FLUOR DANIEL GTI

To: Mr. Dale Klettke, CHMM
Hazardous Materials Specialist
Alameda County, Health Care Services Agency
Environmental Health Services Dept.
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Date: October 14, 1996

Re: Sears, Roebuck and Co.
Monitoring and Sampling
Third Quarter Report

Attn: Mr. Dale Klette

From: Michael J. Wray

We are sending: _X_ Attached __ Via Airborne

The following:

_X_ Report __ Originals __ Shop Drawings __ Samples __ Specifications
__ Copy(s) __ Proposal __ Other

COPIES	DATE	DESCRIPTION
1	10/14/96	Third Quarter 1996 Monitoring and Sampling Report for Oakland, CA Site (1058)

Transmitted as checked:

__ Approved __ For Approval __ Approved as Noted __ For Correction __ For Your Use

__ As Requested __ For Comments _X_ For Your Records __ For Distribution __ Other

Comments:

Enclosed are Sears Monitoring and Sampling Third Quarter report. If you have any questions, please call me at (510) 370-3990. Thanks Mike W Ray

---

757 Arnold Drive, Suite D / Martinez, CA 94553 USA (510) 370-3990 FAX (510) 370-3991

FLUOR DANIEL GTI

October 14, 1996

Mr. Dale Klettke, CHMM
Hazardous Materials Specialist
Alameda County, Health Care Services Agency
Environmental Health Services Dept.
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

SUBJECT: Quarterly Groundwater Monitoring and Sampling Report
Former Sears Store 1058
2633 Telegraph Avenue, Oakland, California
Fluor Daniel GTI Project 020200136

Dear Mr. Klettke:

On behalf of Sears, Roebuck and Co., Fluor Daniel GTI, Inc. presents the quarterly monitoring and sampling data collected on September 4, 1996, from the site referenced above. The eight groundwater monitoring wells were gauged to determine depth to groundwater and to check for the presence of separate-phase petroleum hydrocarbons in accordance with correspondance from the Alameda Health Care Services Agency dated May 1, 1996. Separate-phase hydrocarbons were detected in monitoring well MW-3 which is consistent with past measurements. A potentiometric surface map is presented in attachment 1, figure 1. Extraction well (EW-1) is not included in the potentionmetric surface map, as this well has not yet been surveyed. A summary of groundwater monitoring data is presented in attachment 2, table 1.

After measuring depth to water,all monitoring wells were purged and sampled. Groundwater monitoring and sample collection protocol, and field data sheets are presented in attachment 3. The groundwater samples were analyzed for total petroleum hydrocarbons (TPH)-as-motor oil by modified EPA method 8015 (GC/FID) for benzene, toluene ethyl-benzene, xylenes (BTEX)/methyl tert-butyl ether (MTBE) and for TPH-as-gasoline by EPA methods 8020/modified 8015. A summary of the groundwater analytical results is presented in table 2. A distribution map of dissolved benzene, TPH-as-gasoline and TPH-as-motor-oil concentrations is presented in figure 2. Laboratory reports and chain-of-custody records are included in attachment 4.

Concentrations of petroleum constituents remain consistent with historical results reported in the groundwater samples collected from wells MW-1, MW-2, MW-3, MW-4 and MW-8. Although the detection of TPH-as-motor oil in the samples collected from wells, MW-5, MW-6 and MW-7 are inconsistent with previous sampling results, the concentrations are only slightly above the detection limit of 200 ug/l. The results of analytical testing of groundwater samples continue to show that there are no detections above California Maximum Contaminant (MCLs). At this time Fluor Daniel GTI recommends continued quarterly groundwater sampling.

Fluor Daniel GTI is currently in the process of reporting the results of the Remedial Action Work Plan for the site. It is anticipated that the report results will be completed by the beginning of November 1996. To date, all of the work proposed in the work plan has been completed except the anaerobic treatability testing. That testing is scheduled to be completed by mid-October.

If you have any comments or questions, please contact me at (510) 370-3990.

Sincerely,
Fluor Daniel GTI, Inc.

