

SUMMARY REPORT OF DRILLING ACTIVITIES, 1995 -1996

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
510-567-6765

PREPARED BY:

Gary Rogers, Ph.D.
Aquatic & Environmental Applications
38053 Davy Ct.
Fremont, CA 94536
(510) 791-7157

PROJECT NO. 1004.RPT

April 13, 2000

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Project Description	1
1.2 Site Location and Description	1
1.3 Previous Investigations	1
2.0 GEOLOGY AND HYDROGEOLOGY	5
2.1 Geology	5
2.2 Hydrogeology	5
3.0 SITE INVESTIGATION ACTIVITIES	6
3.1 Soil And Groundwater Sampling Methods	6
3.2 Results of Soil and Groundwater Sampling	6
4.0 SUMMARY	9
5.0 LIMITATIONS	10
6.0 APPENDICES	11
Appendix A - Analytical Results	A-1
Appendix B - Permits	B-1
Appendix C - Boring Logs	C-1

LIST OF FIGURES

Figure 1. Site Location Map 2
Figure 2. Site Layout Map 3
Figure 3. Boring Locations 7

LIST OF TABLES

Table 1. Summary of Soil Analytical Results 8
Table 2. Summary of Groundwater Analytical Results 8

1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

This report discusses Phase II site investigation activities performed at the Motor Partners site, 1234 40th Ave., Oakland, California between November 30, 1995 and February 7, 1996. The project included drilling eight soil borings for collection of soil and groundwater samples as part of a Phase II investigation at the site. The work was performed under the direction of the Alameda County Environmental Health Division.

1.2 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 30 feet above mean sea level.

Motor Partners is located near Nimitz Highway (880) in the Fruitvale District of Oakland, California (Figure 1). The BART rail tracks are about 500 ft. 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.

1.3 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.

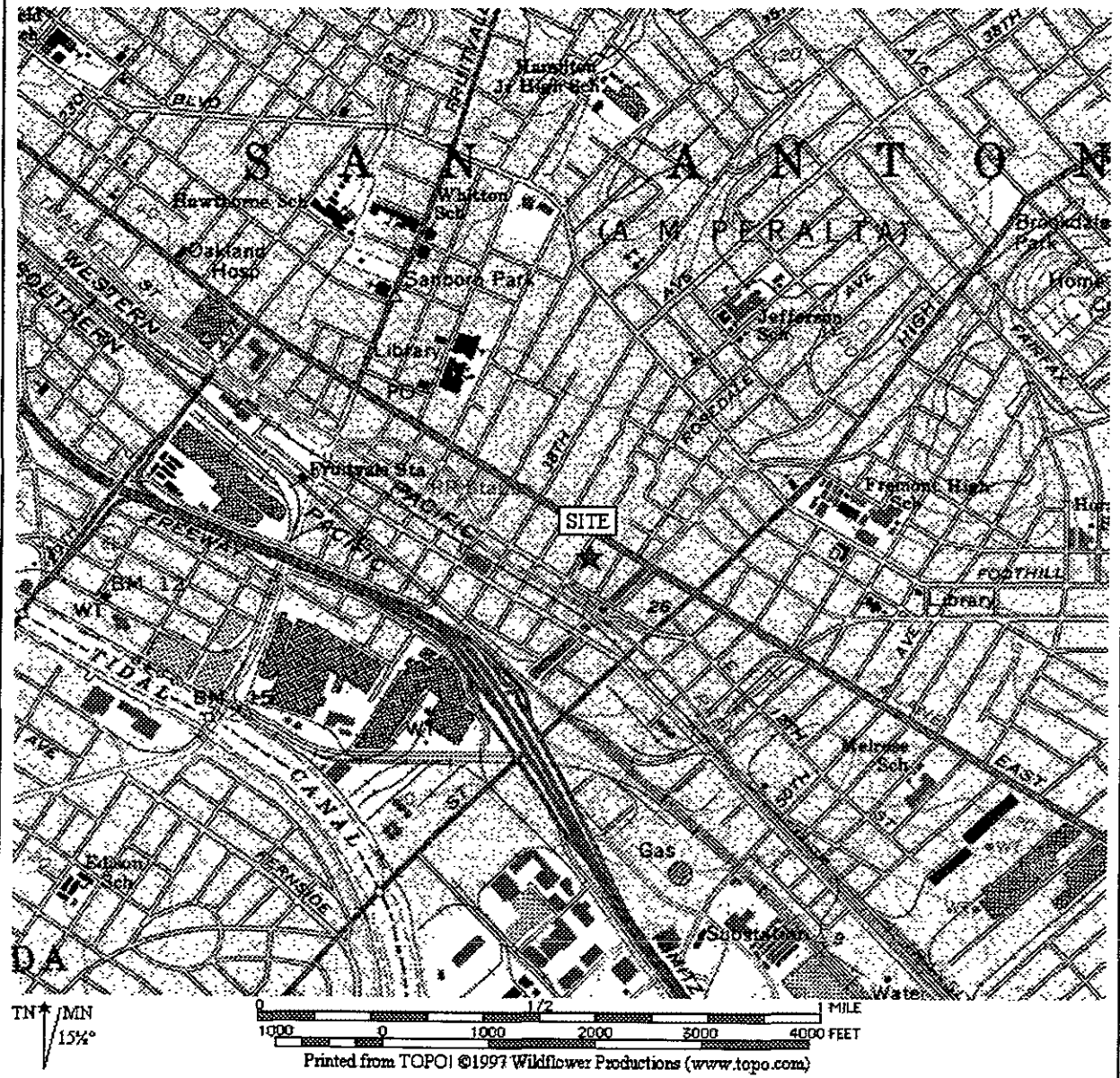
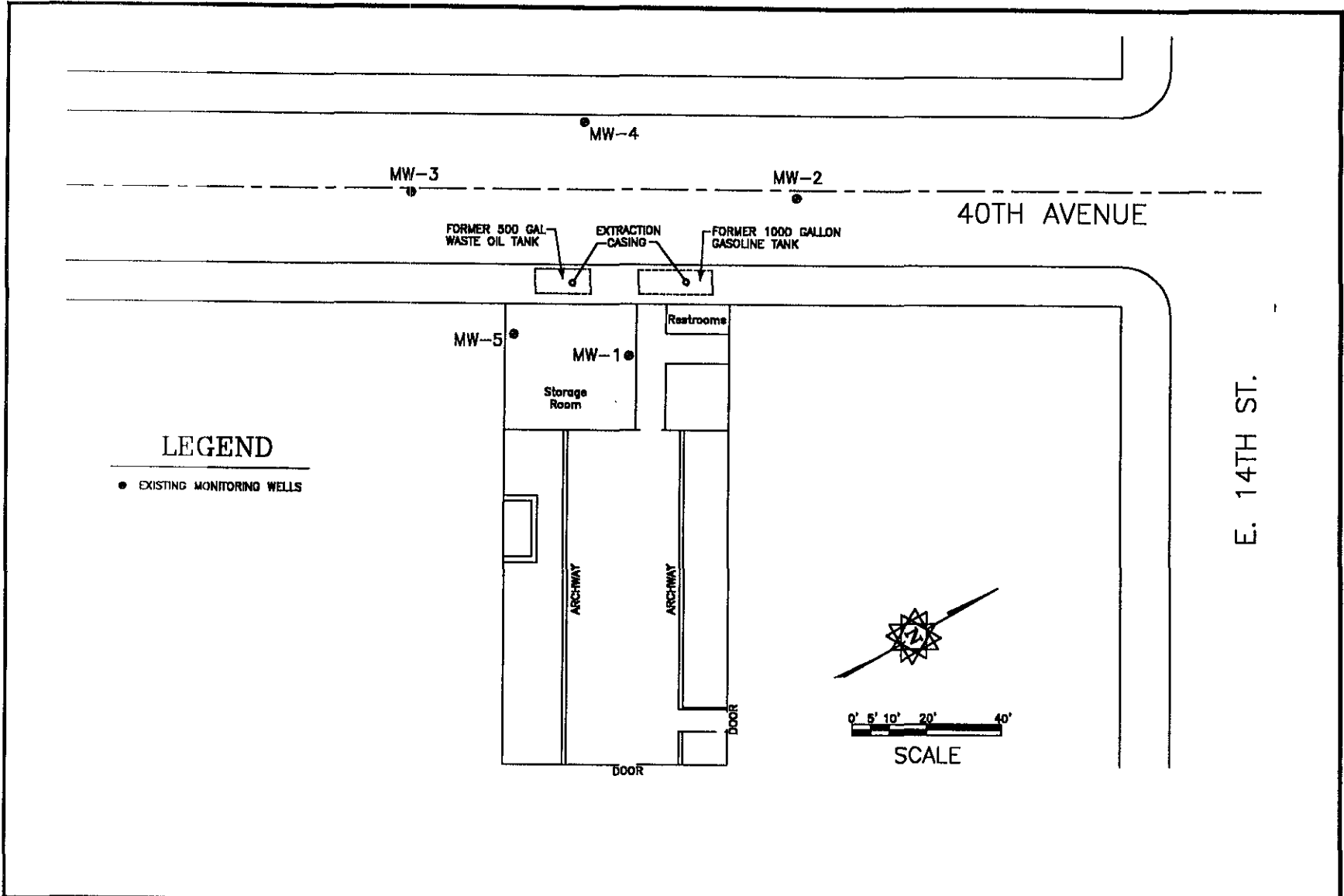


