

# Rogers Environmental Services

ST 17 PM 1:07

June 4, 1997

**REF: 1004-2Q.97**

Mr. Barney Chan  
Environmental Health  
Alameda County  
1131 Harbor Bay Pkwy  
Alameda, CA 94502-6577

**SUBJECT: REPORT OF QUARTERLY MONITORING AT 1234 40TH AVE.,  
OAKLAND, CA**

Dear Barney:

I have enclosed a copy of the Quarterly Monitoring report prepared for the Motor Partners site, 1234 40th Ave., Oakland, California. The groundwater sampling results are presented for the second quarterly monitoring period in 1997.

The results of the sampling indicate that hydrocarbon contamination is present in groundwater samples from each of the wells, though highest levels were reported from MW-1. Concentrations of hydrocarbons in the samples are consistent with the previous monitoring period.

If you have any questions or comments regarding the report, please give me a call.

Sincerely,



Gary Rogers, Ph.D.

cc Bill Owens

**QUARTERLY MONITORING REPORT**

2nd Quarter, 1997

ENVIRONMENTAL  
PROTECTION  
05/17 08:07

**PROJECT SITE:**

**MOTOR PARTNERS**  
1234 40TH AVE., OAKLAND, CALIFORNIA  
StID #3682

**PREPARED FOR:**

Mr. Bill Owens  
2221 Olympic Blvd.  
Walnut Creek, CA 94595  
510-935-3840

**SUBMITTED TO:**

Mr. Barney Chan  
Environmental Health  
Alameda County  
1131 Harbor Bay Pkwy  
Alameda, CA 94502-6577

