Rogers Environmental Services

3682

May 28, 1996

REF: 1004-2Q.RPT

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:

We 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 1996.

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

Sincerely,

Gary Rogers

Gary Rogers, Ph.D.

Stanley L. Klemetson, Ph.D., P.E.

cc: Bill Owens

2657 Bailey Ct. ❖ Fremont, CA 94536 ❖ 510-791-7157 ❖ E-mail. rogers1@ix netcom com

QUARTERLY MONITORING REPORT

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

May 28, 1996

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INTRODUCTION

PROJECT DESCRIPTION

This report discusses the results of quarterly sampling for the second quarter in1996 at the Motor Partners site, 1234 40th Ave., Oakland, California.

SITE LOCATION AND DESCRIPTION

The project site is known as Motor Partners, 1234 40th Avenue, Oakland, California (Figure 1), located in a commercial/light industrial area. The elevation of the site is approximately 25 feet above mean sea level.

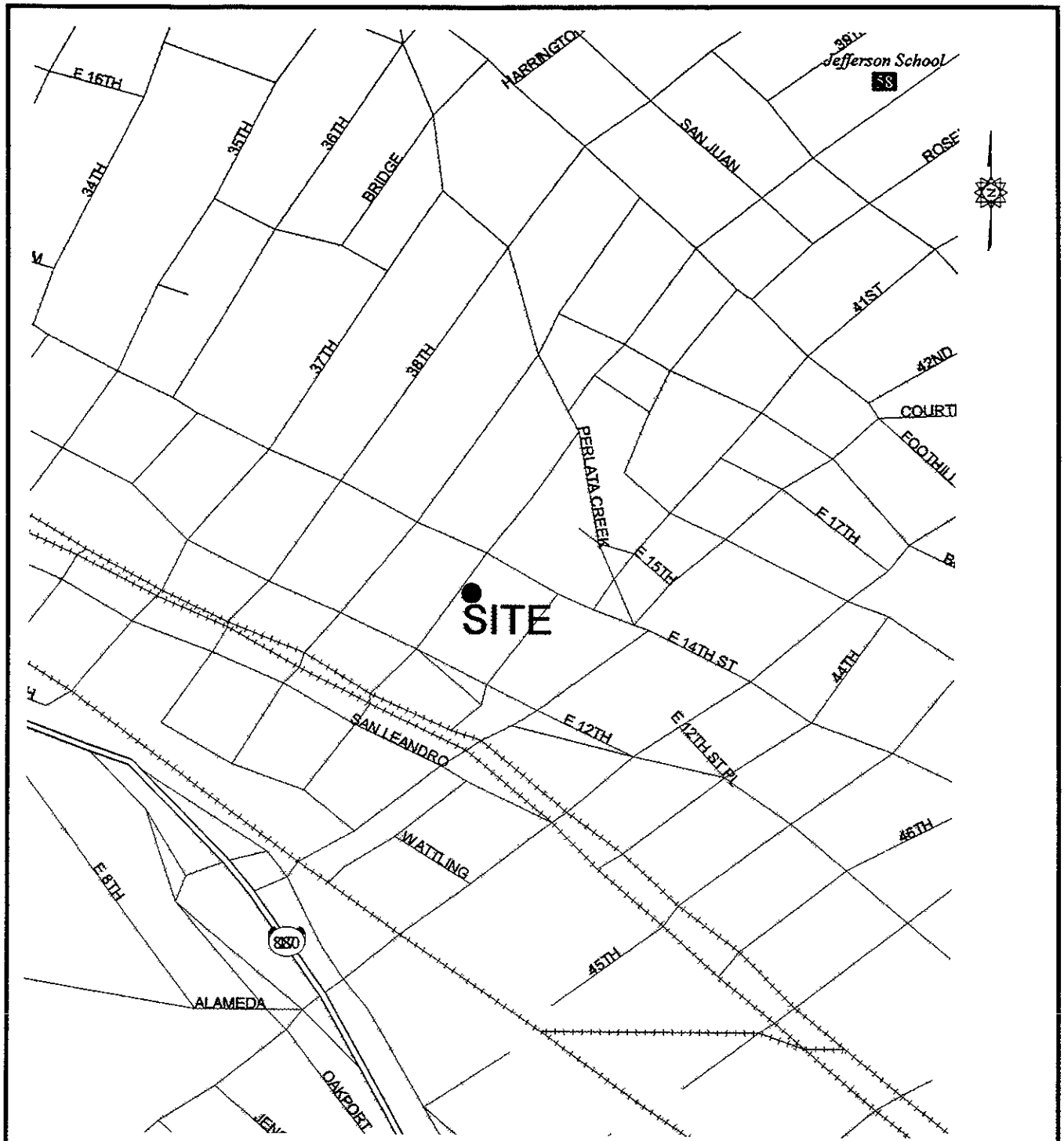
Motor Partners is located at 1234 40th Avenue near Nimitz Highway (880) in the Fruitvale District of Oakland, California (Figure 1). The BART rail tracks are about 500 feet west of the site and San Leandro Bay is less than one mile to the southwest.

