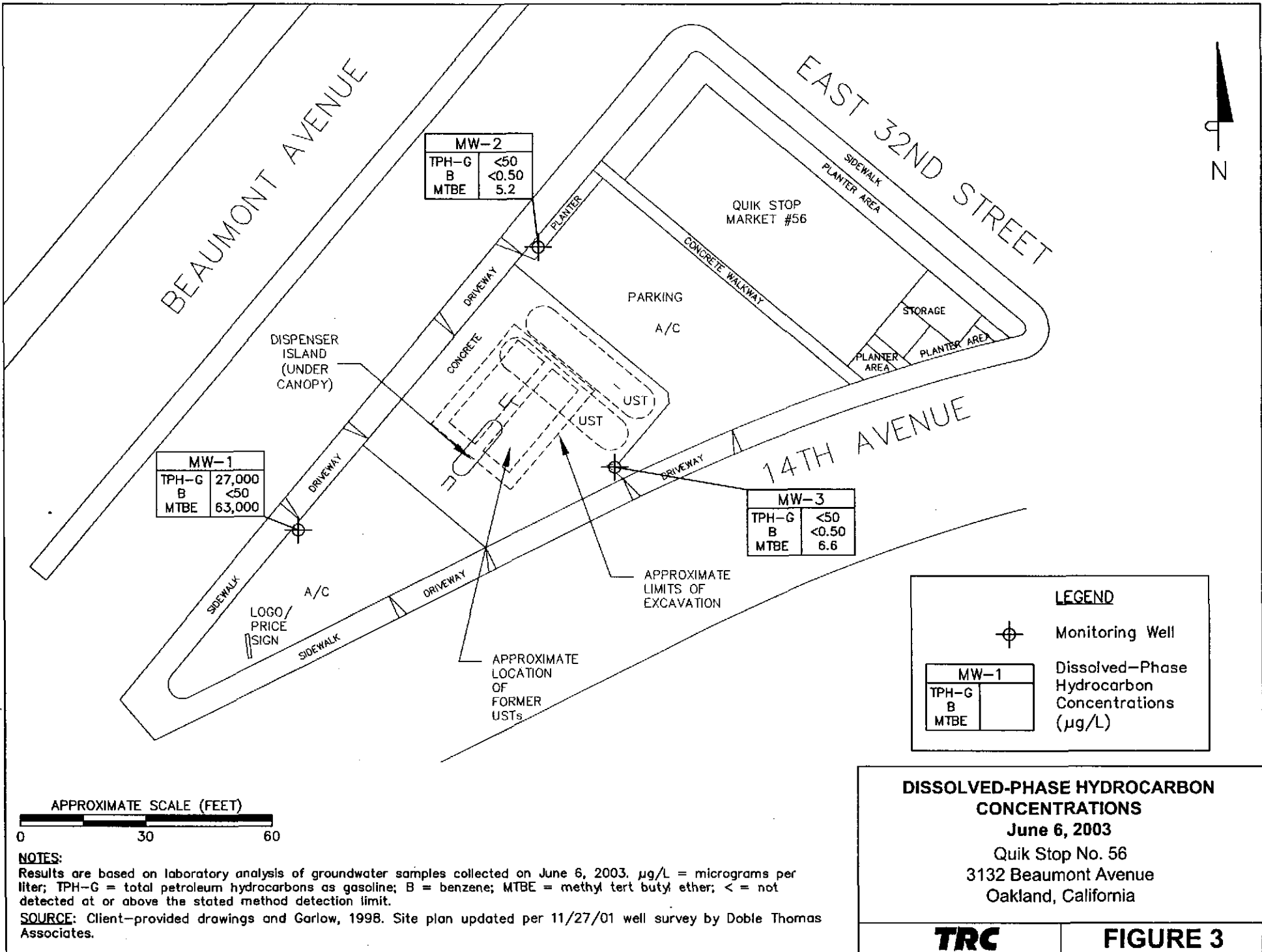
LEGEND

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

**GROUNDWATER ELEVATION
CONTOUR MAP**
 June 6, 2003
 Quik Stop No. 56
 3132 Beaumont Avenue
 Oakland, California



NOTES:
 Contour lines are interpretive based on fluid level measurements taken on June 6, 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.