**PREPARED BY:**

Gary Rogers, Ph.D.  
2657 Bailey Ct.  
Fremont, CA 94536  
(510) 791-7157

**PROJECT NO. 1004.95**

June 4, 1997

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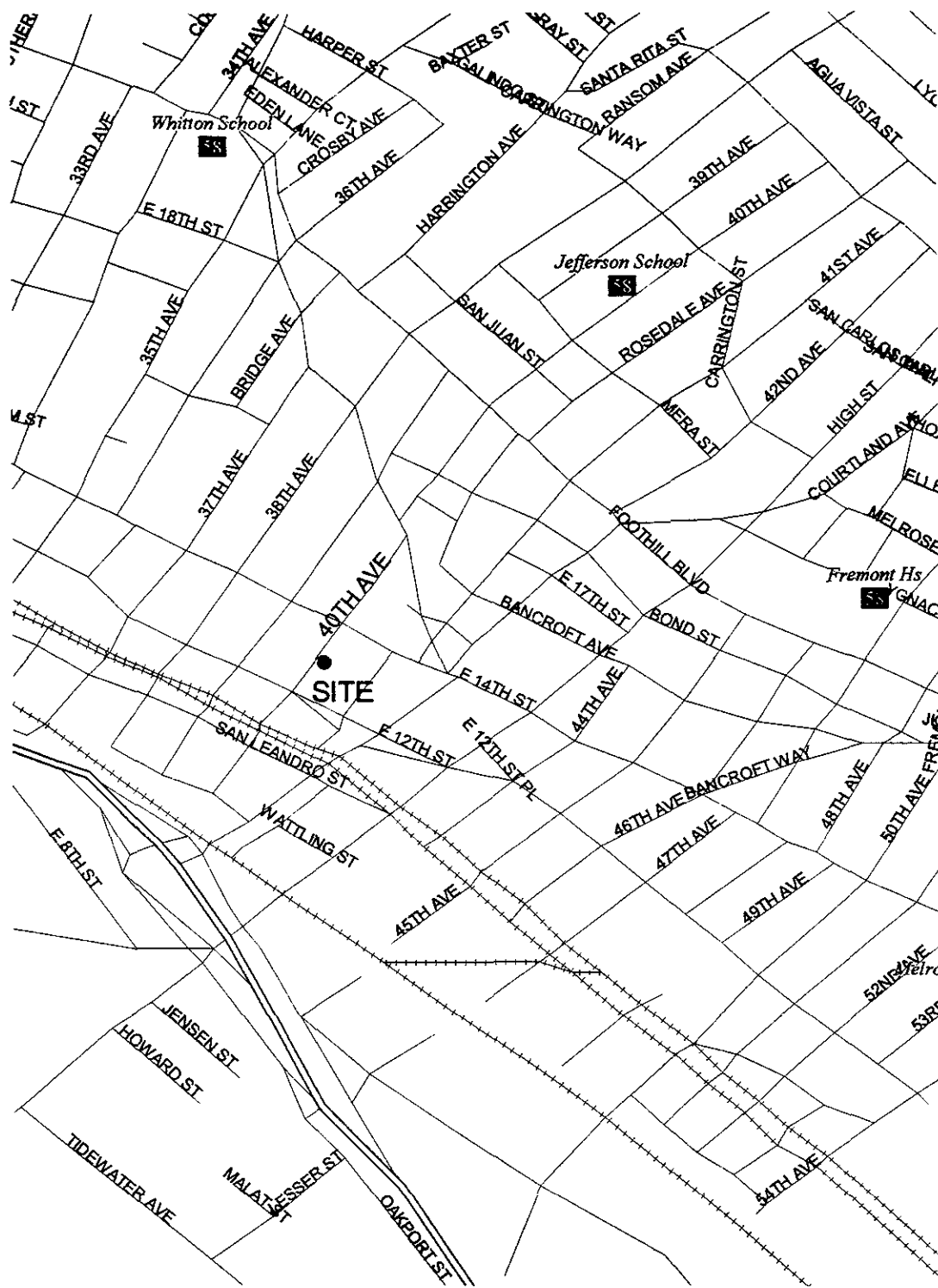
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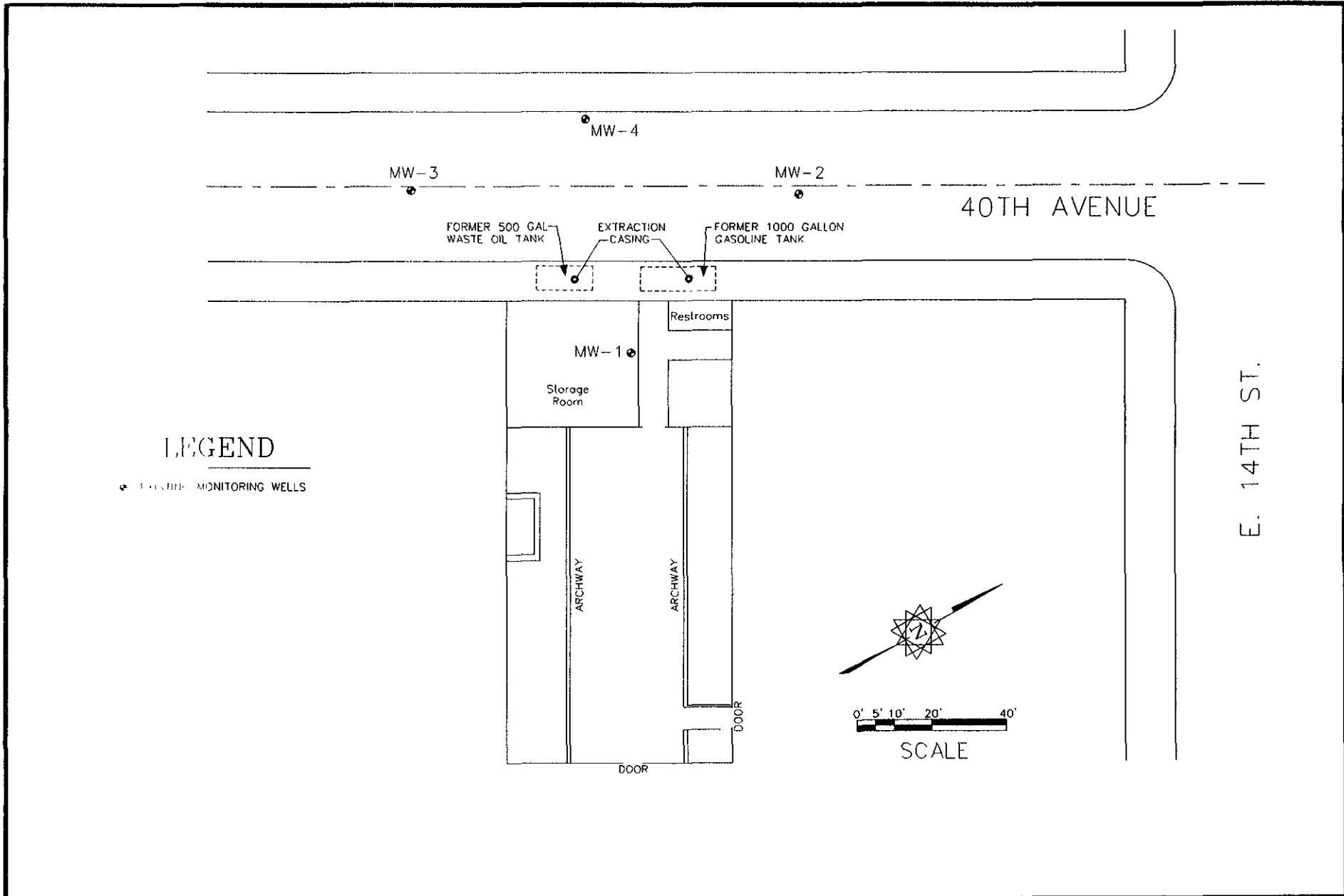
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GARY ROGERS, PH.D. ENVIRONMENTAL CONSULTANT 2657 BAILEY CT. FREMONT, CA 94536 (510) 791-7157	DESCRIPTION <p style="text-align: center;">Site Location</p>	FIGURE <p style="text-align: center;">1</p>		
	PROJECT LOCATION <p style="text-align: center;">Motor Partners          1234 40th Ave. Oakland CA</p>			
DRAWN BY <p style="text-align: center;">GLR</p>	DRAWING DATE <p style="text-align: center;">6 4 97</p>	PROJECT NUMBER <p style="text-align: center;">1004</p>	FILE NAME <p style="text-align: center;">1004-297 DWG</p>	PROJECT MANAGER <p style="text-align: center;">GLR</p>



GARY ROGERS, Ph.D. ENVIRONMENTAL CONSULTANT 2657 BAILEY CT. FREMONT, CA 94536 (510) 791-7157	DRAWN BY GLR	PROJECT NUMBER 1004	DESCRIPTION Site Layout	FIGURE 2	
	DRAWING DATE 6/4/97	FILE NAME 1004-297.DWG			
	REVISION BY	PROJECT MANAGER GLR	PROJECT LOCATION Motor Partners 1234 40th Ave., Oakland		
	REVISION BY	CHECKED BY			

Sampling conducted on January 11, 1994 indicated levels of TPH-gasoline for the former waste oil tank area between 100 and 700 ppm. Levels of TPH-gasoline for the former gasoline tank area ranged from 150 to 1,200 ppm.

