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GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387

FAX: (415) 685-9148

November 12, 1993

Project No. 020204554

Ms. Bernadine Palka
Sears, Roebuck and Company
3333 Beverly Road, Building A2-281A
Department 824C
Hoffman Estates, IL 60179

SUBJECT: *Quarterly Monitoring and Sampling Report* - August through October 1993
Former Sears Automotive Center
2633 Telegraph Avenue
Oakland, California

Dear Ms. Palka:

Groundwater Technology, Inc. is pleased to submit this *Quarterly Monitoring and Sampling Report* for August through October 1993. The report presents the results of monitoring well gauging and sample analyses for the former Sears Automotive Center located at 2633 Telegraph Avenue, Oakland, California (Attachment 1, Figure 1). The monitoring and sampling activities were performed and this report prepared according to the *Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites*, dated August 10, 1990, the *State Water Resources Control Board Leaking Underground Fuel Tank (LUFT) Field Manual*, and the sampling requirements approved by Alameda County Health Care Services Agency, October 7, 1992, and amended in correspondence to Sears, dated June 1, 1993.

SUMMARY OF WORK COMPLETED

Monitoring Well Gauging

On August 13, September 16, and October 22, 1993, the depth to groundwater was measured in five monitoring wells using an INTERFACE PROBE™ Well Monitoring System, which can detect both water and separate-phase product levels. On October 22, 1993, the INTERFACE PROBE™ was apparently not functioning properly and was unable to detect separate-phase product in well MW-3. Therefore, the wells were monitored again on November 3, 1993. Groundwater monitoring data are presented in Attachment 2, Table 1.

Groundwater monitoring data were used to construct potentiometric surface maps (Figures 2 through 4). A measurable thickness of separate-phase hydrocarbons was detected in well MW-3 during this reporting period. The local groundwater gradient was approximately 0.02 foot per foot (ft/ft) to the south on August 13, 1993, September 16, 1993, and November 3, 1993.

Monitoring Well Sampling and Results

On September 16, 1993, groundwater samples from four of the five on-site wells were collected for hydrocarbon constituents and dissolved metals analyses. Well MW-3 was not sampled because separate-phase hydrocarbons were detected in the well. Before sampling, the wells were purged of approximately 4 well-casing volumes. The temperature, conductivity, and pH of the purge water were measured during purging. Well purge data are included in Attachment 3.

Groundwater samples were collected using a Teflon™ bailer and placed in appropriate containers. The sample containers were labeled and placed in an ice-chilled, insulated cooler for transport under chain-of-custody protocol to a California-certified laboratory for the analyses described below. A summary of historical groundwater analytical results is presented in Table 2.

- Groundwater samples from well MW-1 were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using Environmental Protection Agency (EPA) Methods 5030/8020 and total petroleum hydrocarbons-as-motor oil (TPH-M) using a gas chromatograph flame-ionization detector (GC-FID) hydrocarbon scan method of detection.

- Groundwater samples from wells MW-2 and MW-5 were analyzed for BTEX and total petroleum hydrocarbons-as-gasoline (TPH-G) using EPA Methods 5030/8020 and modified EPA Method 8015 ; TPH-M using GC-FID; dissolved lead using EPA Method 7421; and cadmium, chromium, nickel, and zinc using EPA Method 6010.

- Groundwater samples from well MW-4 were analyzed for BTEX and TPH-G using EPA Methods 5030/8020 and modified EPA Method 8015; TPH-M using GC-FID; and dissolved lead using EPA Method 7421.

The laboratory reports and chain-of-custody records are included in Attachment 4. Figures 5 and 6 illustrate the distribution of TPH-G and TPH-M concentrations in the groundwater, respectively.

Aromatic Volatile Organic Compounds (VOCs). Concentrations of aromatic VOCs were detected in samples from wells MW-1, MW-2, MW-4 ,and MW-5 as follows: benzene from nondetectable to 0.3 micrograms per liter (μg/l); toluene from nondetectable to 0.7 μg/l; ethylbenzene from nondetectable to 2 μg/l; and xylenes from nondetectable to 7 μg/l. The results of BTEX analyses are summarized in Table 2.

Total Petroleum Hydrocarbons. Total petroleum hydrocarbon-as-gasoline concentrations of 28 μg/l and 410 μg/l were detected in wells MW-2 and MW-4, respectively. No detectable concentrations of TPH-G were present in the sample from well MW-5. The analytical results of groundwater samples from wells MW-1, MW-2, and MW-5 reported no detectable concentrations of TPH-M; however, the laboratory did note the presence of hydrocarbons that were not indicative of motor oil in the samples from MW-1 and MW-2. A TPH-M concentration of 2,500 μg/l was detected in the sample from MW-4. The results of TPH-G and TPH-M analyses are summarized in Table 2.

Metals. Lead was not detected in the groundwater samples from wells MW-2, MW-4, and MW-5. Cadmium, chromium, nickel, and zinc were not detected in the groundwater samples from wells MW-2 and MW-5. The metals analyses results are summarized in Table 2.

WORK TO BE COMPLETED FROM NOVEMBER 1993 THROUGH JANUARY 1994

A schedule of work tasks at the site planned for November 1993 through January 1994 is presented.

Date	Task
11/93	Monthly well gauging
12/93	Monthly well gauging and quarterly sampling
01/94	Monthly well gauging and preparation of *Quarterly Monitoring and Sampling Report* for November 1993 through January 1994.

Additional assessment is scheduled to be conducted starting on December 13, 1993, to further evaluate the horizontal distribution of hydrocarbons in the groundwater. The additional assessment will include the following activities:

- Collect additional soil and grab-groundwater samples. At least three sampling points will be located downgradient of the former tank pits along the southern edge of the subject property. The purpose of the additional sampling will be to evaluate the horizontal extent of petroleum hydrocarbons in the soil, and groundwater and to select locations for one to two additional monitoring wells.
- Install one to two additional monitoring wells downgradient of well MW-3.
- Prepare and submit a report to Alameda County Health Care Services Agency describing the findings of the further assessment.

If you have any questions or comments concerning this report, please call our Concord office at (510) 671-2387.