NOTES:
 Results are based on laboratory analysis of groundwater samples collected on June 6, 2003. 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.

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)	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-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	0.78
MW-2	07/24/01	132.63	8.38	128.25	<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-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	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	—

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.: 41023607
 Station No.: Quick Stop #56

TRC Alton Personnel: T. Johnson
 Date: 6/6/03

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		8.68				30.05		2"
MW-2		4.88				29.92		2"
MW-3		5.12				30.01		2"

GROUND WATER SAMPLING FIELD NOTES

Site: Quickstop #56 Project No.: _____ Sampled By: T. Johnson Date: 6/6/03

Well No. MW-2 JT Purge Method: 2" Sub Well No. MW-3 TO Purge Method: 2" Sub
 Total Depth (feet) ~~27.92~~ 27.92 Depth to Product (feet): — Total Depth (feet) ~~30.69~~ 30.69 Depth to Product (feet): —
 Depth to Water (feet): 4.88 Product Recovered (gallons): — Depth to Water (feet): 5.12 Product Recovered (gallons): —
 Water Column (feet): 25.04 Casing Diameter (Inches): 2" Water Column (feet): 25.57 Casing Diameter (Inches): 2"
 80% Recharge Depth (feet): 9.89 1 Well Volume (gallons): 4 80% Recharge Depth (feet): 10.23 1 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C.)	pH
1152			4	1.41	72.8	6.27
	1202		8	1.48	74.9	7.09
			12	1.44	75.4	6.82
Total Purged			12	Time Sampled		1254
Comments: <u>Static @ sample - 6.46</u>						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C.)	pH
1214			4	1.02	76.2	6.47
			8	0.99	75.9	6.39
	1219		12	0.99	76.1	6.39
Total Purged			12	Time Sampled		1307
Comments: <u>Static @ sample - 6.77 1 missing</u>						
Turbidity=						

Well No. MW-1 Purge Method: 2" Sub Well No. _____ Purge Method: _____
 Total Depth (feet) 30.05 Depth to Product (feet): — Total Depth (feet) _____ Depth to Product (feet): _____
 Depth to Water (feet): 8.68 Product Recovered (gallons): — Depth to Water (feet): _____ Product Recovered (gallons): _____
 Water Column (feet): 21.37 Casing Diameter (Inches): 2" Water Column (feet): _____ Casing Diameter (Inches): _____
 80% Recharge Depth (feet): 12.95 1 Well Volume (gallons): 3 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
1233			3	0.90	74.8	6.36
			6	0.93	74.8	6.25
	1237		9	0.86	75.2	6.25
Total Purged			9	Time Sampled		1318
Comments: <u>Static @ sample - 12.67 1 stripped</u>						
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: _____ Well No. _____ Purge Method: _____
 Total Depth (feet) _____ Depth to Product (feet): _____ Total Depth (feet) _____ Depth to Product (feet): _____
 Depth to Water (feet): _____ Product Recovered (gallons): _____ Depth to Water (feet): _____ Product Recovered (gallons): _____
 Water Column (feet): _____ Casing Diameter (Inches): _____ Water Column (feet): _____ Casing Diameter (Inches): _____
 80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____ 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 :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.

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

WorkOrder : TRC03061248

Report Due By : 5:00 PM On : 26-Jun-03

Client:

TRC-Alton Geoscience
5052 Commercial Circle

Chris Brown

TEL : (925) 688-1200
FAX : (925) 688-0388

EDD Required : No

Concord, CA 94520

Job : 41023607/Quick Stop #56

Sampled by : Client

Report Attention : Chris Brown

PO :

Client's COC # : none

Cooler Temp : 4 °C

12-Jun-03

CC Report :

QC Level : 1 = Final Rpt Only

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles				TPH/P_W	VOC_W	Requested Tests	Sample Remarks
				ORG	SUB	TAT	PWS #				
TRC03061248-01A	MW-1	AQ	06/06/03 13:18 11/11/03	4	0	10			BTXE/GAS_ C/MTBE	BTXE/GAS_ C/MTBE	
TRC03061248-02A	MW-2	AQ	06/09/03 12:54 11/11/03	4	0	10			BTXE/GAS_ C/MTBE	BTXE/GAS_ C/MTBE	
TRC03061248-03A	MW-3	AQ	06/09/03 13:07 11/11/03	4	0	10			BTXE/GAS_ C/MTBE	BTXE/GAS_ C/MTBE	

Comments: Custody seal. Frozen ice. CA samples. report in wq/c.