Mike Wray

Michael J. Wray
Project Manager

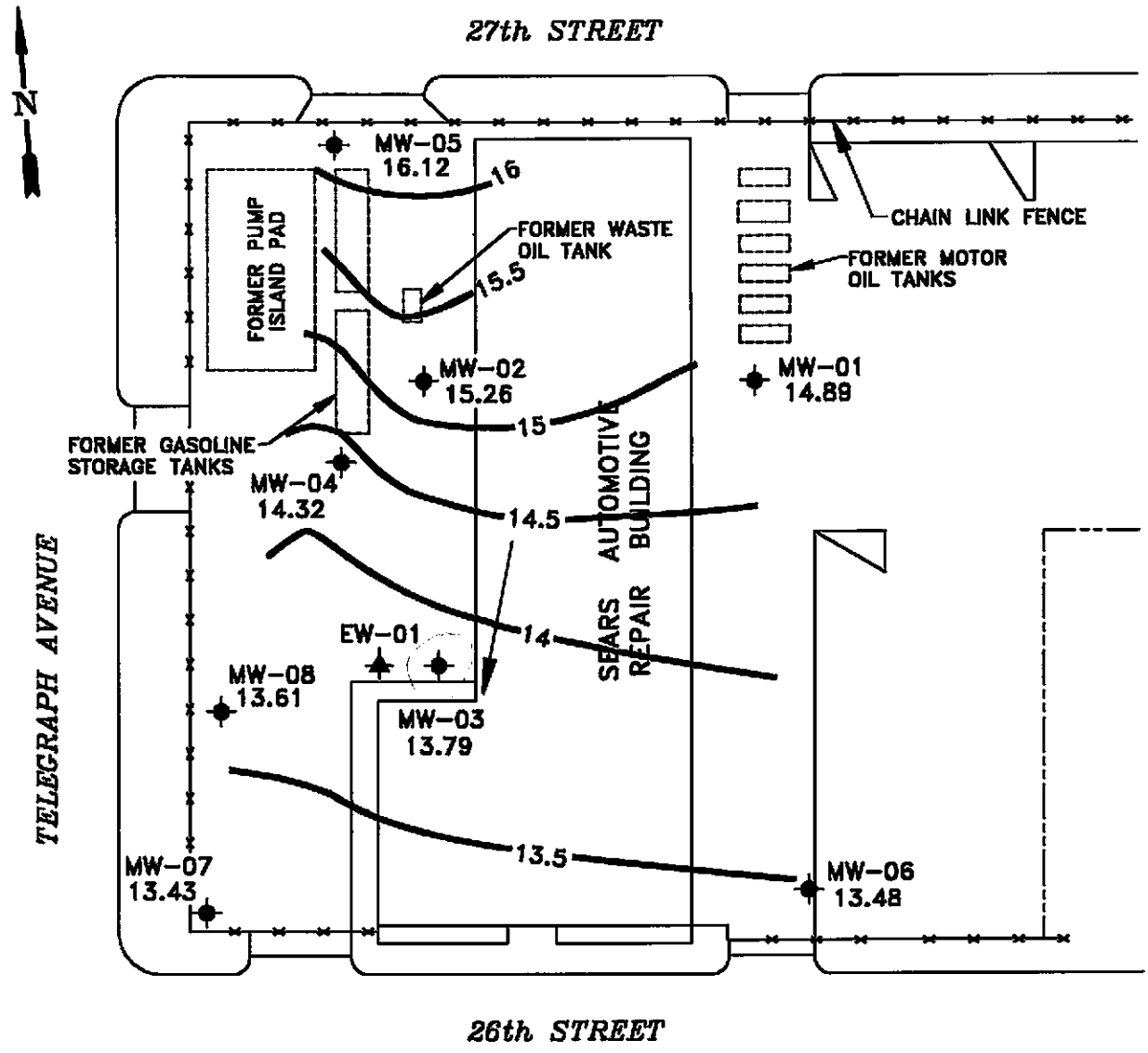
Attachments

Scott M. DeMuth - Sears, Roebuck and Co.