Figure 1. Site Location Map



AQUATIC & ENVIRONMENTAL APPLICATIONS 38053 DAVY CT. FREMONT, CA 94536 (510) 791-7157	DRAWN BY GLR	PROJECT NUMBER 1004	DESCRIPTION Site Layout	FIGURE 2
	DRAWING DATE 4/11/00	FILE NAME 1004-RPT.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. Three monitoring wells were installed on June 14-15, 1994. Two of the wells were located in the street (40th Avenue) and one well was inside the building (see Figure 2 for location).

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.

2.0 GEOLOGY AND HYDROGEOLOGY

2.1 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 nearest cross street is 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.

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.

2.2 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 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.

3.0 SITE INVESTIGATION ACTIVITIES

The subsurface investigation discussed in this report was completed to assist in defining the lateral and vertical extent of soil and groundwater contamination at the Motor Partner Property, 1234 40th Ave., Oakland, California. Drilling activities at the site were completed using a Geoprobe sampling rig.

3.1 SOIL AND GROUNDWATER SAMPLING METHODS

Between November 30, 1995 and February 7, 1996, eight core boreholes were drilled inside or near the buildings located at the Motor Partner property. The borings were completed by Vironex using a Geoprobe hydraulic coring system. Depths of boings varied but most were completed to approximately twenty feet below grade. The locations of the boreholes are shown on Figure 3. Soil samples were collected from each boring to determine soil lithology (soil boring logs are presented in Appendix C) and define limits of contamination. The soil samples were collected at approximately five foot depth intervals.

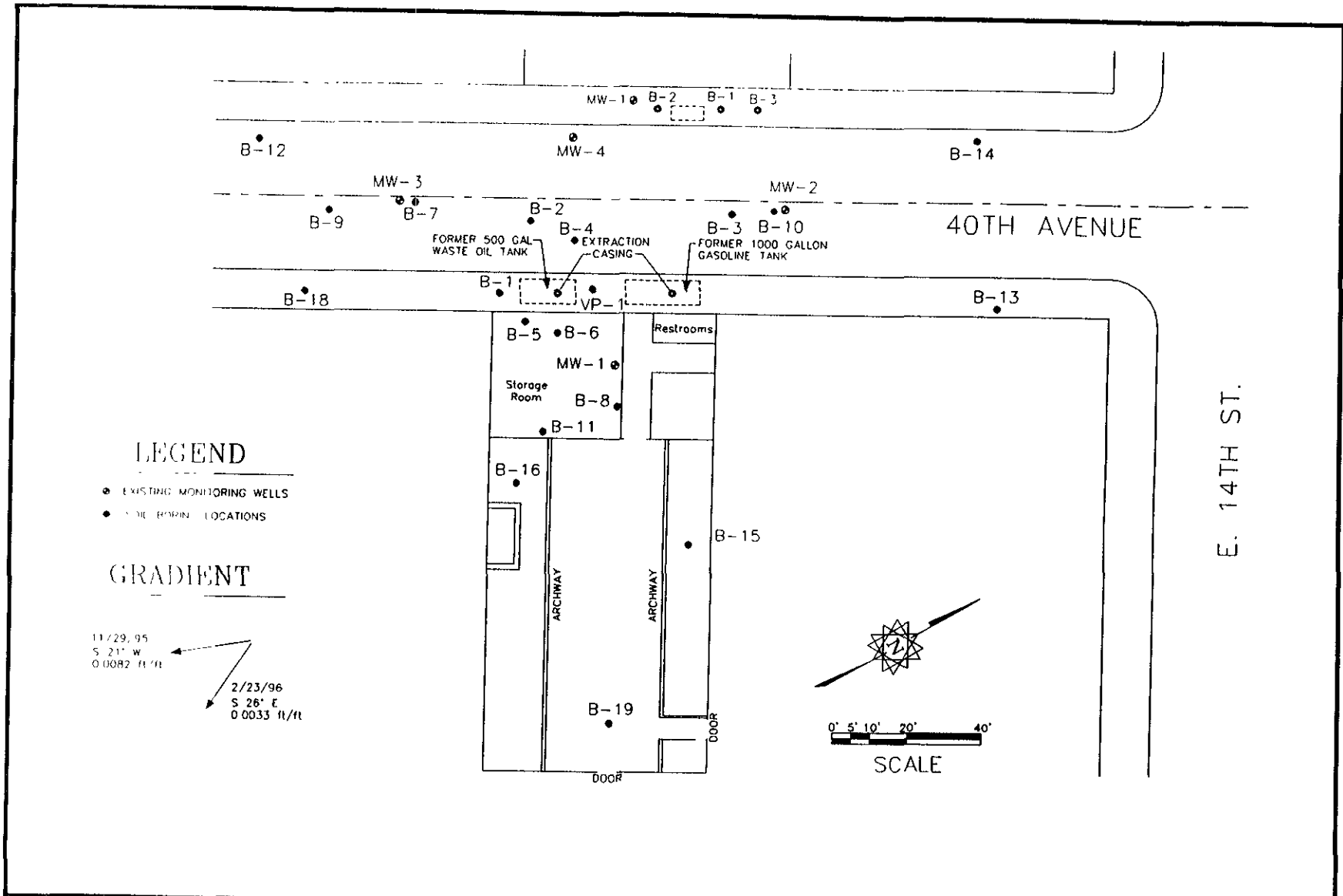
In addition, a groundwater sample was collected from each of the borings. The groundwater samples and selected soil samples were submitted under chain of custody documentation to a state certified laboratory for analysis. The samples were analyzed for TPH-Diesel (EPA Method 8015M), as gasoline (TPH-G) using EPA methods 8015/5030; benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA methods 8020; and oil and grease using EPA method 5520.