Motor Partners utilized the site for auto repair shops. Two underground storage tanks were maintained outside the 1234 40th Avenue building. A 1,000-gallon underground gasoline tank and a 500-gallon underground waste oil tank were located below the sidewalk (Figure 2). No reliable records exist to determine if inventory was lost.

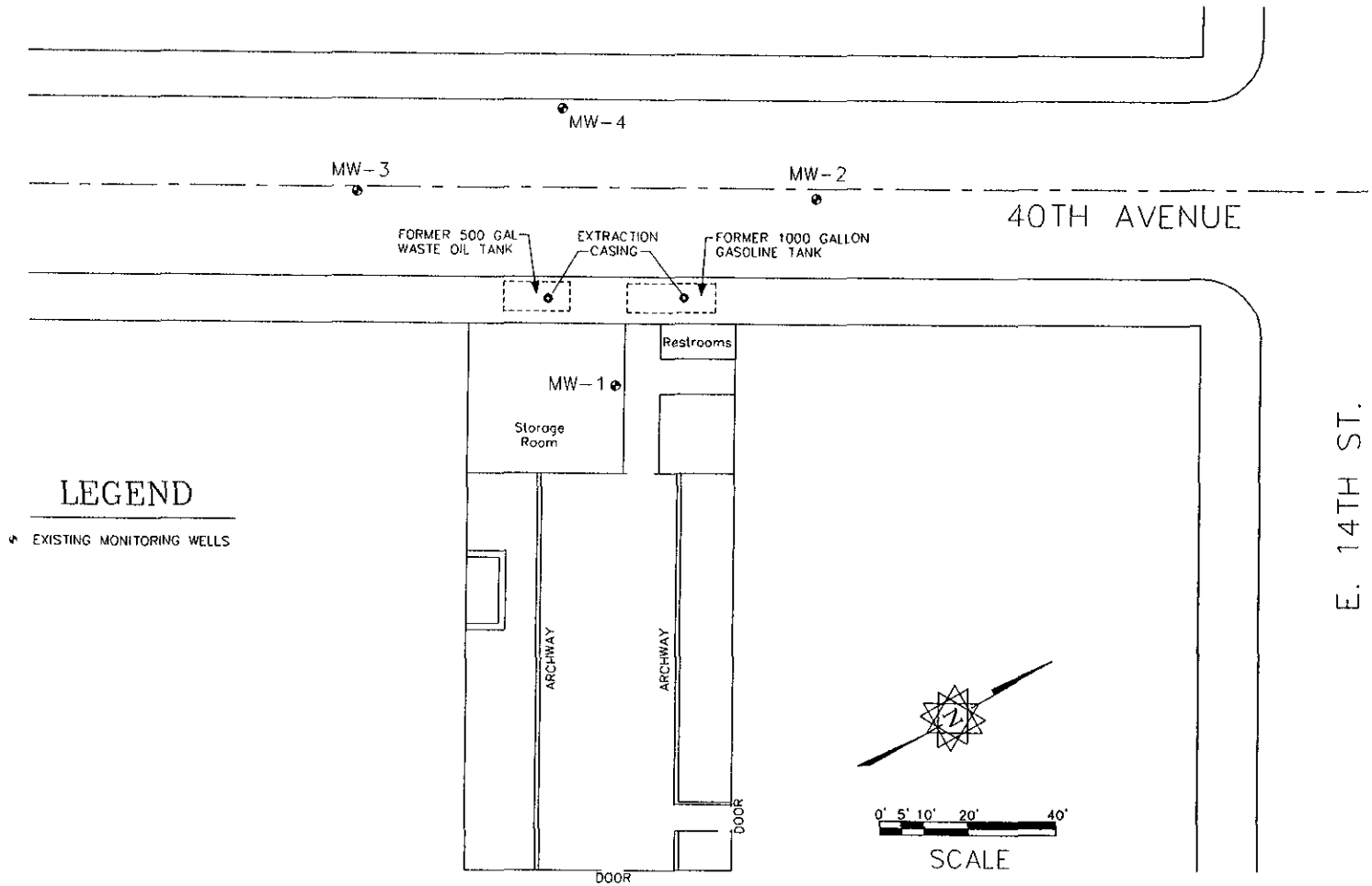
Previous Subsurface Investigations

On Oct. 12, 1990, Semco, Inc. of Modesto, California removed both the 1,000-gallon gasoline tank and the 500-gallon waste oil tank. The concentration of total petroleum hydrocarbons in the gasoline range (TPH-G) below the 1,000-gallon tank was 1,600 mg/Kg. The TPH-G and TPH-D concentrations below the 500-gallon tank were 570 mg/Kg and 650 mg/Kg, respectively. There was no record of groundwater in the excavations. The excavations were backfilled to grade with original spoils.