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

Eileen S. Wray
Project Geologist

Michael J. Wray
Project Manager

Groundwater Technology, Inc.
Reviewed/Approved by

David R. Kleesattel
Registered Geologist
No. 5136

REGISTERED GEOLOGIST
DAVID R. KLEESATTEL
NO. 5136
STATE OF CALIFORNIA

For:
Frank J. Gorry
Vice President, Operations Manager
National Industry Division

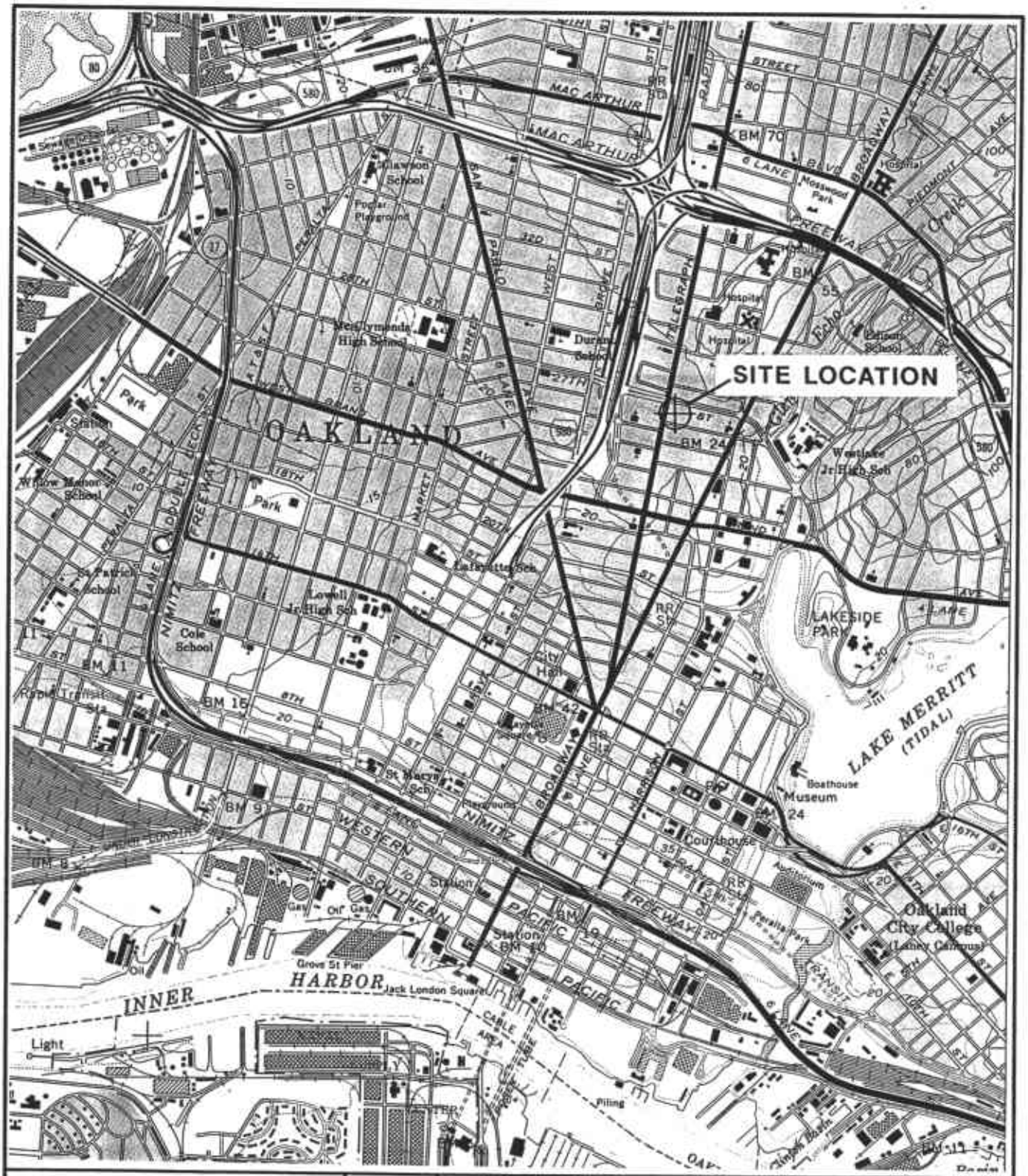
Attachment 1 Figures
Attachment 2 Tables
Attachment 3 Well Purge Data
Attachment 4 Laboratory Reports and Chain-of-Custody Record

cc: Thomas Peacock, Alameda County Health Services Agency
Richard Hiett, Regional Water Quality Control Board

GROUNDWATER TECHNOLOGY, INC.