3.2 RESULTS OF SOIL AND GROUNDWATER SAMPLING

A summary of the soil sample results is presented in Table 1. Table 2 presents the results of groundwater sampling. Copies of all the analytical data sheets from North State Analytical Lab are presented in Appendix A.

Motor Partners, 1234 40th Ave., Oakland, CA
 Summary Report of Drilling Activities, 1995-1996

7



AQUATIC & ENVIRONMENTAL APPLICATIONS 38053 DAVY CT. FREMONT, CA 94536 (510) 791-7157	DRAWN BY GLR	PROJECT NUMBER 1004	DESCRIPTION Boring Locations	FIGURE 3
	DRAWING DATE 4/11/00	FILE NAME 1004-RPT.DWG		
	REVISION BY	PROJECT MANAGER GLR	PROJECT/LOCATION Motor Partners 1234 40th Ave., Oakland	
	REVISION BY	CHECKED BY		

April 13, 2000
 File: 1004-RPT

**Table 1. Summary of Soil Sample Results
Motor Partners, 1234 40th Ave., Oakland, CA**

SOIL ANALYTICAL RESULTS -- MOTOR PARTNERS								
Sample I.D. Number	Date Collected	Depth (ft)	TPH-D (mg/kg)	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
B-16-3	11-30-95	11.5	640	190	0.1	ND	ND	3.2
B-15-3	11-30-95	14.5	ND	ND	ND	ND	ND	ND
B-19-2	11-30-95	14.5	ND	ND	ND	ND	ND	ND
B-14-2	2-7-96	12	ND	ND	ND	ND	ND	ND
B-13-2	2-7-96	11	ND	ND	ND	ND	ND	ND
B-12-2	2-7-96	11	150	200	ND	0.084	0.62	0.8
B-18-2	2-7-96	11	ND	ND	ND	ND	ND	ND
VP-1-1	2-7-96	2.5	240	31	0.01	ND	0.24	0.038
VP-1-2	2-7-96	7.5	ND	ND	ND	ND	ND	ND

Notes: All results in mg/Kg (ppm) ND = Not Detected NA = Not Analyzed

**Table 1. Summary of Groundwater Sample Results
Motor Partners, 1234 40th Ave., Oakland, CA**

GROUNDWATER ANALYTICAL RESULTS -- MOTOR PARTNERS							
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)
B-16	11/30/95	300	2000	ND	2	ND	65
B-15	11/30/95	80	ND	ND	ND	ND	ND
B-19	11/30/95	ND	ND	ND	ND	ND	ND
B-14	2/7/96	ND	ND	ND	ND	ND	ND
B-13	2/7/96	ND	400	3	ND	2	3
B-12	2/7/96	16000	22000	250	7	210	120
B-18	2/7/96	ND	ND	ND	ND	ND	ND

Notes: All results in µg/L (ppb) ND = Not Detected NA = Not Analyzed

4.0 SUMMARY

Between November 1995 and February 1996, Vironex drilled a total of eight soil borings at the Motor Partners site. The drilling was completed as part of Phase II Site Investigation activities to determine the extent of contamination at the site. The borings were drilled inside the building on the property and along each side of 40th Avenue. A Geoprobe rig was used to collect soil samples from the borings.

The results of sampling show that TPH-diesel, TPH-gasoline, and benzene contamination is present on the property with the highest concentrations reported nearest the former UST areas.

5.0 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.



Gary L. Rogers, Ph.D.