ATTACHMENT 1

Figures

1. Potentiometric Surface Map (09/04/96)
2. Concentrations of Benzene, TPH-as-Gasoline and TPH-as-Motor Oil in Groundwater (09/04/96)



LEGEND

✦	MONITORING WELL
✦	EXTRACTION WELL
X.XX	POTENTIOMETRIC SURFACE ELEVATION (FT)
SPH	SEPARATE-PHASE HYDROCARBONS
⌒	POTENTIOMETRIC SURFACE CONTOUR
←	GROUNDWATER FLOW DIRECTION

REGISTERED GEOLOGIST
DENNIS P. MASLONKOWSKI
No. 5299
STATE OF CALIFORNIA

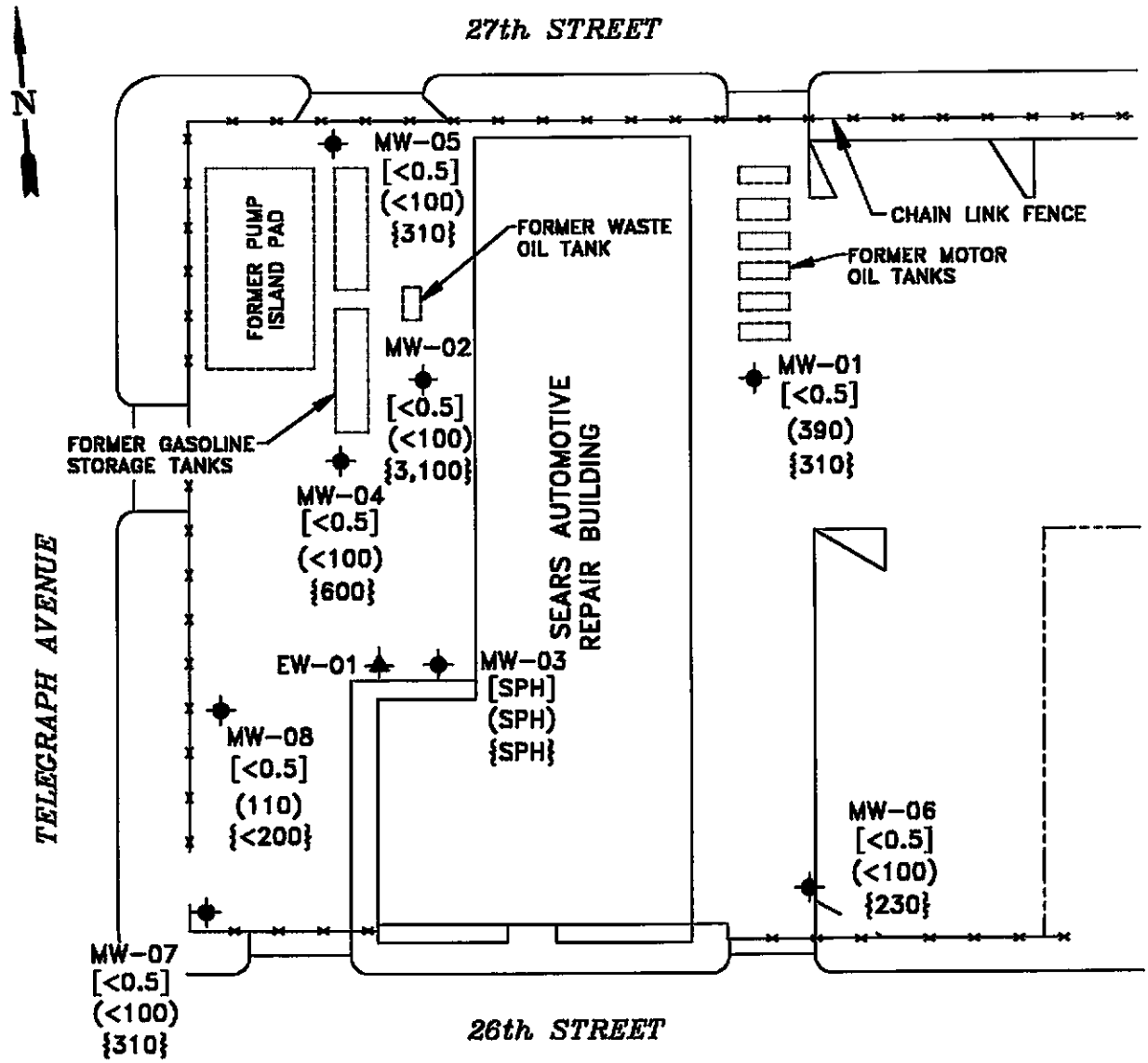
NOTE:
1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.