ATTACHMENT 1

Figures



GROUNDWATER TECHNOLOGY

4057 PORT CHICAGO HWY
CONCORD, CA 94520
(510) 671-2387

N

SCALE: 0 FEET 2000

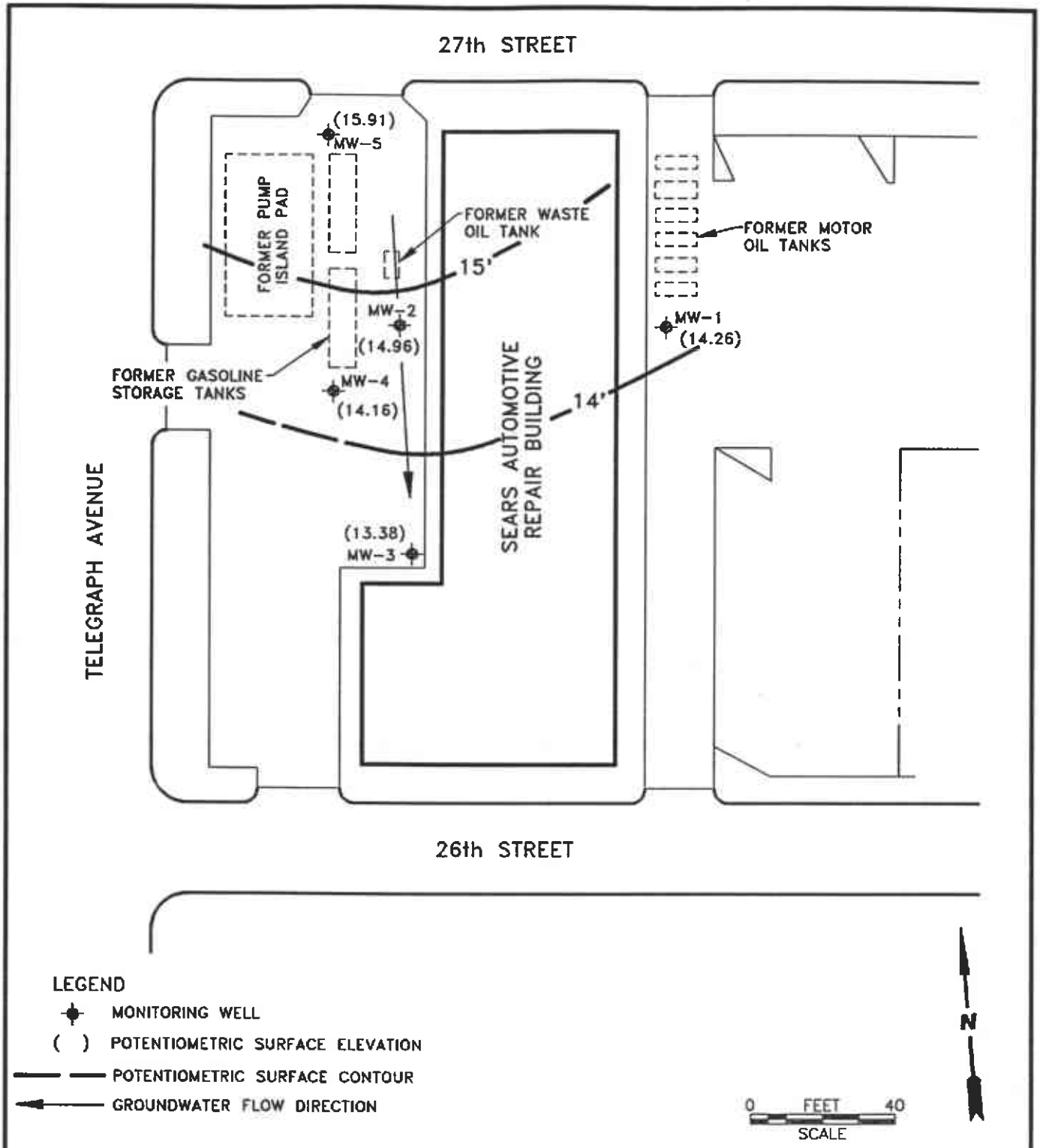
SITE LOCATION MAP

CLIENT: SEARS, ROEBUCK AND CO.
SITE No. 1058

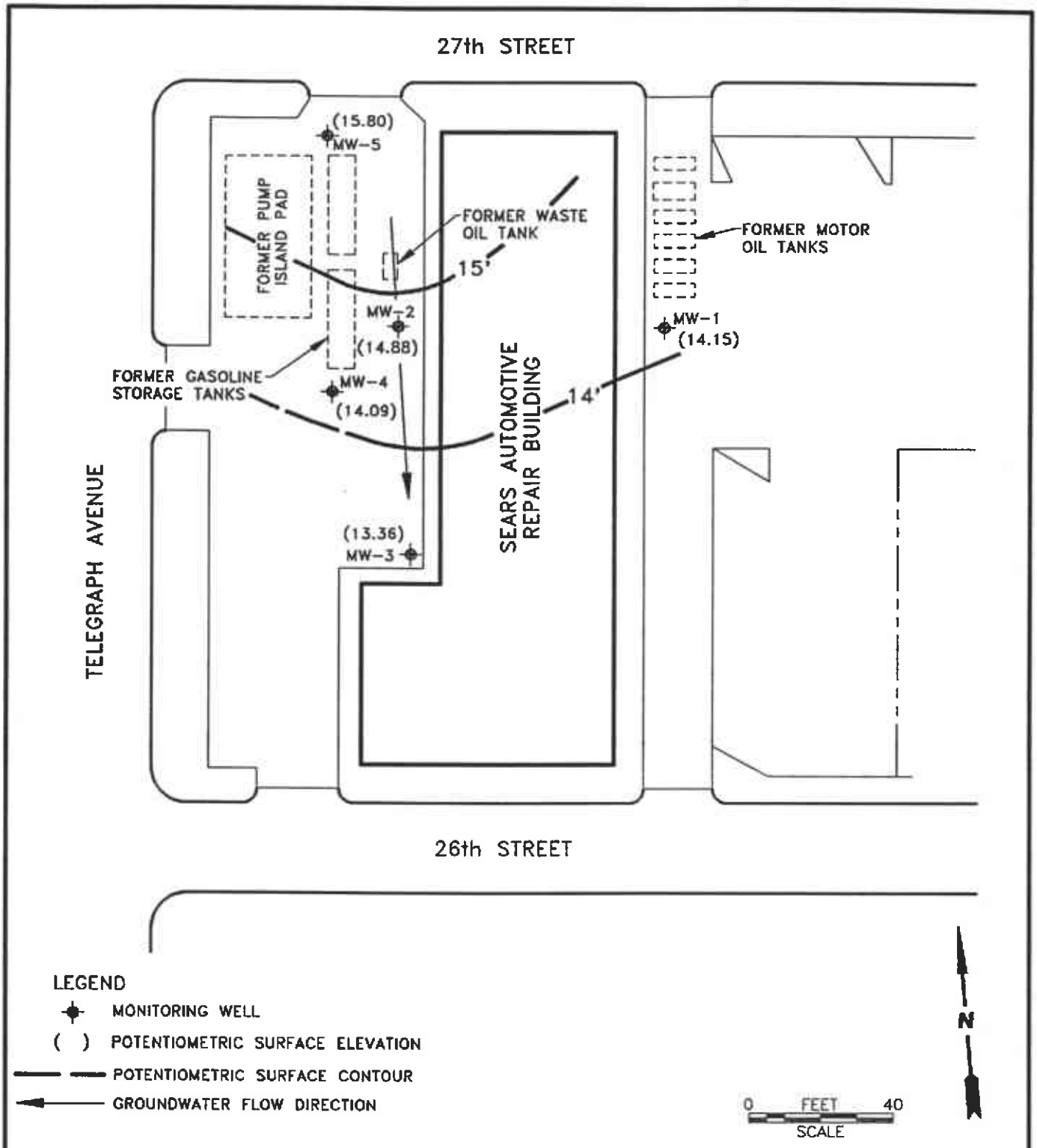
DATE: 8/18/92

LOCATION: 2633 TELEGRAPH AVE.
OAKLAND, CALIFORNIA

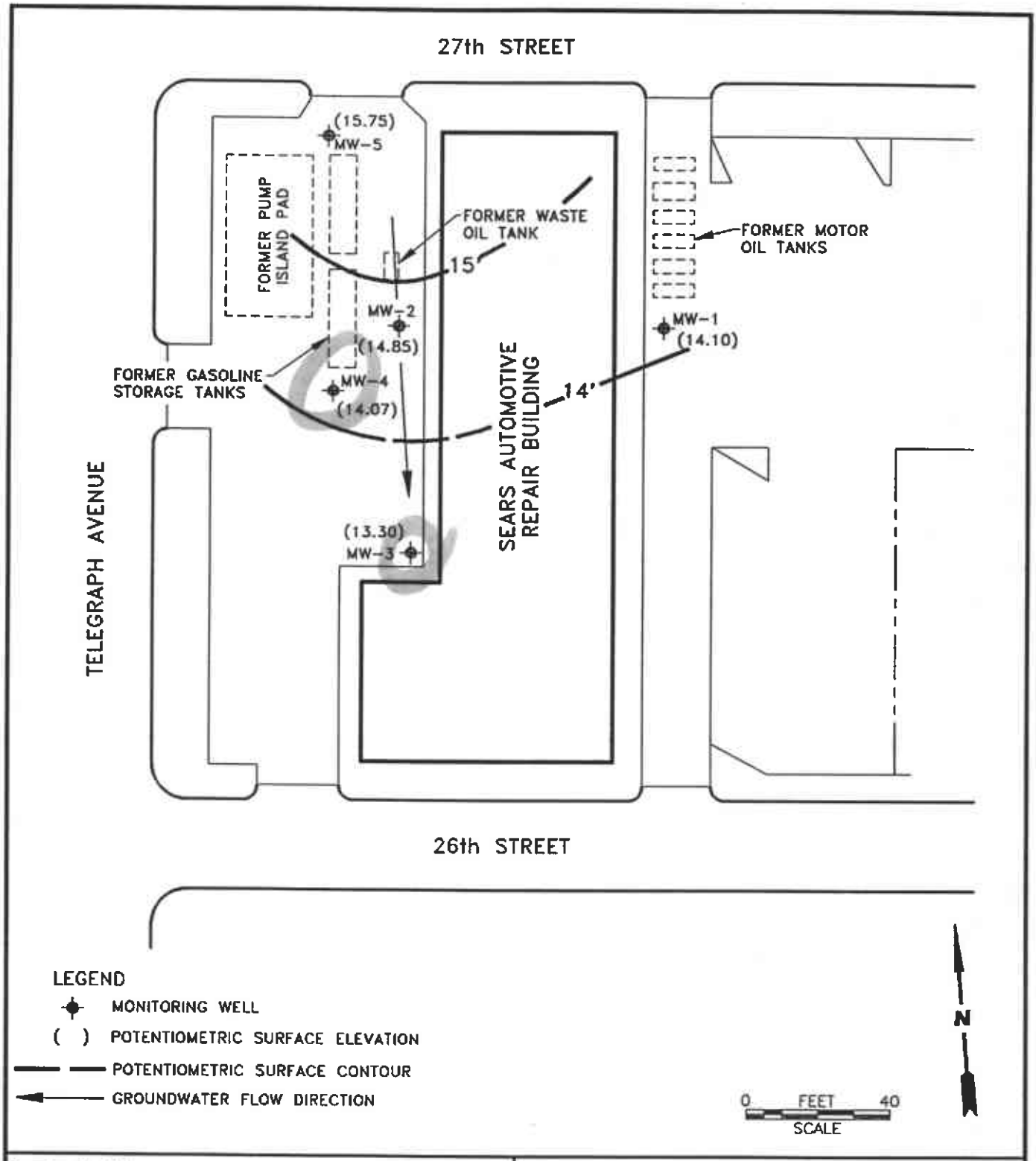