GROWTH Environmental completed soil borings at the property between May and June of 1994. Eleven borings were drilled and three monitoring wells were installed. Both soil and groundwater samples were collected from the borings. Soil and groundwater contamination was found in nearly every boring. Levels of TPH-D up to 2,700 ppm were observed on the west side of the building. A sample from inside the building had a TPH-D level of 520 ppm.

Groundwater samples had highest concentrations near the former tank excavations. The highest level of TPH-G was 64,000 ppb. BTEX compounds were found in groundwater samples from all the borings.

The monitoring wells were sampled on June 17, 1994 and December 7, 1994. Contamination was reported in all three wells. Levels of TPH-G were up to 17,000 ppb and Benzene levels were up to 1,200 ppb in MW-1.

A quarterly monitoring sampling event was completed on November 29, 1995. All of the wells showed increased TPH-G and BTEX levels when compared to the previous sampling event. TPH-G levels were up to 67,000 ppb in MW-1. The groundwater gradient was calculated to be in a southwesterly direction.

Additional geoprobe borings were completed along 40th Avenue between November, 1995 and February, 1996 to determine the extent of contamination.

On February 1, 1996, Bay Area Exploration drilled a soil boring across the street from the former underground storage tank excavations at the Motor Partners site (location shown in Figure 3 ). A two-inch groundwater monitoring well (MW-4) was installed in the boring. The monitoring well was installed according to State of California Water Resource Control Board standards to a depth of 25 feet below grade surface (bgs) and screened from 5 to 25 feet bgs.

## **GEOLOGY AND HYDROGEOLOGY**

### **Regional Geology.**

The site is located on the East Bay Plain about 1.0 mile west of the Oakland Hills, about 1.0 mile east of the San Francisco Bay, and about 0.5 miles north of San Leandro Bay. The property is bounded on the northeast by 14th Street.

The site rests on Quaternary Deposits of various physical and compositional properties. The predominant formation is the Temescal Formation consisting of contemporaneous alluvial units of different origin, lithology, and physical properties. The material ranges from irregularly bedded clay, silt, sand and gravel to lenses of clay, silt, sand, and gravel with Claremont Chert.

The Hayward Fault is approximately 1.5 miles East of the site and is an active historic Fault. The Hayward Fault is the only active fault in the Oakland East Quadrangle.

### **Regional Hydrogeology.**

The site is located within the East Bay Plain which makes up the ground water reservoir in the area. The water bearing capacity varies within the area due to the juxtaposed positions of the various types of soils and strata encountered underneath the East Bay Plain.

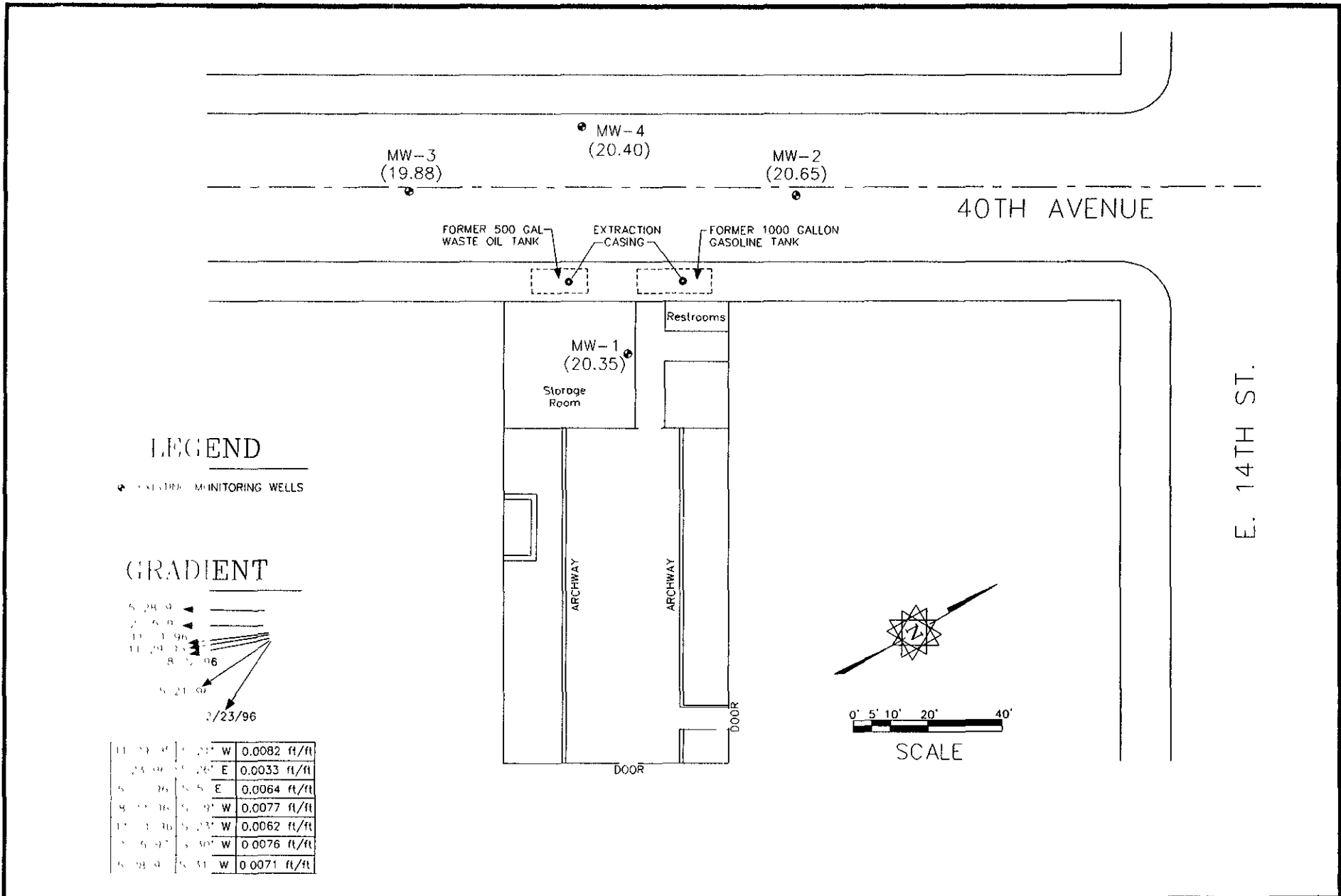
In General the water bearing capacities of the Younger Alluvium range from moderately permeable to low permeable soils. Below the Younger Alluvium at a depth of approximately 70 feet lies the Older Alluvium, which yields large to small quantities of well water.