In January, 1994, SEMCO re-excavated the area to remove contaminated soil, and dispose of the contaminated backfill. During the course of over excavation, it was noted that contamination extended beneath the building and into the street. Utilities prevented further excavation. The over excavation was halted and samples taken from the sidewalls of each excavation. An extraction well casing was installed in each excavation. Clean imported soil was used to backfill the two areas and the sidewalk was resurfaced with Christy boxes housing the two extraction casings.



GARY ROGERS, PH.D. ENVIRONMENTAL CONSULTANT 2657 BAILEY CT. FREMONT, CA 94536 (510) 791 7157	DESCRIPTION Site Location		FIGURE 1	
	PROJECT LOCATION Motor Partners 1234 40th Ave. Oakland CA			
DRAWN BY GLR	DRAWING DATE 5 28 96	PROJECT NUMBER 1004	FILE NAME 1004-2Q DWG	PROJECT MANAGER GLR



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: 5/28/96	FILE NAME: 1004-2Q.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.

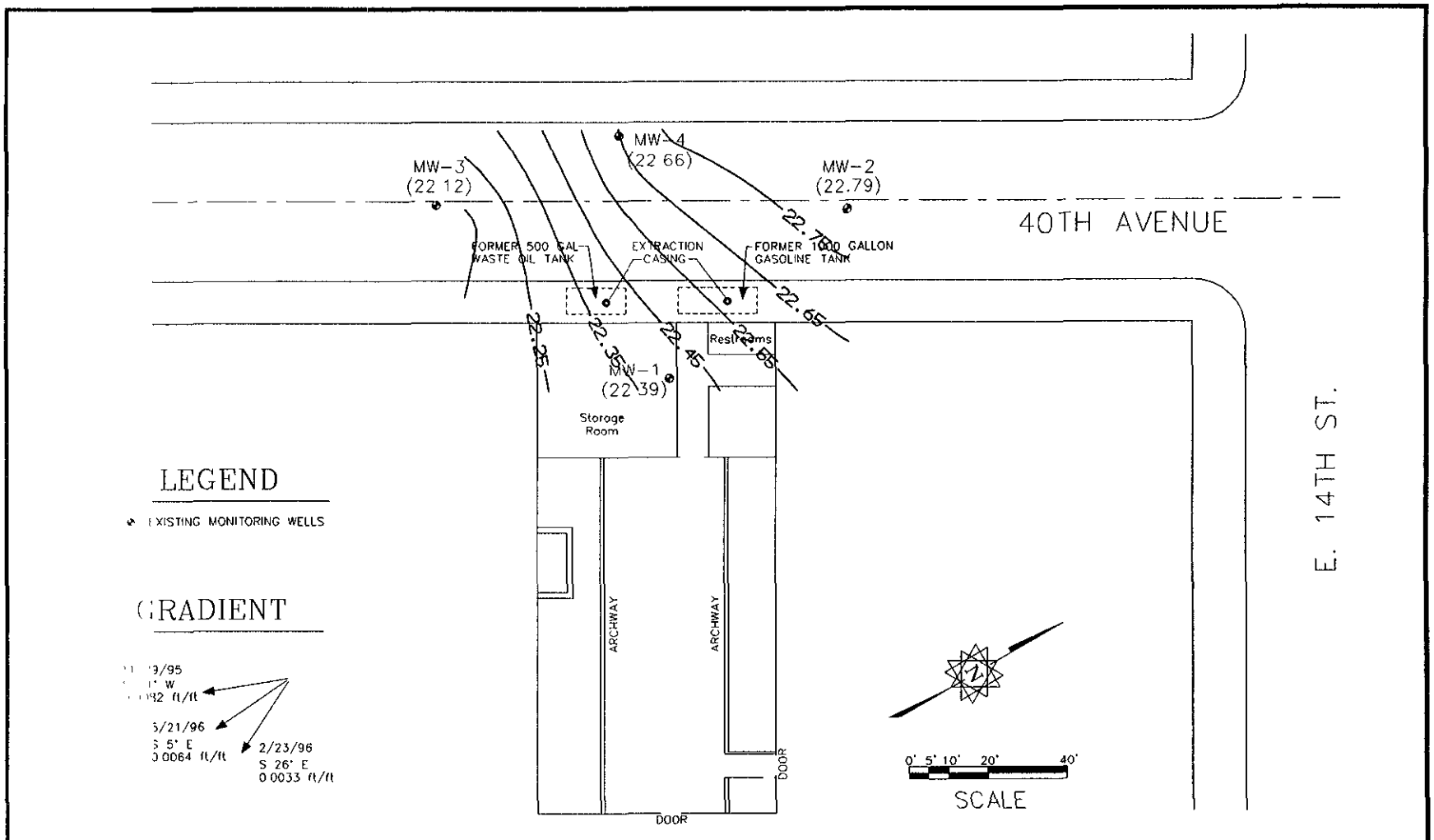
Regional Hydrogeology.