FLUOR DANIEL GTI

0 FEET 40
SCALE

POTENTIOMETRIC SURFACE MAP (9/4/96)

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058	FILE: S996PSM, (1:40)		PROJECT NO.: 020200136	PM mpw	PE/RG DPM
	REV.			FIGURE: 1	
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	DES. SS	DET. SS	DATE: 10/1/96		



LEGEND

✦	MONITORING WELL
✦	EXTRACTION WELL
SPH	SEPARATE-PHASE HYDROCARBONS
X.XX	POTENTIOMETRIC SURFACE ELEVATION (FT)
[ ]	BENZENE CONCENTRATIONS [ug/l]
( )	TPH-AS-GASOLINE (ug/l)
{ }	TPH-AS-MOTOR OIL {ug/l}

REGISTERED GEOLOGIST
DENNIS P. MASLONKOWSKI
No. 5299
STATE OF CALIFORNIA

FLUOR DANIEL GTI

0 FEET 40
SCALE

CONCENTRATIONS OF BENZENE, TPH-AS GASOLINE & TPH-AS-MOTOR OIL IN GROUNDWATER (9/4/96)

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058	FILE: BEN996		PROJECT NO.: 020200136	PM: mjw	PE/RG: DPM
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	REV.			FIGURE: 2	
	DES.: SS	DET.: SS	DATE: 10/1/96		

ATTACHMENT 2

Tables

1. Summary of Historical Groundwater Monitoring Data
2. Summary of Historical Groundwater Sample Analyses

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
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
		11/24/93	11.97	--	--	14.23
		12/01/93	11.46	--	--	14.74
		12/27/93	11.58	--	--	14.62
		01/05/94	11.69	--	--	14.51
		02/08/94	11.87	--	--	14.33
		03/09/94	11.08	--	--	15.12
		04/01/94	11.47	--	--	14.73
		05/10/94	10.77	--	--	15.43
		06/30/94	11.82	--	--	14.38
		07/28/94	11.90	--	--	14.30
		08/31/94	11.94	--	--	14.26
		09/27/94	12.04	--	--	14.16
		10/28/94	12.06	--	--	14.14
		11/15/94	10.02	--	--	16.18
		12/01/94	10.61	--	--	15.59
		01/04/95	9.93	--	--	16.27
		02/01/95	9.56	--	--	16.64
		03/08/95	10.51	--	--	15.69
		04/03/95	NM	NM	NA	NA
		05/18/95	10.80	--	--	15.40
		06/09/95	11.18	--	--	15.02
		07/13/95	11.27	--	--	14.93
		08/03/95	11.48	--	--	14.72
		08/29/95	11.56	--	--	14.64
		09/15/95	11.71	--	--	14.49
		10/20/95	11.80	--	--	14.40
		11/15/95	11.61	--	--	14.59
		01/15/96	11.21	--	--	14.99
		03/05/96	9.35	--	-	16.85
		04/19/96	10.60	--	--	15.60
		05/10/96	11.18	--	--	15.02
		06/03/96	10.90	--	--	15.30
		09/04/96	11.31	--	--	14.89

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
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
		05/26/93	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
		11/24/93	11.52	--	--	14.98
		12/01/93	11.08	--	--	15.42
		12/27/93	11.27	--	--	15.23
		01/05/94	11.39	--	--	15.11
		02/08/94	11.49	--	--	15.01
		03/09/94	11.06	--	--	15.44
		04/01/94	11.25	--	--	15.25
		05/10/94	10.83	--	--	15.67
		06/30/94	11.44	--	--	15.06
		07/28/94	11.48	--	--	15.02
		08/31/94	11.56	--	--	14.94
		09/27/94	11.61	--	--	14.89
		10/28/94	11.65	--	--	14.85
		11/15/94	9.65	--	--	16.85
		12/01/94	10.71	--	--	15.79
		01/04/95	10.11	--	--	16.39
		02/01/95	10.38	--	--	16.12
		03/06/95	10.80	--	--	15.70
		04/03/95	10.61	--	--	15.89
		05/18/95	10.95	--	--	15.55
		06/09/95	11.13	--	--	15.37
		07/13/95	11.15	--	--	15.35
		08/03/95	11.26	--	--	15.24
		08/29/95	11.32	--	--	15.18
		09/15/95	11.42	--	--	15.08
		10/20/95	11.42	--	--	15.08
		11/15/95	11.37	--	--	15.13
		01/15/96	11.10	--	--	15.40
		03/05/96	10.24	--	--	16.26
		04/19/96	10.84	--	--	15.56
		05/10/96	11.13	--	--	15.37
		06/03/96	10.94	--	--	15.56
		09/04/96	11.24	--	--	15.26