FIGURE: 1



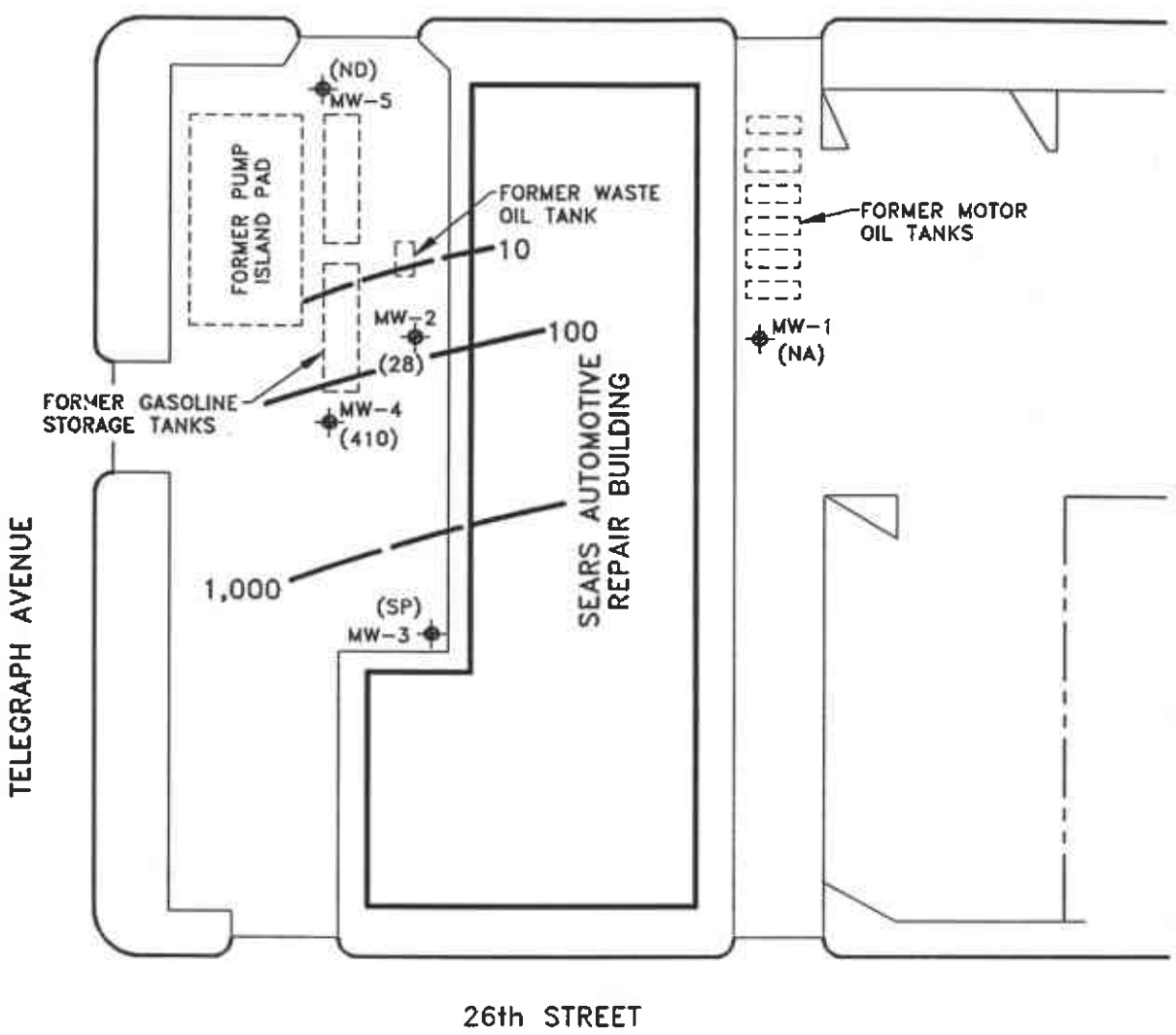
GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387				POTENTIOMETRIC SURFACE MAP (8/13/93)		
CLIENT: SEARS, ROEBUCK AND CO. SITE No. 1058				LOCATION: 2633 TELEGRAPH AVE. OAKLAND, CALIFORNIA	REV. NO.: 0	DATE: 11/4/93
PM	PE/RG	DESIGNED EW	DETAILED ML	ACAD FILE: PSM81393/SP193	PROJECT NO.: 020204554	FIGURE: 2