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.



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: 5/28/96	FILE NAME: 1004-2Q.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[1]	28.43 ft.	28.03 ft.	27.41 ft.	27.34 ft.

[1]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 21, 1996 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. 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 21, 1996, the depth to groundwater in the wells ranged from 4.6 to 6.0 feet below the top of the casing. The groundwater elevations for the wells were as follows; MW-1 was 22.39 feet above mean sea level (msl), MW-2 was 22.79 feet above msl, MW-3 was 22.12 feet above msl, and MW-4 was 22.66 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 5°E) at a gradient of 0.0064 ft/ft. The flow direction and gradient is shown in Figure 3.

A summary of the analytical results for the monitoring well sampling is presented in Table 3. The analytical data sheets 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
TOC		28.43 ft	28.03 ft	27.41 ft.	27. 34	
SWL	11/29/95	10.13	9.31	9.53		S 21° W
GSE		18.3	18.72	17.88		0.0082 ft/ft
SWL	2/23/96	4.59	3.77	3.56	3.17	S 26° E
GSE		23.84	24.26	23.85	24.17	0.0033 ft/ft
SWL	5/21/96	6.04	5.24	5.29	4.68	S 5° E
GSE		22.39	22.79	22.12	22.66	0.0064 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 (μg/L)	TPH-G (μg/L)	Benzene (μg/L)	Toluene (μg/L)	Ethyl Benzene (μg/L)	Total Xylenes (μg/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	1300
MW-2	6/17/94	370	990	ND	1.3	2.3	4.4
	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
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
MW-4	2/23/96	3,000	6,000	58	36	6	28
	5/21/96	78	1,200	18	2.5	6.2	12
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 μg/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, 1996. The results of the sampling indicate that hydrocarbon contamination is present in groundwater samples from each of the wells. However, levels appear to be diminishing.

TPH-Diesel, 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 south easterly 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

CHROMALAB, INC.

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Environmental Services (SDB) (DOHS 1094)

Chain of Custody

DATE May 21, 1996 PAGE 1 OF 1

PROJ MGR Gary Rogers
COMPANY Rogers Environmental Services
ADDRESS 2657 Bailey Ct
Fremont CA 94536

SAMPLERS (SIGNATURE) Gary Rogers
(PHONE NO.) 510-791-7157
(FAX NO.)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
MW-1	5-21-96	1:15	W			X	X																	3
MW-2	"	1:25	W			X	X																	3
MW-3	"	1:35	W			X	X																	3
MW-4	5-21-96	1:45	W			X	X																	3

PROJECT INFORMATION

PROJECT NAME: Motor Partners
PROJECT NUMBER: 1004
PO #:

SAMPLE RECEIPT

TOTAL NO OF CONTAINERS	
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS

RELINQUISHED BY 1	RELINQUISHED BY 2	RELINQUISHED BY 3
(SIGNATURE) Gary Rogers 3:45 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Gary Rogers 5-21-96 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) Rogers Env. Services	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) Minnie Park 1545 (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) Minnie Park 5/21/96 (DATE)
(COMPANY)	(COMPANY)	(LAB) Chromalab

CHROMALAB, INC.