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
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
		05/26/93	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	NA	NA
		11/03/93	13.13	13.02	0.11	13.30
		11/24/93	12.94	12.92	0.02	13.42
		12/01/93	12.71	12.69	0.02	13.65
		12/27/93	12.77	12.73	0.04	13.60
		01/05/94	12.85	12.83	0.02	13.51
		02/08/94	12.37	--	--	13.97
		03/09/94	12.53	--	--	13.81
		04/01/94	12.64	--	--	13.70
		05/10/94	12.32	--	--	14.02
		06/30/94	12.84	12.82	0.02	13.51
		07/26/94	12.93	12.89	0.04	13.44
		08/31/94	13.04	13.01	0.03	13.32
		09/27/94	13.13	13.02	0.11	13.30
		10/28/94	13.30	13.08	0.22	13.22
		11/15/94	11.05	11.02	0.03	15.31
		12/01/94	11.90	11.88	0.02	14.46
		01/04/95	11.80	11.76	0.01	14.55
		02/01/95	12.00	11.98	0.02	14.36
		03/08/95	12.35	12.30	0.05	14.03
		04/03/95	12.09	12.05	0.04	14.28
		05/18/95	12.43	12.40	0.03	13.93
		06/09/95	12.60	12.58	0.02	13.76
		07/13/95	12.55	12.46	0.09	13.87
		08/03/95	12.64	12.61	0.03	13.73
		08/29/95	12.65	12.62	0.03	13.71
		09/15/95	13.00	12.86	0.14	13.45*
		10/20/95	12.86	12.03	0.03	13.50*
		11/15/95	12.81	12.74	0.07	13.59*
		01/15/96	12.60	12.47	0.13	13.84*
		03/05/96	11.68	11.64	0.04	14.69
		04/19/96	12.36	12.34	0.02	14.00
		05/10/96	11.93	11.91	0.02	14.43
		06/03/96	12.93	12.50	0.43	13.75
		09/04/96	12.60	12.55	0.05	13.79

* Corrected elevations. Review of calculations indicated that thses elevations were incorrect in past reports.

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
MW-4	26.17	12/30/92	11.53	--	Sheen	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
		11/24/93	12.02	--	--	14.15
		12/01/93	11.78	--	--	14.99
		12/27/93	11.80	--	--	14.97
		01/05/94	11.91	--	--	14.26
		02/08/94	11.85	--	--	14.32
		03/09/94	11.61	--	--	14.56
		04/01/94	11.73	--	--	14.44
		05/10/94	11.49	--	--	14.68
		06/30/94	11.90	--	--	14.20
		07/28/94	11.97	--	--	14.27
		08/31/94	12.06	--	--	14.11
		09/27/94	12.11	--	--	14.06
		10/28/94	12.18	--	--	13.99
		11/15/94	10.72	--	--	15.45
		12/01/94	11.37	--	--	14.80
		01/04/95	11.20	--	--	14.97
		02/01/95	11.16	--	--	15.01
		03/08/95	11.49	--	--	14.68
		04/03/95	11.35	--	--	14.82
		05/18/95	11.56	--	--	14.61
		06/09/95	11.72	--	--	14.45
		07/13/95	11.72	--	--	14.45
		08/03/95	11.81	--	--	14.36
		08/29/95	11.88	--	--	14.29
		09/15/95	11.99	--	--	14.18
		10/20/95	12.00	--	--	14.17
		11/15/95	11.96	--	--	14.21
		01/15/96	11.71	--	--	14.46
		03/05/96	11.02	--	--	15.15
		04/19/96	11.51	--	--	14.46
		05/10/96	11.74	--	--	14.43
		06/03/96	11.60	--	-	14.57
		09/04/96	11.85	--	--	14.32