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387				POTENTIOMETRIC SURFACE MAP (9/16/93)			
CLIENT: SEARS, ROEBUCK AND CO. SITE No. 1058				LOCATION: 2633 TELEGRAPH AVE. OAKLAND, CALIFORNIA		REV. NO.: 0	DATE: 11/4/93
PM	PE/RG	DESIGNED EW	DETAILED ML	ACAD FILE: PSM91693/SP193	PROJECT NO.: 020204554		FIGURE: 3



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387				**POTENTIOMETRIC SURFACE MAP (11/3/93)**			
CLIENT: SEARS, ROEBUCK AND CO. SITE No. 1058				LOCATION: 2633 TELEGRAPH AVE. OAKLAND, CALIFORNIA		REV. NO.: 0	DATE: 11/4/93
PM	PE/RG	DESIGNED EW	DETAILED ML	ACAD FILE: PSMN393/SP193	PROJECT NO.: 020204554		FIGURE: 4



LEGEND

- MONITORING WELL
- ( ) TPH-AS-GASOLINE CONCENTRATION (ug/l)
- CONCENTRATION CONTOUR
- (ND) NOT DETECTED
- (NA) NOT ANALYZED
- (SP) SEPARATE-PHASE HYDROCARBONS

N

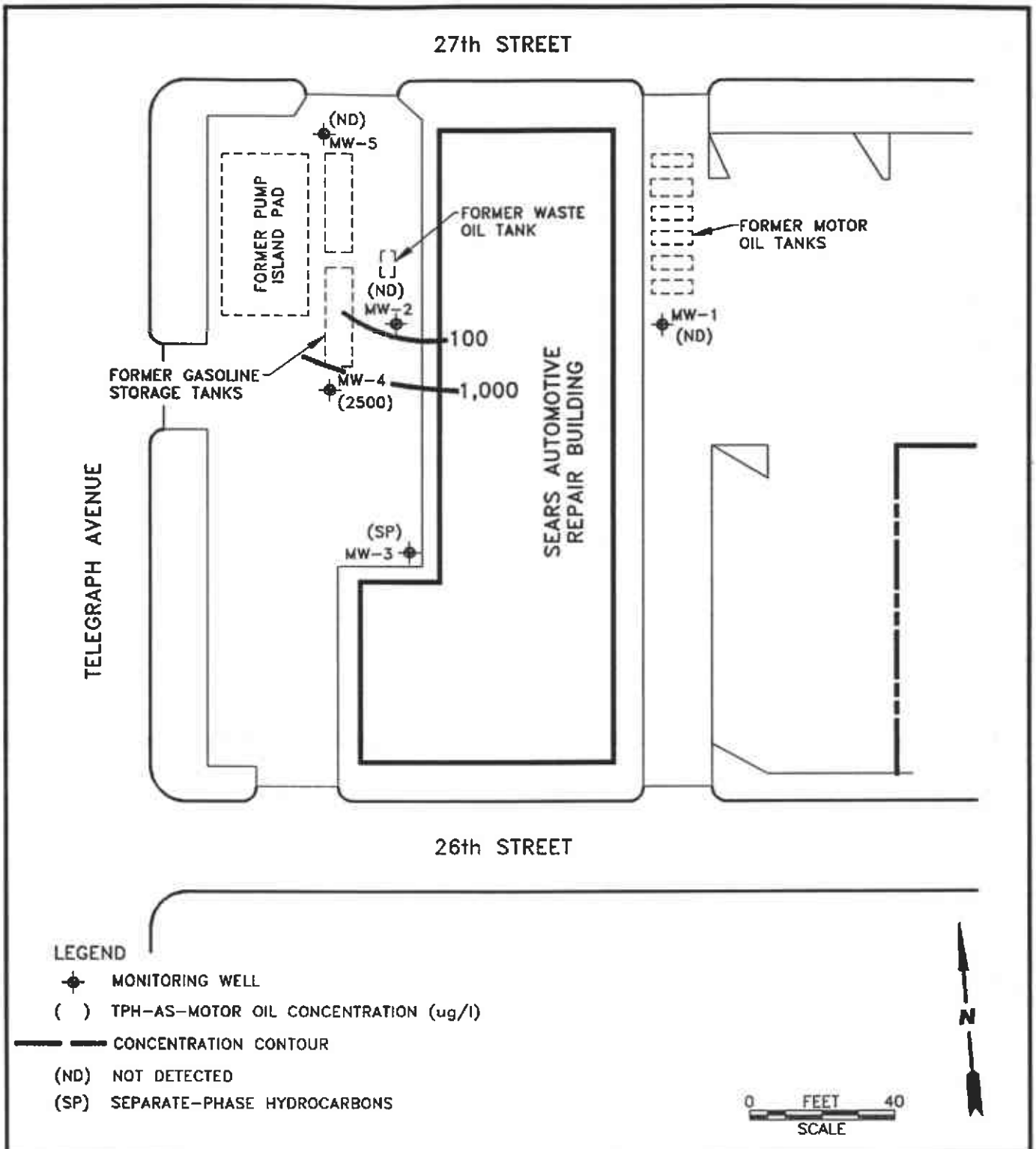
0 FEET 40
SCALE

GROUNDWATER TECHNOLOGY
4057 PORT CHICAGO HWY.
CONCORD, CA 94520
(510) 671-2387

TPH-AS-GASOLINE CONCENTRATIONS IN GROUNDWATER (9/16/93)

CLIENT:	LOCATION:	REV. NO.:	DATE:
SEARS, ROEBUCK AND CO. SITE No. 1058	2633 TELEGRAPH AVE. OAKLAND, CALIFORNIA	1	11/15/93

PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
		EW	ML	TPH91693/SP193	020204554	5