6.0 APPENDICES

APPENDIX A

Analytical Results



North State Environmental Analytical Laboratory

95-624

Chain of Custody/Request for Analysis

(415) 588-9652

Client <i>Gary Rogers</i>		Phone: <i>510-791-7157</i>		Report to: <i>Gary Rogers</i>				Turnaround Time		
Mailing Address <i>2657 Bailey Ct Fremont, CA 94536</i>				Billing to: <i>Bill Owens Owens Financial 2221 Olympic Blvd. Walnut Creek, CA</i>				8 Hr	24 Hr	
Site Address <i>1234 40th Ave Oakland, CA</i>				PO# / Billing Reference:				40 Hr	5 Days	
Sampler <i>G Rogers</i>		Date: <i>11-30-95</i>						Other		
Sample ID	Sample Description	Container # / type	Sampling Time/Date	ANALYSIS REQUESTED						Remarks
				TPH-D	TPH-G	BTEX	O+G			
<i>B-16-1</i>	<i>4.5'</i>	<i>1 Soil</i>	<i>9:00 11-30-95</i>							<i>HOLD</i>
<i>B-16-2</i>	<i>9.5'</i>	<i>1 Soil</i>	<i>9:15</i>							<i>HOLD</i>
<i>B-16-3</i>	<i>11.5'</i>	<i>1 Soil</i>	<i>9:20</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		
<i>B-16-4</i>	<i>14.5'</i>	<i>1 Soil</i>	<i>9:25</i>							<i>HOLD</i>
<i>B-16-5</i>	<i>19.5</i>	<i>1 Soil</i>	<i>9:45</i>							<i>HOLD</i>
<i>B-15-1</i>	<i>4.5'</i>	<i>1 Soil</i>	<i>10:30</i>							<i>HOLD</i>
<i>B-15-2</i>	<i>9.5'</i>	<i>1 Soil</i>	<i>10:40</i>							<i>HOLD</i>
<i>B-15-3</i>	<i>14.5'</i>	<i>1 Soil</i>	<i>10:52</i>	<i>X</i>	<i>X</i>	<i>X</i>				
<i>B-15-4</i>	<i>19.5</i>	<i>1 Soil</i>	<i>11:00</i>							<i>HOLD</i>
<i>B-16</i>	<i>Water</i>	<i>2 VOA's + 1 L</i>	<i>10:00</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>			
<i>B-15</i>	<i>Water</i>	<i>2 VOA's + 1 L</i>	<i>11:30</i>	<i>X</i>	<i>X</i>	<i>X</i>				
<i>B-19-1</i>	<i>4.5'</i>	<i>1 Soil</i>	<i>11:35</i>							<i>HOLD</i>
<i>B-19-2</i>	<i>14.5</i>	<i>1 Soil</i>	<i>12:15 11-30-95</i>	<i>X</i>	<i>X</i>	<i>X</i>				
Relinquished by <i>Gary Rogers</i>		Date: <i>11-30-95</i> Time: <i>3:40</i>		Received by: <i>D. J. Rogers</i> <i>11-30-95</i> <i>3:40</i>				Yes	No	
Relinquished by		Date: Time:		Received by:				Were samples Preserved ?		
Relinquished by		Date: Time:		Received in lab by:				In good condition ?		



North State Environmental Analytical Laboratory

95-624

Chain of Custody/Request for Analysis

(415) 588-9652

Client: Gary Rogers		Phone: 510-791-7157	Report to: Gary Rogers		Turnaround Time								
Mailing Address: 2657 Bailey Ct Fremont, CA 94536		Billing to: Bill Owens Owens Financial 2221 Olympic Blvd. Walnut Creek, CA		8 Hr <input type="checkbox"/>	24 Hr <input type="checkbox"/>								
Site Address: 1234 40th Ave. Oakland, CA		PO# / Billing Reference:		40 Hr <input type="checkbox"/>	5 Days <input type="checkbox"/>								
Sampler: G Rogers		Date: 11-30-95	Other <input type="checkbox"/>										
Sample ID	Sample Description	Container # / type	Sampling Time/Date	ANALYSIS REQUESTED								Remarks	
				TPH-D	TPH-G	BTEX	O+G						
B-19-3	19.5'	1 Soil	12:40 11-30-95										HOLD
B-19	Water	2 VOA3 + 1 L	12:50 11-30-95	X	X	X							
Relinquished by: Gary Rogers		Date: 11-30-95	Time: 3:40	Received by: Jeffrey Xi		11-30-95		3:40p		Yes	No		
Relinquished by:		Date:	Time:	Received by:		Were samples Preserved ?							
Relinquished by:		Date:	Time:	Received in lab by:		In good condition ?							



North State Environmental
Chemical Waste Disposal - Tracking - Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 96-055 DATE SAMPLED: 02-07-96
 CLIENT: GARY ROGERS DATE EXTRACTED: 02-09-96
 PROJECT NAME: 1234 40th Ave DATE ANALYZED: 02-09-96
 Oakland

BTXE AND GASOLINE RANGE ORGANICS BY
 EPA METHOD 8020/5030 AND 8015 M
 DIESEL RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No.	Client ID	Analyte	Result
96-055-02	B-14-2 @ 12'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Diesel	ND
96-055-04	B-13-2 @ 11'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Diesel	ND
96-055-05	B-14 Water	Benzene	ND<0.5 ug/L
		Toluene	ND<0.5 ug/L
		Ethylbenzene	ND<0.5 ug/L
		Xylenes	ND<1.0 ug/L
		Gasoline	ND<50 ug/L
		Diesel	ND<50 ug/L
96-055-06	B-13 Water	Benzene	3 ug/L
		Toluene	ND<0.5 ug/L
		Ethylbenzene	2 ug/L
		Xylenes	3 ug/L
		Gasoline	0.4 mg/L
		Diesel	ND
96-055-08	B-12-2 @ 11'	Benzene	ND
		Toluene	84 ug/Kg
		Ethylbenzene	620 ug/Kg
		Xylenes	800 ug/Kg
		Gasoline	200 mg/Kg
		Diesel	150 mg/Kg

Page 1 of 3



North State Environmental Analytical Laboratory

Chain of Custody/Request for Analysis

96-055
Page 1 of 2

(415) 588-9652

Client: Gary Rogers		Phone: 510-791-7157	Report to: Gary Rogers				Turnaround Time						
Mailing Address: 2657 Bailey Ct Fremont, CA 94536			Billing to: Same				8 Hr	24 Hr					
Site Address: 1234 40th Ave, Oakland, CA			PO # / Billing Reference:				40 Hr	5 Days					
Sampler: G. Rogers		Date: 2-7-96					Other						
Sample ID:	Sample Description	Container # / type	Sampling Time/Date	ANALYSIS REQUESTED								Remarks	
				TPH-D	TPH-G	BTEX	O+G						
B-14-1	7'	1 Tube	8:10 2-7-96										hold
B-14-2	12'	1 Tube	8:45	X	X	X							
B-13-1	6'	1 Tube	10:00										hold
B-13-2	11'	1 Tube	10:10	X	X	X							
B-14	Water	1 Liter + 3 Vials	9:10	X	X	X							
B-13	Water	1 Liter + 3 Vials	10:30	X	X	X							
B-12-1	6'	1 Tube	11:30										hold
B-12-2	11'	1 Tube	12:00	X	X	X							
B-12	Water	1 Liter + 3 Vials	12:15	X	X	X							
B-18-1	6'	1 Tube	1:30										hold
B-18-2	11'	1 Tube	1:40	X	X	X							
B-18	Water	1 Liter + 3 Vials	1:50 2-7-96	X	X	X							
Relinquished by: Gary Rogers		Date: 2-8-96	Time: 10:30 AM	Received by: [Signature]				Date: 2-8-96		Time: 10:30 AM		Yes	No
Relinquished by:		Date:	Time:	Received by:				Were samples Preserved ?					
Relinquished by:		Date:	Time:	Received in lab by:				In good condition ?					