Environmental Services (SDB)

May 29, 1996 *Submission #:* 9605732

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS *Project#:* 1004
Received: May 21, 1996

re: 1 sample for Gasoline and BTEX compounds analysis.
Method: *EPA 5030/8015M/8020*

Matrix: WATER
Sampled: May 21, 1996 *Run#:* 1514 *Analyzed:* May 27, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
85841	MW-1	11000	290	37	600	1300
Reporting Limits		1200	12	12	12	12
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)		84.4	107	112	114	118

June Zhao
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

May 29, 1996

Submission #: 9605732

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS *Project#:* 1004
Received: May 21, 1996

re: 1 sample for Gasoline and BTEX compounds analysis.
Method: *EPA 5030/8015M/8020*

Sampled: May 21, 1996 *Matrix:* WATER *Run#:* 1514 *Analyzed:* May 27, 1996

Spl# CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
85842 MW-2	62	N.D.	N.D.	N.D.	1.0
Reporting Limits	50	0.50	0.50	0.50	0.50
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	84.4	107	112	114	118

June Zhao
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

May 29, 1996 *Submission #:* 9605732

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS *Project#:* 1004
Received: May 21, 1996

re: 1 sample for Gasoline and BTEX compounds analysis.
Method: *EPA 5030/8015M/8020*

Matrix: WATER
Sampled: May 21, 1996 *Run#:* 1514 *Analyzed:* May 28, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
85843	MW-3	6600	220	48	160	66
Reporting Limits		500	5.0	5.0	5.0	5.0
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)		84.4	107	112	114	118

June Zhao
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

May 29, 1996

Submission #: 9605732

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS
Received: May 21, 1996

Project#: 1004

re: 1 sample for Gasoline and BTEX compounds analysis.
Method: *EPA 5030/8015M/8020*

Sampled: May 21, 1996

Matrix: WATER
Run#: 1514

Analyzed: May 28, 1996

Spl# CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
85844 MW-4	1200	18	2.5	6.2	12
Reporting Limits	50	0.50	0.50	0.50	0.50
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	84.4	107	112	114	118

June Zhao
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.
Environmental Services (SDB)

May 29, 1996 Submission #: 9605732

ROGERS ENVIRONMENTAL SERVICES
2657 Bailey Ct.
Fremont, CA 94536

Attn: Gary Rogers

RE: Analysis for project MOTOR PARTNERS, number 1004.

REPORTING INFORMATION

Samples were received cold and in good condition on May 21, 1996. They were refrigerated upon receipt and analyzed as described in the attached report. ChromaLab followed EPA or equivalent methods for all testing reported.

No discrepancies were observed or difficulties encountered with the testing.

Motor oil was found in sample MW-1.
Motor oil was found in sample MW-3.

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.
Environmental Services (SDB)

May 29, 1996 *Submission #:* 9605732

ROGERS ENVIRONMENTAL SERVICES

Atten: Gary Rogers

Project: MOTOR PARTNERS *Project#:* 1004
Received: May 21, 1996

re: 4 samples for TPH - Diesel analysis.
Method: *EPA 3510/8015M*

Matrix: WATER *Extracted:* May 23, 1996
Sampled: May 21, 1996 *Run#:* 1486 *Analyzed:* May 24, 1996

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
85842	MW-2	N.D.	50	N.D.	91.0	1
85843	MW-3	350	50	N.D.	91.0	1
	Note: Hydrocarbon reported does not match the pattern of our Diesel standard.					
85844	MW-4	78	50	N.D.	91.0	1
	Note: Hydrocarbon reported does not match the pattern of our Diesel standard.					

Matrix: WATER *Extracted:* May 23, 1996
Sampled: May 21, 1996 *Run#:* 1486 *Analyzed:* May 25, 1996

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
85841	MW-1	650	100	N.D.	91.0	2
	Note: Hydrocarbon reported has characteristics of weathered/aged Diesel.					