Received by: DS Baker Signature: DS Baker Print Name: DS Baker Company: Alpha Analytical, Inc. Date/Time: 6/12/03 15:15

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

CIA

Ship To: Alpha Analytical
Attn: 755 Glendale Ave
Suite 21
Sparks, NV 89431

Page 1 of 1
Project Name: Quick Stop #56
Project No.: 41023607
Site Location: 3132 Beaumont Ave
Date: June / 11 / 2003

CHAIN OF CUSTODY RECORD

Boring/Well No.	Sample No.	Depth	Date	Time	Sample Type			Comp.	Grab.	Sample Containers				Analysis	Remarks
					Water	Solid	Other			Vol.	No.	Type	Pres.		
MW-1			6/6/03	1318	X			X		4	VOA	HCl	X	TRC 03061248-01 -02 -03	
MW-2			↓	1254	X			X		4	VOA	HCl	X		
MW-3			↓	1307	X			X		4	VOA	HCl	X		

TRH-GIBTEX
MTBE

Total Number of Samples Shipped: _____ Shipper's Signature: _____

Signature	Company	Date	Time
Relinquished by: <u>[Signature]</u>	TRC	6/11/03	1315
Received by: <u>DS Baker</u>	Alpha	6/10/03	1515
Relinquished by:			
Received by:			
Relinquished by:			
Received by:			

Special Instructions / Shipment / Handling/ Storage Requirements:

The material(s) listed are received for analysis and/or treatability evaluation and remain the property of the client and not TRC. At the conclusion of the test work, all remaining material(s) will be returned to the client for eventual disposal at a licensed facility.

TRC
21 Technology Drive
Irvine, California 92618
(949) 727-9336

TRC
5052 Commercial Circle
Concord, California 94520
(925) 688-1200



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 06/12/03

Job#: 41023607/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	27,000	10,000 µg/L	06/06/03	06/17/03
MW-1	Methyl tert-butyl ether (MTBE)	63,000	50 µg/L	06/06/03	06/17/03
Lab ID :	Benzene	ND	V 50 µg/L	06/06/03	06/17/03
TRC03061248-01A	Toluene	ND	V 50 µg/L	06/06/03	06/17/03
	Ethylbenzene	ND	V 50 µg/L	06/06/03	06/17/03
	Xylenes, Total	ND	V 50 µg/L	06/06/03	06/17/03
Client ID :	TPH Purgeable	ND	50 µg/L	06/06/03	06/17/03
MW-2	Methyl tert-butyl ether (MTBE)	5.2	0.50 µg/L	06/06/03	06/17/03
Lab ID :	Benzene	ND	0.50 µg/L	06/06/03	06/17/03
TRC03061248-02A	Toluene	ND	0.50 µg/L	06/06/03	06/17/03
	Ethylbenzene	ND	0.50 µg/L	06/06/03	06/17/03
	Xylenes, Total	ND	0.50 µg/L	06/06/03	06/17/03
Client ID :	TPH Purgeable	ND	50 µg/L	06/06/03	06/17/03
MW-3	Methyl tert-butyl ether (MTBE)	6.6	0.50 µg/L	06/06/03	06/17/03
Lab ID :	Benzene	ND	0.50 µg/L	06/06/03	06/17/03
TRC03061248-03A	Toluene	ND	0.50 µg/L	06/06/03	06/17/03
	Ethylbenzene	ND	0.50 µg/L	06/06/03	06/17/03
	Xylenes, Total	ND	0.50 µg/L	06/06/03	06/17/03

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

6/25/03

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: TRC03061248

Project: 41023607/Quick Stop #56

Alpha's Sample ID	Client's Sample ID	Matrix	pH
03061248-01A	MW-1	Aqueous	2
03061248-02A	MW-2	Aqueous	2
03061248-03A	MW-3	Aqueous	2

6/25/03
Report Date