96-055

2-15-96 MED 10:40



North State Environmental Analytical Laboratory

Chain of Custody/Request for Analysis

96-05
Page 2 of 2

(415) 588-9652

Client <i>Gary Rogers</i>		Phone: <i>570-791-7157</i>	Report to: <i>Gary Rogers</i>				Turnaround Time					
Mailing Address <i>2657 Bailey Ct Fremont CA 94536</i>			Billing to: <i>same</i>				8 Hr	24 Hr				
Site Address <i>1234 40th Ave, Oakland, CA</i>			PO# / Billing Reference:				40 Hr	5 Days				
Sampler: <i>G Rogers</i>		Date: <i>2-7-96</i>					Other					
Sample ID	Sample Description	Container # / type	Sampling Time/Date	ANALYSIS REQUESTED								Remarks
				TPH-D	TPH-G	BTEX	O+G					
<i>VP-1-1</i>	<i>2.5'</i>	<i>1 Tube</i>	<i>2:15 2-7-96</i>	X	X	X						
<i>VP-1-2</i>	<i>7.5'</i>	<i>1 Tube</i>	<i>2:30 2-7-96</i>	X	X	X						
Relinquished by <i>Gary Rogers</i>		Date: <i>2-8-96</i>	Time: <i>10:30AM</i>	Received by: <i>De J... 2-8-96</i>					Yes	No		
Relinquished by		Date:	Time:	Received by:				Were samples Preserved ?				
Relinquished by		Date:	Time:	Received in lab by:				In good condition ?				

P. 06

96-05-13
-14

2-15-96 WED 10:41

APPENDIX B

Permits



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1234 40th Ave.
Oakland, California

PERMIT NUMBER _____
LOCATION NUMBER _____

CLIENT
Name Mr. Bill Owens
Address 2221 Olympic Blvd Voice 510-935-3840
City Walnut Creek, CA Zip 94595

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT
Name Gary Rogers
Address 2657 Bailey Ct Fax 510-791-7157
City Fremont, CA Voice 510-791-7157
Zip 94536

TYPE OF PROJECT
Well Construction _____ Geotechnical Investigation _____
Cathodic Protection _____ General _____
Water Supply _____ Contamination _____
Monitoring _____ Well Destruction _____

PROPOSED WATER SUPPLY WELL USE
Domestic _____ Industrial _____ Other _____
Municipal _____ Irrigation _____

DRILLING METHOD:
Mud Rotary _____ Air Rotary _____ Auger _____
Cable _____ Other Geoprobe

DRILLER'S LICENSE NO. 705927

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum _____
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Number _____

GEOTECHNICAL PROJECTS
Number of Borings 6 Maximum _____
Hole Diameter 1 in. Depth 25 ft

ESTIMATED STARTING DATE Dec 15, 1995
ESTIMATED COMPLETION DATE Jan 1, 1996

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-63

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved _____ Date _____

APPLICANT'S SIGNATURE Gary Rogers Date 11-14-95

APPENDIX C

Boring Logs

Aquatic & Environmental Applications

38053 Davy Ct.
Fremont, CA 94536

FIELD BOREHOLE LOG

BOREHOLE NO.: **B-12**

TOTAL DEPTH: **15'**

PROJECT INFORMATION

PROJECT: **Motor Partner**
 SITE LOCATION: **1234 40th Ave, Oakland**
 JOB NO.: **1004**
 LOGGED BY: **G. Rogers**
 PROJECT MANAGER: **G. Rogers**
 DATES DRILLED: **2-7-96**

DRILLING INFORMATION

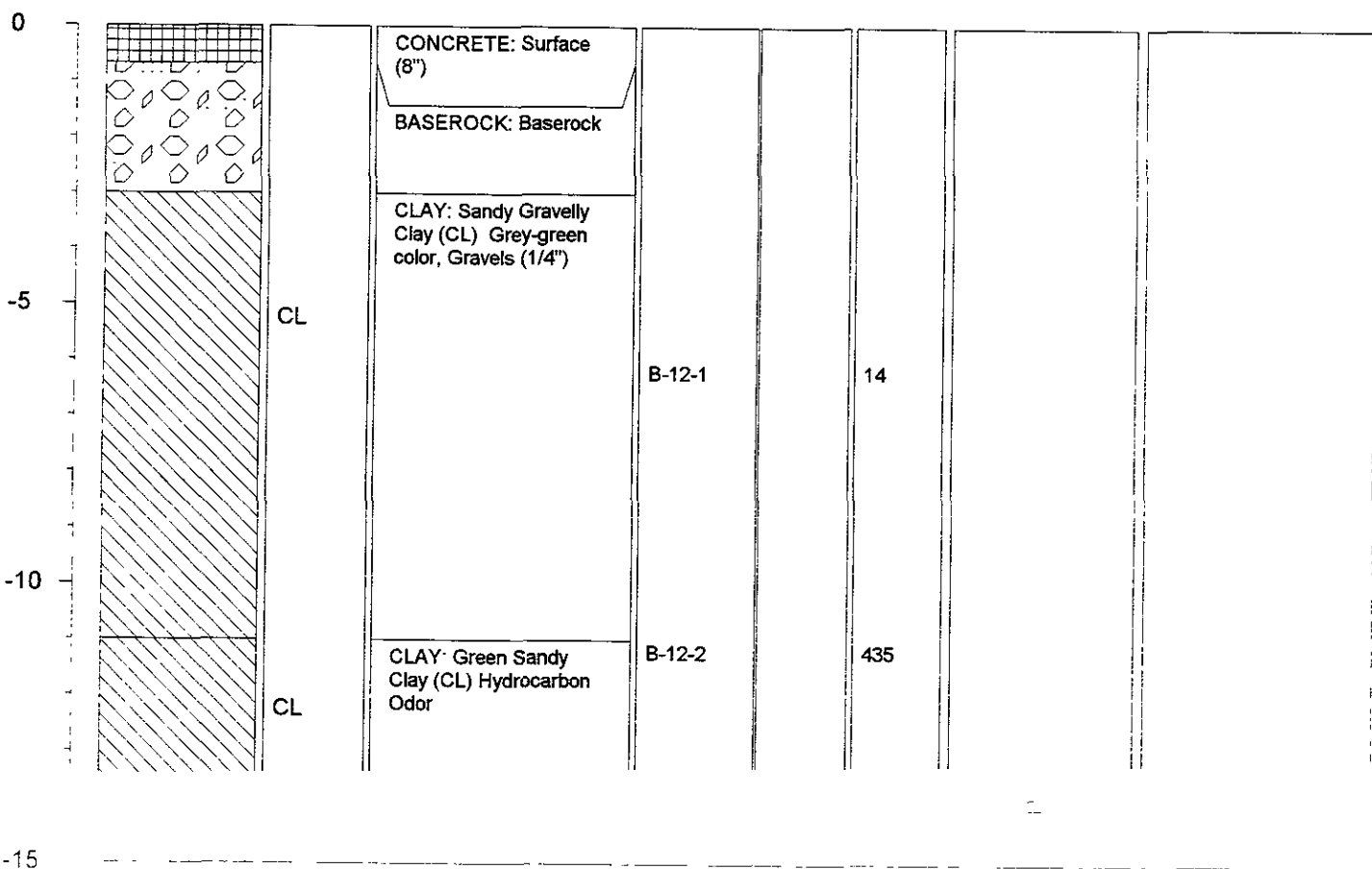
DRILLING CO.: **Vironex**
 DRILLER:
 RIG TYPE: **Geoprobe**
 METHOD OF DRILLING: **Hydraulically Driven**
 SAMPLING METHODS: **Continuous Core**
 HAMMER WT./DROP **NA**