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096

APPENDIX B

Quarterly Monitoring Data Sheets

Quarterly Monitoring Data Sheet

Date: 5/21/96	Well Diameter: 2 Inches Well ID: MW-1
Project Location: Motor Partners Site	Well Type: Monitoring Well
1234 40th Ave., Oakland	Total Depth as Built: 19 ft
Sampler: G. Rogers	Screened Interval: 7 ft to 17 ft
Water Level Data	**Purge Calculation(Min 3 Casing Volumes)**
Time Depth Sounded: 10:45 AM	gal/ft X ft = gal X 3 = gal
Measured Depth to Water: 6.04'	
Measured Total Depth: 18.9'	0.163 X 12.9 = 2.1 X 3 = 6.3

Purge Data

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (μs/cm)	pH	Turbidity (NTU)	
10:50		0	64.3	4340	7.35	>200	
10:55		2	65.3	959	7.18	126	
11:00		4	65.8	760	7.08	47	
11:05		6	65.8	748	6.91	82	
11:10		8	65.9	737	6.82	20	

Observations/Comments:

Inside Building

Laboratory Analysis:

Sample at 1:15 PM
Water depth - 6.03'
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: 5/21/96	Well Diameter: 2 Inches Well ID: MW-2
Project Location: Motor Partners Site	Well Type: Monitoring Well
1234 40th Ave., Oakland	Total Depth as Built: 22 ft
Sampler: G. Rogers	Screened Interval: 10 ft to 20 ft
Water Level Data	**Purge Calculation(Min 3 Casing Volumes)**
Time Depth Sounded: 11:30 AM	gal/ft X ft = gal X 3 = gal
Measured Depth to Water: 5.24'	
Measured Total Depth: 19.6'	0.163 X 14.4 = 2.3 X 3 = 7.0

Purge Data

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (μs/cm)	pH	Turbidity (NTU)	
11:35		0	64.8	714	6.95	110	
11:40		2	66.1	718	7.03	85	
11:45		4	66.6	715	7.06	29	
11:50		6	65.8	721	7.18	15	
11:55		8	65.9	720	7.11	21	

Observations/Comments:

Overcast, Raining

Laboratory Analysis:

Sample at 1:25 PM
Water depth - 5.29'
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: 5/21/96	Well Diameter: 2 Inches Well ID: MW-3
Project Location: Motor Partners Site	Well Type: Monitoring Well
1234 40th Ave., Oakland	Total Depth as Built: 23 ft
Sampler: G. Rogers	Screened Interval: 7 ft to 20 ft

Water Level Data	**Purge Calculation(Min 3 Casing Volumes)**
Time Depth Sounded: 12:05 PM	gal/ft X ft = gal X 3 = gal
Measured Depth to Water: 5.29'	
Measured Total Depth: 21.8'	0.163 X 16.5 = 2.7 X 3 = 8.1

Purge Data

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (μs/cm)	pH	Turbidity (NTU)	
12:10		0	69.8	849	6.89	-	
12:15		2	68.8	848	7.03	-	
12:20		4	66.3	845	7.09	121	
12:25		6	66.0	841	7.11	70	
12:30		8	66.8	844	7.10	77	

Observations/Comments:

Overcast

Laboratory Analysis:

Sample at 1:35 PM
Water depth - 5.40'
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: 5/21/96	Well Diameter: 2 Inches Well ID: MW-4
Project Location: Motor Partners Site 1234 40th Ave., Oakland	Well Type: Monitoring Well
Sampler: G. Rogers	Total Depth as Built: 25 ft
	Screened Interval: 5 ft to 25 ft

Water Level Data	Purge Calculation(Min 3 Casing Volumes)
Time Depth Sounded: 12:35 PM	gal/ft X ft = gal X 3 = gal
Measured Depth to Water: 4.68'	
Measured Total Depth: 24.5'	0.163 X 19.8 = 3.2 X 3 = 9.7

Purge Data

Time	Flowrate (gpm)	Volume (gal)	Temp (°F)	EC (μs/cm)	pH	Turbidity (NTU)	
12:40		0	66.8	735	7.72	>200	
12:43		2	67.8	760	7.42	>200	
12:46		4	67.1	761	7.49	>200	
12:50		6	68.4	758	7.26	>200	
12:52		8	69.2	766	7.26	190	
12:55		10	69.5	765	7.29	17	

Observations/Comments:

Overcast

Laboratory Analysis:

Sample at 1:45 PM
Water depth - 4.75'
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.