**Site Geology.** The site soils were characterized using the United Soil Classification System (USCS). During on-site subsurface drilling, CEC (GROWTH) encountered up to two feet of baserock (fill) followed by a 4 to 5 foot layer of dark sandy clay (CL). Below the dark clay to a depth between 7 and 15 feet, a grey sandy gravel was found. Below the sandy gravel the soil varied between a clayey sand to a sandy silty clay (SC). The gravels are poorly sorted, angular to rounded clasts ranging in size from 0.2 cm to 3.0 cm.

**Site Hydrogeology.** The depth of first water ranged from 8 to 10 feet below the ground surface (bgs) in the borings. Groundwater was encountered within the grey clayey sandy gravel layers.



Motor Partners 1234 40th Ave., Oakland CA  
 Quarterly Monitoring Report



June 4 1996  
 File 1004-297

GARY ROGERS, PH.D. ENVIRONMENTAL CONSULTANT 2657 BAILEY CT FREMONT, CA 94536 (510) 791-7157	DRAWN BY GLR	PROJECT NUMBER 1004	DESCRIPTION Groundwater Gradient	FIGURE 3	
	DRAWING DATE 6/4/97	FILE NAME 1004-297.DWG			
	REVISION BY	PROJECT MANAGER GLR	PROJECT LOCATION Motor Partners 1234 40th Ave., Oakland		
	REVISION BY	CHECKED BY			

**Table 1**  
**Monitoring Well Construction Data for Motor Partners Site**  
**1234 40th Ave., Oakland, California**

	MW-1	MW-2	MW-3	MW-4
Date Drilled	6/15/94	6/14/94	6/14/94	2/1/96
Total Depth	22.5 ft.	22.0 ft.	23.0 ft.	23.0 ft.
Bore Diameter	10 inches	10 inches	10 inches	10 inches
Casing Diameter	2 inch	2 inch	2 inch	2 inch
Well Seal Type	Bentonite Pellets	Bentonite Pellets	Bentonite Pellets	Bentonite Pellets
Well Seal Interval	5.0 - 6.0 bgs	5.0 - 6.0 bgs	5.0 - 6.0 bgs	3.0 - 4.0 bgs
Filter Pack Material	2/14 Lonestar Sand	2/14 Lonestar Sand	2/14 Lonestar Sand	2/14 Lonestar Sand
Filter Pack Interval	6.0 - 17.0 bgs	9.0 - 20.0 bgs	6.5 - 20.0 bgs	4.0 - 25.0 bgs
Screen Slot Size	0.020 in.	0.020 in.	0.020 in.	0.010 in.
Screened Interval	7.0 - 17.0 bgs	10.0 - 20.0 bgs	7.0 - 20.0 bgs	5.0 - 25.0 bgs
Well Elevation <sup>1</sup>	28.43 ft.	28.03 ft.	27.41 ft.	27.34 ft.

<sup>1</sup>TOC -Top of Casing Elevations for MW-1, MW-2, and MW-3 were surveyed on 11/17/95 to a City of Oakland benchmark at the northwest corner of the block using an elevation of 29.07 feet above mean sea level. The Top of Casing Elevation for MW-4 was surveyed on 2/14/96 to the TOC Elevations for MW-2 and MW-3.

## **GROUNDWATER MONITORING**

### **GROUNDWATER ELEVATION MEASUREMENTS**

The static water level was measured in all four monitoring wells (MW-1, MW-2, MW-3, and MW-4) on May 28, 1997 and the depths were recorded to the nearest 0.01 foot using an electronic water level sounder. All of the results were recorded on Quarterly Monitoring Data Sheets presented in Appendix B.

### **MONITORING WELL SAMPLING**

The monitoring wells were purged by withdrawing a minimum of three casing volumes from each well using a 2" submersible pump. The purging continued until the turbidity was less than 100 NTU and the temperature, electric conductivity, and pH were relatively stable. Samples were collected when the water levels recovered to at least 80% of the original static level.