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387				TPH-AS-MOTOR OIL CONCENTRATIONS IN GROUNDWATER (9/16/93)		
CLIENT: SEARS, ROEBUCK AND CO. SITE No. 1058				LOCATION: 2633 TELEGRAPH AVE. OAKLAND, CALIFORNIA	REV. NO.: 1	DATE: 11/15/93
PM	PE/RG	DESIGNED EW	DETAILED ML	ACAD FILE: TPM91693/SP193	PROJECT NO.: 020204554	FIGURE: 6

ATTACHMENT 2

Tables

TABLE 1
SUMMARY OF HISTORICAL MONITORING DATA
Former Sears Automotive Center
2633 Telegraph Avenue, Oakland, California

Well No.	Casing Elev	Date	DTW	DTP	PT	Groundwater Elevation
MW-1	26.20	12/30/92	10.60	--	--	15.60
		02/26/93	10.14	--	--	16.06
		03/24/93	10.48	--	--	15.72
		04/27/93	11.30	--	--	14.90
		05/28/93	11.43	--	--	14.77
		06/21/93	11.71	--	--	14.49
		07/22/93	11.87	--	--	14.33
		08/13/93	11.94	--	--	14.26
		09/16/93	12.05	--	--	14.15
		10/22/93	12.00	--	--	14.20
		11/03/93	12.10	--	--	14.10
MW-2	26.50	12/30/92	10.65	--	*	15.85
		02/26/93	10.56	--	--	15.94
		03/24/93	10.52	--	--	15.98
		04/27/93	11.17	--	--	15.33
		05/28/93	11.12	--	--	15.38
		06/21/93	11.41	--	--	15.09
		07/22/93	11.50	--	--	15.00
		08/13/93	11.54	--	--	14.96
		09/16/93	11.62	--	--	14.88
		10/22/93	11.57	--	--	14.93
		11/03/93	11.65	--	--	14.85
MW-3	26.34	12/30/92	12.43	--	*	13.91
		02/26/93	12.21	--	--	14.13
		03/24/93	12.36	--	--	13.98
		04/27/93	12.70	--	--	13.64
		05/28/93	12.72	--	--	13.62
		06/21/93	12.87	--	--	13.47
		07/22/93	12.92	--	--	13.42
		08/13/93	12.96	--	--	13.38
		09/16/93	13.01	12.97	0.04	13.36
		10/22/93	NM	12.96	NM	NM
		11/03/93	13.13	13.02	0.11	13.30
MW-4	26.17	12/30/92	11.53	--	--	14.64
		02/26/93	11.35	--	--	14.82
		03/24/93	11.46	--	--	14.71
		04/27/93	11.74	--	--	14.43
		05/28/93	11.77	--	--	14.40
		06/21/93	11.92	--	--	14.25
		07/22/93	11.95	--	--	14.22
		08/13/93	12.01	--	--	14.16
		09/16/93	12.08	--	--	14.09
		10/22/93	12.03	--	--	14.14
		11/03/93	12.10	--	--	14.07

TABLE 1
SUMMARY OF HISTORICAL MONITORING DATA
Former Sears Automotive Center
2633 Telegraph Avenue, Oakland, California

Well No.	Casing Elev	Date	DTW	DTP	PT	Groundwater Elevation
MW-5	26.98	12/30/92	10.50	--	--	16.48
		02/26/93	10.12	--	--	16.86
		03/24/93	10.31	--	--	16.67
		04/27/93	10.75	--	--	16.23
		05/28/93	10.80	--	--	16.18
		06/21/93	10.94	--	--	16.04
		07/22/93	11.01	--	--	15.97
		08/13/93	11.07	--	--	15.91
		09/16/93	11.18	--	--	15.80
		10/22/93	11.19	--	--	15.79
		11/03/93	11.23	--	--	15.75

Elevation in feet above mean sea level
DTW = Depth to water (in feet)
DTP = Depth to product (in feet)
PT = Product thickness (in feet)
NM = Not monitored
* = Sheen observed (<0.01 foot)
-- = Product not detected

GROUNDWATER TECHNOLOGY, INC.

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS
Former Sears Automotive Center
2633 Telegraph Avenue, Oakland, California

Well ID	Date	B	T	E	X	TPH-G	TPH-M	TPH (mg/l)	Dissolved Metals
MW-1	12/30/92	1	1	2	2	–	–	1	–
	03/24/93	0.4	1	0.3	10	–	–	1	–
	06/21/93	<0.3	1	2	6	–	<100**	–	–
	09/16/93	<0.3	0.7	<0.3	7	–	<100**	–	–
MW-2	12/30/92	0.7	<0.3	<0.3	3	190	–	1	[a]ND
	03/24/93	0.6	<0.3	<0.3	2	120	–	<1	[a]ND
	06/21/93	0.3	<0.3	<0.3	0.7	82	<100**	–	[c]ND
	09/16/93	<0.3	<0.3	<0.3	<0.5	28	<100**	–	[c]ND
MW-3	12/30/92	11	0.9	<0.3	2	910	–	20	[a]ND
	03/24/93	28	0.7	1	8	3,300	–	28	[a]15*
	06/21/93	21	5	2	19	2,600**	32,000	26	[cd]5
	09/16/93	–	–	–	–	–	–	–	–
MW-4	12/30/92	2	<0.3	1	<0.5	1,200	–	<1	[a]ND
	03/24/93	<0.3	<0.3	<0.3	<0.5	750	–	2	[a]7*
	06/21/93	<0.3	2	<0.3	0.5	660	19,000	–	[a]ND
	09/16/93	0.3	<0.3	2	3	410	2,500	–	[a]ND
MW-5	12/30/92	<0.3	<0.3	<0.3	<0.5	37	–	<1	[bc]5
	03/24/93	<0.3	<0.3	<0.3	0.5	19	–	2	[c]341*
	06/21/93	<0.3	<0.3	<0.3	<0.5	<10	<100	–	[c]ND
	09/16/93	0.3	<0.3	<0.3	1	<10	<100	–	[c]ND

Results in micrograms per liter [µg/l] except where noted otherwise.

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes (EPA Methods 5030, 8020)
TPH-G	=	Total petroleum hydrocarbons-as-gasoline (EPA Methods 5030 and modified EPA Method 8015)
TPH-M	=	Total petroleum hydrocarbons-as-motor oil (modified EPA Method 8015)
TPH	=	Total petroleum hydrocarbons (EPA Method 418.1 [SM 5520 FC])
mg/l	=	Milligrams per liter
–	=	Not analyzed
ND	=	Nondetectable (detection limits for each compound are listed in laboratory reports, included in Appendix D)
*	=	Water samples were not filtered, analytical results represent total metals present, not dissolved concentrations.
**	=	Uncategorized hydrocarbon compound not included in this hydrocarbon concentration.
a	=	Dissolved lead
b	=	Dissolved lead only analyte detected
c	=	Dissolved lead, cadmium, total chromium, nickel, and zinc.
d	=	Cadmium only analyte detected.