NOTES: Boring Across Street from Site

- ☒ Water level during drilling
- ☒ Water level in completed boring

Page 1 of 1

DEPTH (FT)	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMPLE ID	BLOW COUNT	PID (ppm)	BORING COMPLETION	WELL DESCRIPTION
------------	--------------	------	------------------	-----------	------------	-----------	-------------------	------------------



Aquatic & Environmental Applications

38053 Davy Ct.
Fremont, CA 94536

FIELD BOREHOLE LOG

BOREHOLE NO.: **B-14**

TOTAL DEPTH: **20'**

PROJECT INFORMATION

PROJECT: **Motor Partner**
 SITE LOCATION: **1234 40th Ave, Oakland**
 JOB NO.: **1004**
 LOGGED BY: **G. Rogers**
 PROJECT MANAGER: **G. Rogers**
 DATES DRILLED: **2-7-96**

DRILLING INFORMATION


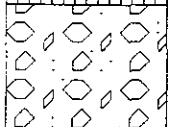
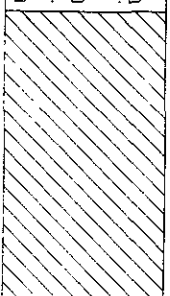
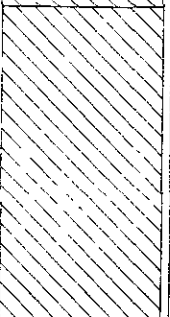
DRILLING CO.: **Vironex**
 DRILLER:
 RIG TYPE: **Geoprobe**
 METHOD OF DRILLING: **Hydraulically Driven**
 SAMPLING METHODS: **Continuous Core**
 HAMMER WT./DROP **NA**

NOTES: Other Side of Street North of Site

☞ Water level during drilling
 ☒ Water level in completed boring

Page 1 of 1

DEPTH (FT)	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMPLE ID	BLOW COUNT	PID (ppm)	BORING COMPLETION	WELL DESCRIPTION
------------	--------------	------	------------------	-----------	------------	-----------	-------------------	------------------

0			CONCRETE: Surface (8")					
			BASEROCK: Baserock					
-5		CL	CLAY: Silty Clay (CL) Black color	B-14-1	0			
-10		CL	CLAY: Sandy Gravelly Clay (CL), Reddish-brown color, 1/2" Gravels	B-14-2	0			

-15

-20

Aquatic & Environmental Applications

38053 Davy Ct.
Fremont, CA 94536

FIELD BOREHOLE LOG

BOREHOLE NO.: **B-15**

TOTAL DEPTH: **22'**

PROJECT INFORMATION

PROJECT: **Motor Partner**
 SITE LOCATION: **1234 40th Ave, Oakland**
 JOB NO.: **1004**
 LOGGED BY: **G. Rogers**
 PROJECT MANAGER: **G. Rogers**
 DATES DRILLED: **11-30-95**

DRILLING INFORMATION

DRILLING CO.: **Vironex**
 DRILLER:
 RIG TYPE: **Geoprobe**
 METHOD OF DRILLING: **Hydraulically Driven**
 SAMPLING METHODS: **Continuous Core**
 HAMMER WT./DROP **NA**