A groundwater sample was collected with a disposable Teflon bailer and placed in two 40-ml VOA's and one one-liter amber bottle. The samples were labeled and stored on ice until delivered under a chain of custody to the state certified laboratory. Samples from all four wells (MW-1, MW-2, MW-3, and MW-4) were analyzed for total petroleum hydrocarbons as diesel (TPH-D), using EPA methods modified 8015; as gasoline (TPH-G) using EPA methods 8015/5030; and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA methods 8020.

## ANALYTICAL RESULTS

### GROUNDWATER HYDRAULIC CONDITIONS

**Groundwater Elevation.** The groundwater elevation data for the monitoring wells is presented in Table 2. Based on groundwater level measurements collected on May 28, 1997, the depth to groundwater in the wells ranged from 6.9 to 8.1 feet below the top of the casing. The groundwater elevations for the wells were as follows; MW-1 was 20.35 feet above mean sea level (msl), MW-2 was 20.65 feet above msl, MW-3 was 19.88 feet above msl, and MW-4 was 20.40 feet above msl.

**Groundwater Flow Direction and Gradient.** Groundwater flow direction was calculated using three wells (MW-1, MW-2, and MW-3). Groundwater flow direction trended to the southwest (S 31°W) at a gradient of 0.0071 ft/ft. The flow direction and gradient are shown in Figure 3.

### LABORATORY DATA

A summary of the analytical results for the monitoring well sampling is presented in Table 3. Copies of all the analytical data sheets from ChromaLab, Inc. are presented in Appendix A.

**Table 2**  
**Groundwater Elevation Results at Motor Partners Site**  
**1234 40th Ave., Oakland, California**

	DATE	MW-1	MW-2	MW-3	MW-4	GRADIENT
<b>TOC</b>		28.43 ft	28.03 ft	27.41 ft.	27.34	
<b>SWL</b>	11/29/95	10.13	9.31	9.53		S 21° W
<b>GSE</b>		18.3	18.72	17.88		0.0082 ft/ft
<b>SWL</b>	2/23/96	4.59	3.77	3.56	3.17	S 26° E
<b>GSE</b>		23.84	24.26	23.85	24.17	0.0033 ft/ft
<b>SWL</b>	5/21/96	6.04	5.24	5.29	4.68	S 5° E
<b>GSE</b>		22.39	22.79	22.12	22.66	0.0064 ft/ft
<b>SWL</b>	8/22/96	8.46	7.66	7.88	7.10	S 19° W
<b>GSE</b>		19.97	20.37	19.53	20.24	0.0077 ft/ft
<b>SWL</b>	11/21/96	8.44	7.73	7.76	7.31	S 23° W
<b>GSE</b>		19.99	20.30	19.65	20.03	0.0062 ft/ft
<b>SWL</b>	2/25/97	6.53	5.78	5.97	5.06	S 30° W
<b>GSE</b>		21.90	22.25	21.44	22.28	0.0076 ft/ft
<b>SWL</b>	5/28/97	8.08	7.38	7.53	6.94	S 31° W
<b>GSE</b>		20.35	20.65	19.88	20.40	0.0071 ft/ft

TOC - Top of Casing Elevations for MW-1, MW-2, and MW-3 were surveyed on 11/17/95 to City of Oakland benchmark at northwest corner of block, using an elevation of 29.07 feet above mean sea level. The Top of Casing Elevation for MW-4 was surveyed on 2/14/96 to MW-2 and MW-3.

SWL - Static Water Level (ft)

GSE - Groundwater Surface Elevation (feet relative to mean sea level)

**Table 3**  
**Quarterly Groundwater Sampling Results at Motor Partners**  
**1234 40th Ave., Oakland, California**

Sample I.D. Number	Date Collected	TPH-D ( $\mu\text{g/L}$ )	TPH-G ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl Benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )
MW-1	6/17/94	2,400	17,000	1,200	220	1,000	2,600
	11/29/95	53,000	67,000	860	180	1,300	3,100
	2/23/96	25,000	16,000	360	ND	370	740
	5/21/96	650	11,000	290	37	600	1,300
	8/22/96	ND	13,000	270	51	540	1,400
	11/21/96	5,500	15,000	810	79	680	1,700
	2/25/97	3,900	15,000	430	36	760	1,200
	5/28/97	3,700	7,600	110	15	370	870
	MW-2	6/17/94	370	990	ND	1.3	2.3
12/07/94		ND	170	2.1	0.70	0.60	1.7
11/29/95		200	400	ND	ND	ND	3
2/23/96		ND	500	ND	ND	ND	ND
5/21/96		ND	62	ND	ND	ND	1
8/22/96		ND	120	0.58	0.62	ND	0.62
11/21/96		89	89	0.60	0.78	ND	ND
2/25/97		ND	250	1.2	1.0	ND	ND
5/28/97		ND	ND	ND	ND	ND	ND
California Drinking Water MCL		None Listed	None Listed	1.0	1,000	680	1,750
Reporting Limit		50	50	0.5	0.5	0.5	1.0

Notes. All results in  $\mu\text{g/l}$  (ppb)  
 ND = Not Detected  
 NA = Not Analyzed

**Table 3 Continued**  
**Quarterly Groundwater Sampling Results at Motor Partners**  
**1234 40th Ave., Oakland, California**