ATTACHMENT 3

Well Purge Data

Project Name: SEARS/TELEGRAPH AVE. Date: 8-16-93

Job Number: 020503392 . 6104 Page 1 of 4

Site Address: 2533 Telegraph Ave., Oakland, Calif. Project Manager: Mike Wray

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Well ID MW--5

Well Dia 2"

DTW Measurements
Initial = 11.18 ft
Recharge ____ ft

Calc Well Volume = ____ gal
Well Volume = x4 9 gal

Purge Method	Pump Depth ____ ft
____ Peristaltic	X Hand Bailed
____ Gear Drive	____ Air Lift
____ Submersible	____ Other

Instruments Used	
____ YSI 3650 pH/ C/mmbo	____ OMEGA Cond.
X HYDAC pH/ F/umbo	____ DRT--15C TURBID
____ OMEGA pH/ C	____ Other

CALIBRATED PH METER to 4 + 7 buffer solution @ 12:30pm.

TIME	TEMP C / X F	pH	Conductivity x1000 umhos	PURGE VOLUME	COMMENTS
12:40	83.5	6.68	.72	2	BROWN SILTY
12:41	76.7	6.71	.65	4	↓
12:42	76.1	6.82	.64	6	
12:43	76.0	6.78	.62	8	
12:44	76.1	6.81	.63	10	✓

Project Name: SEARS/TELEGRAPH AVE. Date: 9-16-93

Job Number: 020503392 . 6104 Page 2 of 4

Site Address: 2533 Telegraph Ave., Oakland, Calif. Project Manager: Mike Wray

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Well ID MW-1

Well Dia 2"

DTW Measurements
Initial = 12.05 ft
Recharge ____ ft

Calc Well Volume = ____ gal
Well Volume = x4 6 gal

Purge Method	Pump Depth ____ ft
____ Peristaltic	X Hand Bailed
____ Gear Drive	____ Air Lift
____ Submersible	____ Other

Instruments Used	
____ YSI 3650 pH/ C/mmbo	____ OMEGA Cond.
X HYDAC pH/ F/umbo	____ DRT-15C TURBID
____ OMEGA pH/ C	____ Other

TIME	TEMP C / F	pH	Conductivity x1000 umhos	PURGE VOLUME	COMMENTS
12:55	73.8	6.88	.68	0	Brown, silty
12:56	74.9	6.67	.69	2	↓
12:57	75.5	6.67	.70	4	
12:58	75.1	6.67	.73	6	✓

Project Name: SEARS/TELEGRAPH AVE. Date: 9-16-93

Job Number: 020503392 . 6104 Page 3 of 4

Site Address: 2533 Telegraph Ave., Oakland, Calif. Project Manager: Mike Wray

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Well ID MW-2

Well Dia 2"

DTW Measurements
Initial = 11.62 ft
Recharge ____ ft

Calc Well Volume = ____ gal
Well Volume = X 4 ~~6~~ gal

Purge Method	Pump Depth	ft
____ Peristaltic	X	Hand Bailed
____ Gear Drive	____	Air Lift
____ Submersible	____	Other

Instruments Used		
____	YSI 3650 pH/ C/mmbo	OMEGA Cond.
X	HYDAC pH/ F/umbo	DRT-15C TURBID
____	OMEGA pH/ C	Other

TIME	TEMP C / X F	pH	Conductivity X 1000	PURGE VOLUME	COMMENTS
1:25	7.50	6.83	.61	0	Brown Silty
1:26	73.2	~~6.68~~ ~~73.2~~	.58	2	↓
1:27	72.3	6.70	.56	4	
1:28	71.7	6.70	.58	6	✓

Project Name: SEARS/TELEGRAPH AVE. Date: 9-16-93

Job Number: 020503392 . 6104 Page 4 of 4

Site Address: 2533 Telegraph Ave., Oakland, Calif. Project Manager: Mike Wray

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Well ID MW-4

Well Dia 2"

DTW Measurements
Initial = 12.08 ft
Recharge ____ ft

Calc Well Volume = ____ gal
Well Volume = X4 17 gal

Purge Method	Pump Depth	ft
____ Peristaltic	X	Hand Bailed
____ Gear Drive		Air Lift
____ Submersible		Other

Instruments Used		
____ YSI 3650 pH/ C/mmbo		OMEGA Cond.
X HYDAC pH/ F/umbo		DRT-15C TURBID
____ OMEGA pH/ C		Other

TIME	TEMP C / X F	pH	Conductivity X1000	PURGE VOLUME	COMMENTS
1:45	72.7	6.62	.65	0	
1:46	72.2	6.59	.63	2	Brown/Grey Silty, slight odor
1:47	72.5	6.61	.62	4	
1:48	72.7	6.60	.64	6	
1:45	72.3	6.59	.63	8	

ATTACHMENT 4

Laboratory Reports
and
Chain-of-Custody Record

GTEL
ENVIRONMENTAL
LABORATORIES, INC.
4080 Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
(800) 423-7143 Outside CA
(510) 825-0720 FAX

Client Number: 020204554
Project ID: Oakland
Work Order Number: C3-09-0382

October 12, 1993

Mike Wray
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 09/17/93, under chain of custody record 29755.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen

Eileen F. Bullen
Laboratory Director

Client Number: 020204554
Project ID: Oakland
Work Order Number: C3-09-0382
Date Reissued: 11-11-1993

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		02	03	04	05
Client Identification		MW1	MW5	MW2	MW4
Date Sampled		09/16/93	09/16/93	09/16/93	09/16/93
Date Analyzed		09/30/93	09/30/93	09/30/93	09/30/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	0.3	<0.3	0.3
Toluene	0.3	0.7	<0.3	<0.3	<0.3
Ethylbenzene	0.3	<0.3	<0.3	<0.3	2
Xylene, total	0.5	7	1	<0.5	3
BTEX, total	--	8	1	--	5
TPH as Gasoline	10	NA	<10	28	410
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		99.6	96.5	95.7	113

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

NA = Not Applicable.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: 020204554
Project ID: Oakland
Work Order Number: C3-09-0382
Date Reissued: 11-11-1993

Table 1 (continued)