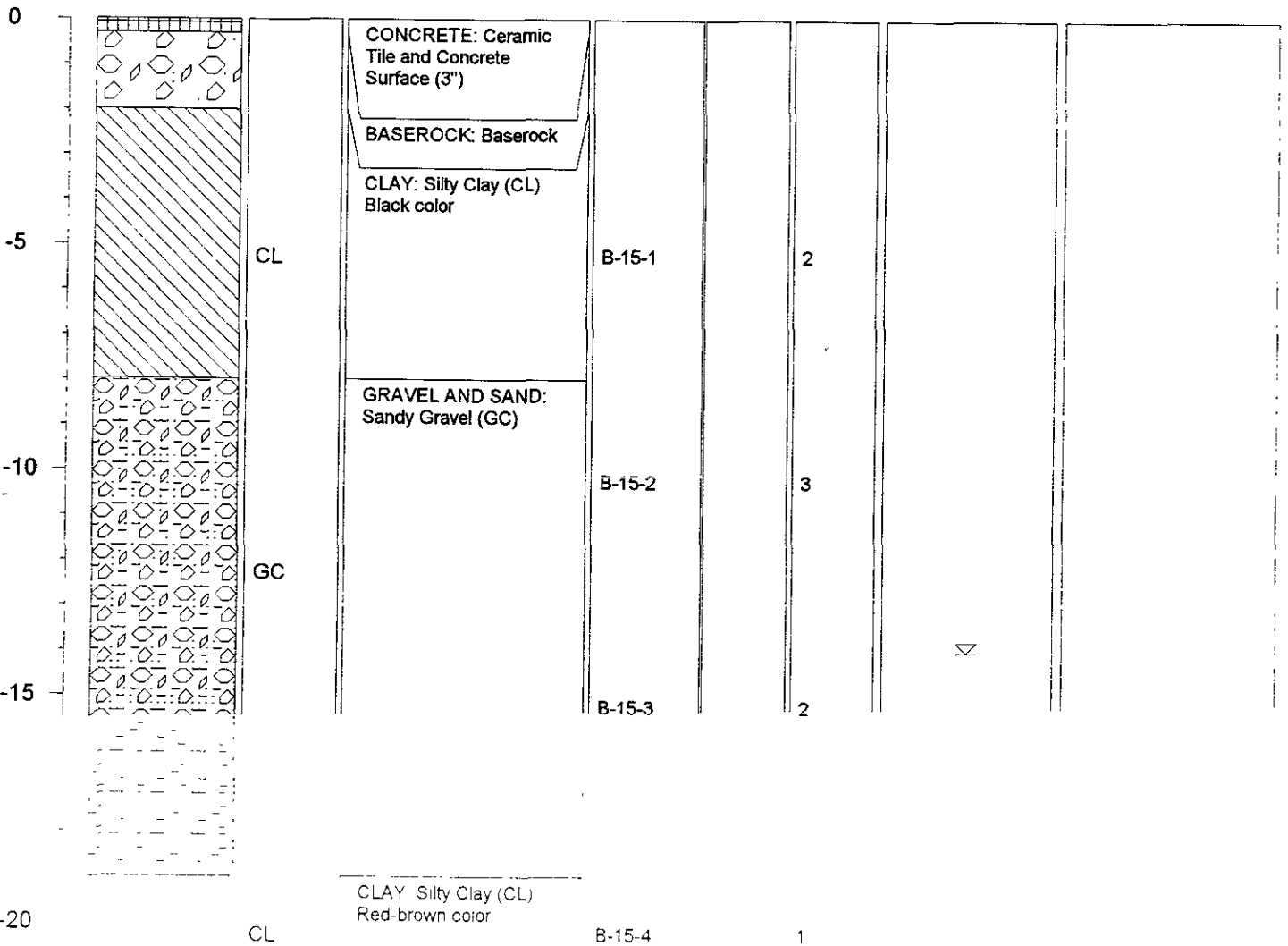
NOTES: Inside Building

☒ Water level during drilling

☒ Water level in completed boring

Page 1 of 1

DEPTH (FT)	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMPLE ID	BLOW COUNT	PID (ppm)	BORING COMPLETION	WELL DESCRIPTION
------------	--------------	------	------------------	-----------	------------	-----------	-------------------	------------------



Aquatic & Environmental Applications

38053 Davy Ct.
Fremont, CA 94536

FIELD BOREHOLE LOG

BOREHOLE NO.: **B-16**

TOTAL DEPTH: **21'**

PROJECT INFORMATION

PROJECT: **Motor Partner**
 SITE LOCATION: **1234 40th Ave, Oakland**
 JOB NO.: **1004**
 LOGGED BY: **G. Rogers**
 PROJECT MANAGER: **G. Rogers**
 DATES DRILLED: **11-30-95**

DRILLING INFORMATION

DRILLING CO.: **Vironex**
 DRILLER:
 RIG TYPE: **Geoprobe**
 METHOD OF DRILLING: **Hydraulically Driven**
 SAMPLING METHODS: **Continuous Core**
 HAMMER WT./DROP **NA**

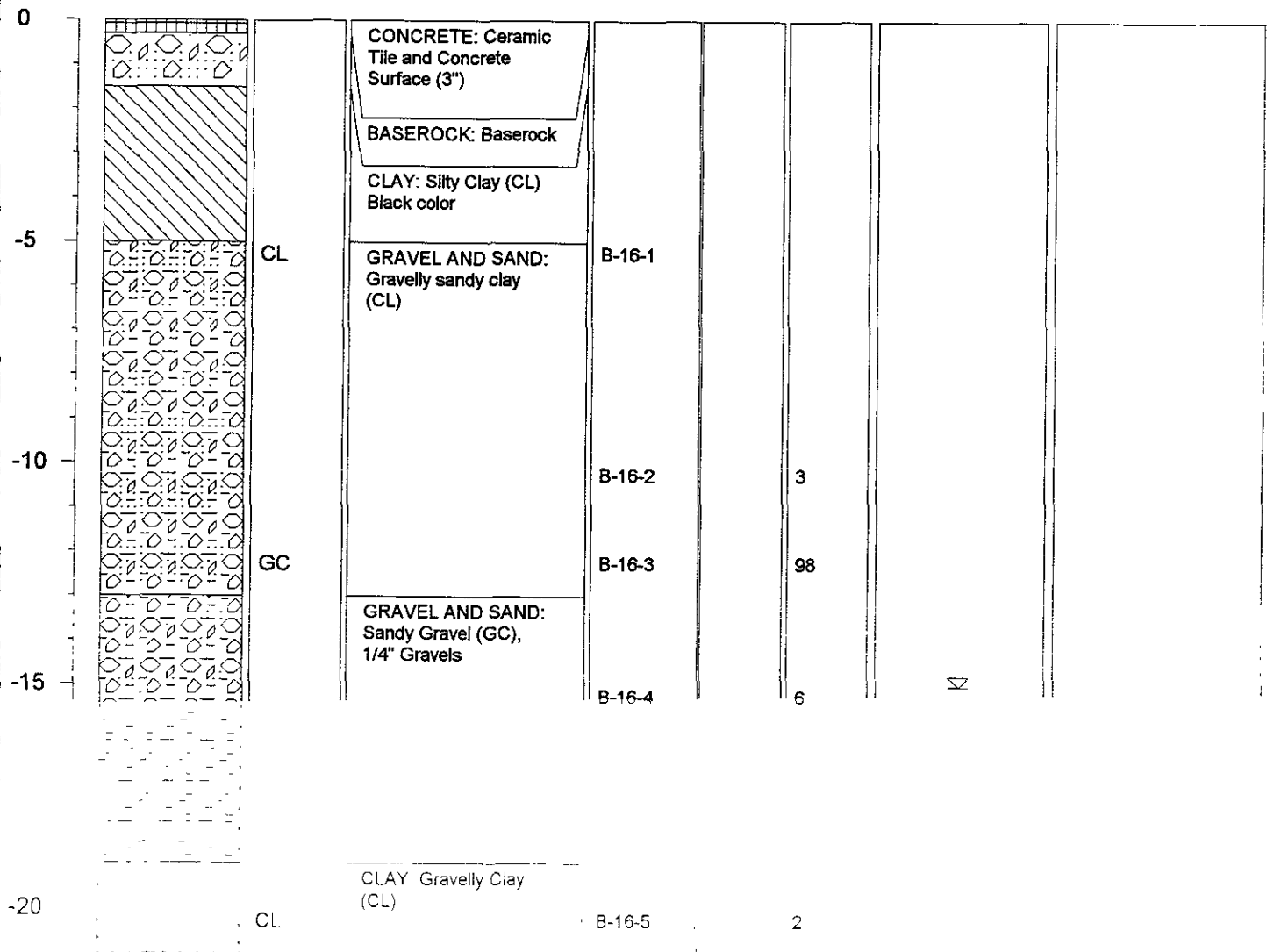
NOTES: Inside Building

☒ Water level during drilling

☑ Water level in completed boring

Page 1 of 1

DEPTH (FT)	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMPLE ID	BLOW COUNT	PID (ppm)	BORING COMPLETION	WELL DESCRIPTION
------------	--------------	------	------------------	-----------	------------	-----------	-------------------	------------------