Sample I.D. Number	Date Collected	TPH-D ( $\mu\text{g/L}$ )	TPH-G ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl Benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )
MW-3	6/17/95	2,200	9,500	330	40	100	74
	12/07/94	1,700	7,500	380	42	130	72
	11/29/95	14,000	9,000	300	49	300	16
	2/23/96	14,000	13,000	270	83	260	67
	5/21/96	350	6,600	220	48	160	66
	8/22/96	ND	4,800	120	34	44	44
	11/21/96	3,300	8,700	220	51	150	68
	2/25/97	ND	8,200	260	57	200	72
	5/28/97	1,800	7,000	140	22	44	31
	MW-4	2/23/96	3,000	6,000	58	36	6
5/21/96		78	1,200	18	2.5	6.2	12
8/22/96		ND	400	8.6	3.4	1.8	2.6
11/21/96		87	170	3.6	1.1	1.7	2.3
2/25/97		ND	120	5.4	0.64	0.93	0.80
5/28/97		55	150	5.6	0.64	4.4	8.8
California Drinking Water MCL		None Listed	None Listed	1.0	1,000	680	1,750
Reporting Limit		50	50	0.5	0.5	0.5	1.0

Notes: All results in  $\mu\text{g/l}$  (ppb)  
 ND = Not Detected  
 NA = Not Analyzed

## SUMMARY AND RECOMMENDATIONS

The four monitoring wells at the Motor Partners site were sampled for the second quarter, 1997. The results of the sampling indicate that hydrocarbon contamination is present in groundwater samples from three of the wells (MW-1, MW-3, and MW-4). Concentrations of hydrocarbons in the samples are consistent with the previous monitoring period.

TPH-Gasoline and Benzene contamination exists on the property. The highest concentrations reported from the four wells were from the groundwater sample collected at MW-1 (inside the building). Groundwater flow direction for this sampling period was shown to be in a southwesterly direction.

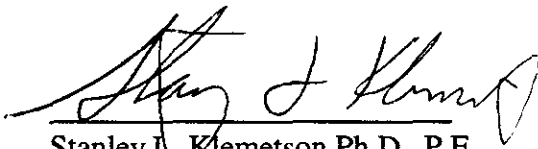
Phase II investigation activities are on-going at the site. It is recommended that quarterly groundwater sampling be continued.



## LIMITATIONS

This report has been prepared in accordance with generally accepted environmental, geological and engineering practices. No warranty, either expressed or implied is made as to the professional advice presented herein. The analysis, conclusions, and recommendations contained in this report are based upon site conditions as they existed at the time of the investigation and they are subject to change.

The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity, and interpretation of available information as described in this report. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users and any use or reuse of this document or its findings, conclusions or recommendations presented herein is at the sole risk of the said user.



Stanley L. Klemetson Ph.D., P.E.  
P.E. No. 40087



**APPENDIX A**

**Analytical Results**

413/133686 12121

JBM #: 9705413 REP: M  
CLIENT: ROGERSENV  
HE: 06/04/97  
EF #: 33928

53728

# CHROMALAB, INC.

## Chain of Custody

Environmental Services (SDB) (DOHS 1394)

DATE 5-28-97 PAGE 1 OF 1

PROJ MGR				ANALYSIS REPORT																	NUMBER OF CONTAINERS
COMPANY				TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (EPA 5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TPH (EPA 3510/3550, 8015)	PURCEABLE AROMATICS BTEX (EPA 602, 8020)	PURCEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 5242)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5820, 844, 84F)	PCB (EPA 606, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	LUFT METALS: Ca, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (ICLP, STIC)		
SAMPLE ID.	DATE	TIME	MATRIX PRESRV.																		
MW-2	5-28-97	11:50	W	X	X																3
MW-3		12:05	W	X	X																3
MW-1		12:15	W	X	X																3
MW-4	5-28-97	12:25	W	X	X																3

PROJECT INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY 1		RELINQUISHED BY 2		RELINQUISHED BY 3	
PROJECT NAME <u>Motor Partners</u>	TOTAL NO OF CONTAINERS			<u>Gary Rogers 2:25</u>					
PROJECT NUMBER <u>1004.95</u>	HEAD SPACE			<u>Gary Rogers 5-28-97</u>					
P.O.#	REC'D GOOD CONDITION/COLD			<u>Rogers Environmental</u>					
TAT	CONFORMS TO RECORD	24	48	72	OTHER				
SPECIAL INSTRUCTIONS/COMMENTS				RECEIVED BY 1		RECEIVED BY 2		RECEIVED BY (LABORATORY) 3	
				<u>[Signature]</u>		<u>[Signature]</u>		<u>[Signature]</u> 1425	
				<u>[Printed Name]</u>		<u>[Printed Name]</u>		<u>[Printed Name]</u> 5-28-97	
				[Company]		[Company]		[Company]	

P.002

TEL: 510 484 1096

CHROMALAB, INC.