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		06	093093S		
Client Identification		DUP	METHOD BLANK		
Date Sampled		09/16/93	--		
Date Analyzed		09/30/93	09/30/93		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	<0.3		
Toluene	0.3	0.5	<0.3		
Ethylbenzene	0.3	<0.3	<0.3		
Xylene, total	0.5	<0.5	<0.5		
BTEX, total	--	0.5	--		
TPH as Gasoline	10	51	<10		
Detection Limit Multiplier		1	1		
BFB surrogate, % recovery		120	118		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: 020204554
Project ID: Oakland
Work Order Number: C3-09-0382

ANALYTICAL RESULTS

TPH as Motor Oil in Water

Method: GC-FID[a]

GTEL Sample Number		02	03	04	05
Client Identification		MW1	MW5	MW2	MW4
Date Sampled		09/16/93	09/16/93	09/16/93	09/16/93
Date Extracted		09/28/93	09/28/93	09/28/93	09/28/93
Date Analyzed		10/09/93	10/09/93	10/09/93	10/09/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Motor Oil	100	<100[b]	<100	<100[b]	2500
Detection Limit Multiplier		1	1	1	1
OTP surrogate, % recovery		137	146	131	179[c]

GTEL Sample Number		100493 MO-1			
Client Identification		METHOD BLANK			
Date Sampled		--			
Date Extracted		09/28/93			
Date Analyzed		10/09/93			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Motor Oil	100	<100			
Detection Limit Multiplier		1			
OTP surrogate, % recovery		146			

a. O-Terphenyl surrogate recovery acceptability limits are 50-150%. Test Methods for Evaluating Solid Waste, SW-846, 3rd edition, Rev. O, U.S. EPA, November, 1986.
b. High concentrations of hydrocarbons. Not indicative of motor oil.
c. Surrogate recovery high due to high concentration of non target compounds.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: 020204554
Project ID: Oakland
Work Order Number: C3-09-0382

Table 1

ANALYTICAL RESULTS

Metals in Water[d]

GTEL Sample Number			03	04	05	092093 MET
Client Identification			MW5	MW2	MW4	METHOD BLANK
Date Sampled			09/16/93	09/16/93	09/16/93	--
Date Prepared (Method 3005[a])			09/20/93	09/20/93	09/20/93	09/20/93
Date Analyzed (Method 6010)			09/22/93	09/22/93	09/22/93	09/22/93
Date Analyzed (Method 7060, 7421, 7740, 7841)			09/27/93	09/27/93	09/27/93	09/27/93
Analyte	EPA Method[a]	Detection Limit, ug/L	Concentration, ug/L			
Cadmium	EPA 6010[b]	5	<5	<5	NR	<5
Chromium, total	EPA 6010[b]	10	<10	<10	NR	<10
Lead	EPA 7421[c]	5	<5	<5	<5	<5
Nickel	EPA 6010[b]	20	<20	<20	NR	<20
Zinc	EPA 6010[b]	20	<20	<20	NR	<20
Detection Limit Multiplier			1	1	1	1

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. NR = Not Requested.
b. Inductively Coupled Argon Plasma(ICP)
c. Graphite Furnace Atomic Absorption (GFAA)
d. Unpreserved sample was passed through a 0.45 micron filter and analyzed as a dissolved metal. Sample was lab filtered 09/17/93.
NR = Not Requested

GTEL ENVIRONMENTAL LABORATORIES, INC.

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4080 PIKE LANE, SUITE C
CONCORD, CA 94520
(510) 685-7852
(800) 423-7143

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

29755

Company Name: GROUNDWATERTECH

Phone #:

FAX #:

Company Address: CONCORD

Site location: OAKLAND

Project Manager: MIKE WRAY

Client Project ID: (#) 02020455 4.6104

(NAME) SEARS / TELEGRAPH AVE

I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler Name (Print): HECTOR MERINO

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix: WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	UNPRESERVED	OTHER (SPECIFY)	Sampling: DATE	TIME	BTEX/602 ☐ 8020 ☐ with MTBE ☐	BTEX/Gas Hydrocarbons PID/FID ☐ with MTBE ☐	Hydrocarbons GC/FID Gas ☐ Diesel ☐ Screen ☐	Hydrocarbon Profile (SIMDIS) ☐	Oil and Grease 413.1 ☐ 413.2 ☐ SM 503 ☐	TPH/IR 418.1 ☐ SM 503 ☐	EDB by 504 ☐ DBCP by 504 ☐	EPA 503.1 ☐ EPA 502.2 ☐	EPA 601 ☐ EPA 8010 ☐	EPA 602 ☐ EPA 8020 ☐ BTEX	EPA 608 ☐ 8080 ☐ PCB only ☐	EPA 624/PPL ☐ 8240/TAL ☐ NBS (+15) ☐	EPA 625/PPL ☐ 8270/TAL ☐ NBS (+25) ☐	EPA 610 ☐ 8310 ☐	EP TOX Metals ☐ Pesticides ☐ Herbicides ☐	TCLP Metals ☐ VOA ☐ Semi-VOA ☐ Pest ☐ Herb ☐	EPA Metals - Priority Pollutant ☐ TAL ☐ RCRA ☐	CAM Metals TTLC ☐ STLC ☐	Lead 239.2 ☐ 200.7 ☐ 7420 ☐ 7421 ☐ 6010 ☐	Organic Lead ☐	Corrosivity ☐ Flash Point ☐ Reactivity ☐	TPH as Motor oil (8015)	TOTAL LEAD (CADMIUM, ZINC)
TRIPBLANK	01	1	X						X			X			9/																				
MW1	02	4	X						X			X	X		9/	230									X								X	X	
MW5	03	8	X						X			X	X		9/	240		X																X	X	
MW2	04	8	X						X			X	X		9/16	250		X																X	X	
MW4	05	8	X						X			X	X		9/	300		X																X	X	X
DUP	06	2	X						X			X			9/13																					

TAT

Priority (24 hr) ☐
Expedited (48 hr) ☐
7 Business Days ☐
Other _____
Business Days ☐

Special Handling

GTEL Contact _____
Quote/Contract # _____
Confirmation # _____
PO # _____

QA / QC LEVEL

BLUE ☐ CLP ☐ OTHER _____

SPECIAL DETECTION LIMITS

SPECIAL REPORTING REQUIREMENTS

FAX ☐

REMARKS

SAMPLES FOR METALS ANALYSIS ARE UNPRESERVED - PLEASE "FILTER"

Lab Use Only Lot #

Storage Location: T-Box DR 3/2

ON ICE AT 3°C 9/17/93

Work Order # C3090382

CUSTODY RECORD

	Relinquished by Sampler:	Date	Time	Received by:
		9/17		
	Relinquished by:	Date	Time	Received by:
	Relinquished by:	Date	Time	Received by Laboratory:
		9/17/93	1125	

Waybill #

Rev. 7/91