Aquatic & Environmental Applications

38053 Davy Ct.
Fremont, CA 94536

FIELD BOREHOLE LOG

BOREHOLE NO.: **B-19**

TOTAL DEPTH: **20'**

PROJECT INFORMATION

PROJECT: **Motor Partner**
 SITE LOCATION: **1234 40th Ave, Oakland**
 JOB NO.: **1004**
 LOGGED BY: **G. Rogers**
 PROJECT MANAGER: **G. Rogers**
 DATES DRILLED: **11-30-95**

DRILLING INFORMATION

DRILLING CO.: **Vironex**
 DRILLER:
 RIG TYPE: **Geoprobe**
 METHOD OF DRILLING: **Hydraulically Driven**
 SAMPLING METHODS: **Continuous Core**
 HAMMER WT./DROP **NA**

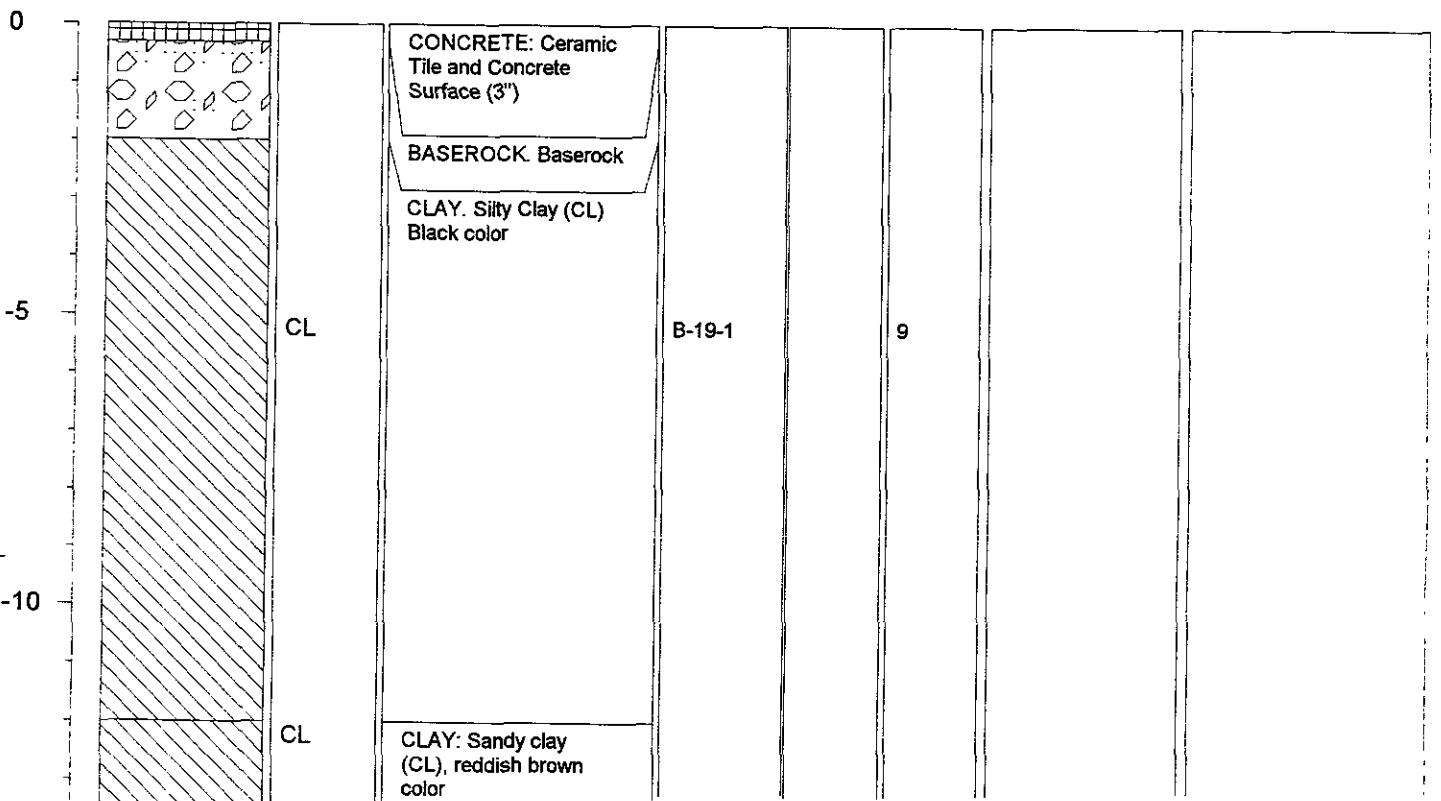
NOTES: **Inside Building**

☒ Water level during drilling

☒ Water level in completed boring

Page 1 of 1

DEPTH (FT)	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMPLE ID	BLOW COUNT	PID (ppm)	BORING COMPLETION	WELL DESCRIPTION
------------	--------------	------	------------------	-----------	------------	-----------	-------------------	------------------



-15 B-19-2 320

-20

Aquatic & Environmental Applications

38053 Davy Ct.
Fremont, CA 94536

FIELD BOREHOLE LOG

BOREHOLE NO.: **VP-1**

TOTAL DEPTH: **8'**

PROJECT INFORMATION

PROJECT: **Motor Partner**
 SITE LOCATION: **1234 40th Ave, Oakland**
 JOB NO.: **1004**
 LOGGED BY: **G. Rogers**
 PROJECT MANAGER: **G. Rogers**
 DATES DRILLED: **2-7-96**

DRILLING INFORMATION

DRILLING CO.: **Vironex**
 DRILLER:
 RIG TYPE: **Geoprobe**
 METHOD OF DRILLING: **Hydraulically Driven**
 SAMPLING METHODS: **Continuous Core**
 HAMMER WT./DROP **NA**

NOTES: Vapor Point Near Former USTs

☒ Water level during drilling

☒ Water level in completed boring

Page 1 of 1

DEPTH (FT)	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMPLE ID	BLOW COUNT	PID (ppm)	BORING COMPLETION	WELL DESCRIPTION
0			CONCRETE: Surface (3")					
			BASEROCK: Baserock					
			CLAY: Silty Clay (CL) Black color, Hydrocarbon odor	VP-1-1		265		
-5		CL						
				VP-1-2		45		
								3/4" PVC Screened from 3 feet to 6 feet