JUN - 15 '97 (FRI) 10 08

# CHROMALAB, INC.

Environmental Services (SDB)

June 4, 1997

Submission #: 9705413

Revised from June 3, 1997

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS  
Received: May 28, 1997

Project#: 1004.95

re: One sample for Gasoline BTEX analysis.  
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-1

Spl#: 133688

Sampled: May 28, 1997

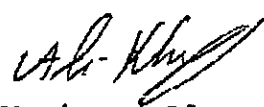
Matrix: WATER

Run#: 7119

Analyzed: June 3, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	7600	1000	N.D.	86	20
BENZENE	110	10	N.D.	88	20
TOLUENE	15	10	N.D.	90	20
ETHYL BENZENE	370	10	N.D.	97	20
XYLENES	870	10	N.D.	97	20

  
Kayvan Kimyai  
Chemist

  
For Marianne Alexander  
Gas/BTEX Supervisor

# CHROMALAB, INC.

Environmental Services (SOB)

June 3, 1997

Submission #: 9705413

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS  
Received: May 28, 1997

Project#: 1004.95

re: One sample for Gasoline BTEX analysis.  
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-2

Spl#: 133686

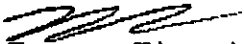
Sampled: May 28, 1997


Matrix: WATER

Run#: 7119

Analyzed: June 3, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	86	1
BENZENE	N.D.	0.50	N.D.	88	1
TOLUENE	N.D.	0.50	N.D.	90	1
ETHYL BENZENE	N.D.	0.50	N.D.	97	1
XYLENES	N.D.	0.50	N.D.	97	1

  
Kayvan Kimyai  
Chemist

  
Marianne Alexander  
Gas/BTEX Supervisor

510-742-0552

# CHROMALAB, INC.

Environmental Services (SDB)

June 4, 1997

Submission #: 9705413

Revised from June 3, 1997

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS  
Received: May 28, 1997

Project#: 1004.95

rc: One sample for Gasoline BTEX analysis.  
Method: SW846 8020A Nov 1990 / 8015Mod


Client Sample ID: MW-3  
Spl#: 133687  
Sampled: May 28, 1997

Matrix: WATER  
Run#: 7119

Analyzed: June 3, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	7000	1000	N.D.	86	20
BENZENE	140	10	N.D.	88	20
TOLUENE	22	10	N.D.	90	20
ETHYL BENZENE	44	10	N.D.	97	20
XYLENES	31	10	N.D.	97	20

  
Kayvan Kimyai  
Chemist

*Fol*   
Marianne Alexander  
Gas/BTEX Supervisor

# CHROMALAB, INC.

Environmental Services (SDB)

June 3, 1997

Submission #: 9705413

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS  
 Received: May 28, 1997

Project#: 1004.95

re: One sample for Gasoline BTEX analysis.  
 Method: SW846 8020A Nov 1990 / 8015Mod


Client Sample ID: MW-4  
 Spl#: 133689  
 Sampled: May 28, 1997

Matrix: WATER  
 Run#: 7119

Analyzed: June 3, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	150	50	N.D.	86	1
BENZENE	5.6	0.50	N.D.	88	1
TOLUENE	0.64	0.50	N.D.	90	1
ETHYL BENZENE	4.4	0.50	N.D.	97	1
XYLENES	8.8	0.50	N.D.	97	1

  
 Kayvan Kimyai  
 Chemist

  
 Marianne Alexander  
 Gas/BTEX Supervisor

510-742-0552

# CHROMALAB, INC.

Environmental Services (SDB)

June 4, 1997

Submission #: 9705413

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS  
Received: May 28, 1997

Project#: 1004.95


re: 4 samples for TPH - Diesel analysis.  
Method: EPA 8015M


Sampled: May 28, 1997      Matrix: WATER      Extracted: June 2, 1997  
Run#: 7099      Analyzed: June 2, 1997

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
133686	MW-2	N.D.	50	N.D.	79.0	1
133687	MW-3	1800	50	N.D.	79.0	1
Note: Hydrocarbon reported does not match the pattern of our Diesel standard. Concentration reported is estimated due to overlapping fuel patterns.						
133689	MW-4	55	50	N.D.	79.0	1
Note: Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard.						

Sampled: May 28, 1997      Matrix: WATER      Extracted: June 2, 1997  
Run#: 7099      Analyzed: June 4, 1997

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
133688	MW-1	3700	50	N.D.	79.0	1
Note: Hydrocarbon reported does not match the pattern of our Diesel standard. Concentration reported is estimated due to overlapping fuel patterns.						

  
Bruce Havlik *fm*  
Chemist

  
Alex Tam  
Semivolatiles Supervisor



**APPENDIX B**

**Quarterly Monitoring Data Sheets**

### Quarterly Monitoring Data Sheet

Date: <u>5/28/97</u> Project Location: <u>Motor Partners Site</u> <u>1234 40th Ave., Oakland</u> Sampler: <u>G. Rogers</u>	Well Diameter: <u>2 Inches</u> Well ID: <u>MW-1</u> Well Type: <u>Monitoring Well</u> Total Depth as Built: <u>19 ft</u> Screened Interval: <u>7 ft to 17 ft</u>
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<b>Water Level Data</b>	<b>Purge Calculation (Min 3 Casing Volumes)</b>
Time Depth Sounded: <u>10:27 AM</u> Measured Depth to Water: <u>8.08 ft.</u> Measured Total Depth: <u>18.2 ft.</u>	$\text{gal/ft} \times \text{ft} = \text{gal} \times 3 = \text{gal}$ $0.163 \times 10.12 = 1.65 \times 3 = 4.9$

#### Purge Data

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (μs/cm)	pH	Turbidity (NTU)
10:35		0	67.2	653	6.94	>200
10:39		2	65.6	654	6.79	>200
10:43		4	65.6	661	6.76	68
10:47		6	65.4	663	6.74	40
10:50		8	65.4	662	6.72	13

**Observations/Comments:**

Inside Building

**Laboratory Analysis:**

Sample at 12:15 pm  
 Water depth - 8.11 ft.  
 Analyze for TPH-D, TPH-G and BTEX

**Data for Volume Calculation:**

1 cu. ft. = 7.48 gal = 62.4 lbs (approx)	1 gal = 0.134 cu. ft. = 8.34 lbs (approx)
2" well = 0.163 gal/linear ft	3" well = 0.367 gal/linear ft.
4" well = 0.653 gal/linear ft.	6" well = 1.469 gal/linear ft

### Quarterly Monitoring Data Sheet

Date: <u>5/28/97</u> Project Location: <u>Motor Partners Site</u> <u>1234 40th Ave., Oakland</u> Sampler: <u>G. Rogers</u>	Well Diameter: <u>2 Inches</u> Well ID: <u>MW-2</u> Well Type: <u>Monitoring Well</u> Total Depth as Built: <u>22 ft</u> Screened Interval: <u>10 ft to 20 ft</u>
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<b>Water Level Data</b>	<b>Purge Calculation (Min 3 Casing Volumes)</b>
Time Depth Sounded: <u>9:20 AM</u> Measured Depth to Water: <u>7.38 ft.</u> Measured Total Depth: <u>19.2 ft.</u>	gal/ft X ft = gal X 3 = gal <u>0.163 X 11.82 = 1.93 X 3 = 5.8</u>

#### Purge Data

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (µs/cm)	pH	Turbidity (NTU)
9:26		0	69.8	673	6.94	168
9:30		2	67.9	645	7.09	65
9:35		4	67.4	645	7.07	28
9:40		6	67.3	643	7.09	17
9:45		8	67.6	647	7.08	9

**Observations/Comments:**

foggy, overcast during purging, clear and sunny during sampling

**Laboratory Analysis:**

Sample at 11:50 am  
 Water depth - 7.38 ft.  
 Analyze for TPH-D, TPH-G and BTEX

**Data for Volume Calculation:**

1 cu. ft. = 7.48 gal = 62.4 lbs (approx)	1 gal = 0.134 cu. ft. = 8.34 lbs (approx)
2" well = 0.163 gal/linear ft.	3" well = 0.367 gal/linear ft
4" well = 0.653 gal/linear ft.	6" well = 1.469 gal/linear ft.

**Quarterly Monitoring Data Sheet**

Date: 5/28/97  
 Project Location: Motor Partners Site  
1234 40th Ave., Oakland  
 Sampler: G. Rogers

Well Diameter: 2 Inches Well ID: MW-3  
 Well Type: Monitoring Well  
 Total Depth as Built: 23 ft  
 Screened Interval: 7 ft to 20 ft

**Water Level Data**

Time Depth Sounded: 9:55 AM  
 Measured Depth to Water: 7.53 ft.  
 Measured Total Depth: 21. ft

**Purge Calculation (Min 3 Casing Volumes)**

gal/ft X ft = gal X 3 = gal  
0.163 X 13.77 = 2.24 X 3 = 6.7

**Purge Data**

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (µs/cm)	pH	Turbidity (NTU)
9:57		0	70.6	716	7.06	135
10:00		2	70.1	715	6.92	146
10:04		4	70.4	719	6.87	28
10:07		6	69.9	719	6.85	39
10:10		8	70.1	722	6.89	14

**Observations/Comments:**

Partly cloudy changing to sunny and clear

**Laboratory Analysis:**

Sample at 12:05 pm  
 Water depth - 7.60 ft.  
 Analyze for TPH-D, TPH-G and BTEX

**Data for Volume Calculation:**

1 cu ft. = 7.48 gal = 62.4 lbs (approx)  
 2" well = 0.163 gal/linear ft.  
 4" well = 0.653 gal/linear ft.

1 gal = 0.134 cu. ft. = 8.34 lbs (approx)  
 3" well = 0.367 gal/linear ft  
 6" well = 1.469 gal/linear ft

**Quarterly Monitoring Data Sheet**

Date: <u>5/28/97</u> Project Location: <u>Motor Partners Site</u> <u>1234 40th Ave., Oakland</u> Sampler: <u>G. Rogers</u>	Well Diameter: <u>2 Inches</u> Well ID: <u>MW-4</u> Well Type: <u>Monitoring Well</u> Total Depth as Built: <u>25 ft</u> Screened Interval: <u>5 ft to 25 ft</u>
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<b>Water Level Data</b>	<b>Purge Calculation (Min 3 Casing Volumes)</b>
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Time Depth Sounded: <u>10:55 AM</u> Measured Depth to Water: <u>6.94 ft.</u> Measured Total Depth: <u>24.4 ft.</u>	gal/ft X ft = gal X 3 = gal <u>0.163</u> X <u>17.46</u> = <u>2.84</u> X 3 = <u>8.5</u>
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**Purge Data**

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (µs/cm)	pH	Turbidity (NTU)
11:03		0	68.4	708	7.25	>200
11:08		2	69.1	710	7.11	>200
11:12		4	69.4	713	7.17	70
11:16		6	69.6	712	7.14	47
11:20		8	69.7	710	7.16	21

**Observations/Comments:**

Clear and sunny

**Laboratory Analysis:**

Sample at 12:25 pm  
 Water depth - 6.94 ft.  
 Analyze for TPH-D, TPH-G and BTEX

**Data for Volume Calculation:**

1 cu. ft. = 7.48 gal = 62.4 lbs (approx)	1 gal = 0.134 cu. ft. = 8.34 lbs (approx)
2" well = 0.163 gal/linear ft.	3" well = 0.367 gal/linear ft
4" well = 0.653 gal/linear ft.	6" well = 1.469 gal/linear ft