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
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
		11/24/93	12.00	--	--	14.98
		12/01/93	10.84	--	--	16.14
		12/27/93	10.81	--	--	16.17
		01/05/94	10.96	--	--	16.02
		02/08/94	10.94	--	--	16.04
		03/09/94	10.54	--	--	16.44
		04/01/94	10.77	--	--	16.21
		05/10/94	10.44	--	--	16.54
		06/30/94	10.88	--	--	16.10
		07/28/94	10.98	--	--	16.00
		08/31/94	11.07	--	--	15.91
		09/27/94	11.12	--	--	15.86
		10/28/94	11.21	--	--	15.77
		11/15/94	10.05	--	--	16.93
		12/01/94	10.39	--	--	16.59
		01/04/95	10.18	--	--	16.80
		02/01/95	9.93	--	--	17.05
		03/08/95	10.35	--	--	16.63
		04/03/95	10.15	--	--	16.83
		05/18/95	10.43	--	--	16.55
		06/09/95	10.62	--	--	16.36
		07/13/95	10.76	--	--	16.22
		08/03/95	10.82	--	--	16.16
		08/29/95	10.91	--	--	16.07
		09/15/95	11.00	--	--	15.98
		10/20/95	11.02	--	--	15.96
		11/15/95	11.95	--	--	15.03
		01/15/96	10.57	--	--	16.41
		03/05/96	9.81	--	--	17.17
		04/19/96	10.32	--	--	16.66
		05/10/96	10.56	--	--	16.40
		06/03/96	10.46	--	--	16.52
		09/04/96	10.86	--	--	16.12

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
MW-6	24.32	12/27/93	11.24	--	--	13.08
		01/05/94	11.39	--	--	12.93
		02/08/94	11.15	--	--	13.17
		03/09/94	10.97	--	--	13.35
		04/01/94	11.25	--	--	13.07
		05/10/94	10.78	--	--	13.54
		06/30/94	11.49	--	--	12.83
		07/28/94	11.59	--	--	12.73
		08/31/94	11.56	--	--	12.76
		09/27/94	11.65	--	--	12.67
		10/28/94	11.59	--	--	12.73
		11/15/94	10.24	--	--	14.08
		12/01/94	10.30	--	--	14.02
		01/04/95	9.81	--	--	14.51
		02/01/95	10.01	--	--	14.31
		03/08/95	10.64	--	--	13.68
		04/03/95	10.26	--	--	14.06
		05/18/95	10.81	--	--	13.51
		06/09/95	11.07	--	--	13.25
		07/13/95	10.91	--	--	13.41
		08/03/95	11.15	--	--	13.17
		08/29/95	11.09	--	--	13.23
		09/15/95	11.35	--	--	12.97
		10/20/95	11.32	--	--	13.00
		11/15/95	11.20	--	--	13.12
		01/15/96	10.83	--	--	13.49
		03/05/96	9.60	--	--	14.72
		04/19/96	10.71	--	--	13.61
		05/10/96	11.05	--	--	13.27
		06/03/96	10.91	--	--	13.41
		09/04/96	10.84	--	--	13.48

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
MW-7	24.88	12/27/93	11.80	--	--	13.08
		01/05/94	11.53	--	--	13.35
		02/08/94	11.90	--	--	12.98
		03/09/94	11.23	--	--	13.65
		04/01/94	11.34	--	--	13.54
		05/10/94	11.02	--	--	13.86
		06/30/94	11.49	--	--	13.39
		07/28/94	11.58	--	--	13.30
		08/31/94	11.69	--	--	13.19
		09/27/94	11.73	--	--	13.15
		10/28/94	11.77	--	--	13.11
		11/15/94	10.29	--	--	14.59
		12/01/94	10.89	--	--	13.99
		01/04/95	10.77	--	--	14.11
		02/01/95	10.70	--	--	14.18
		03/08/95	11.05	--	--	13.83
		04/03/95	10.88	--	--	14.00
		05/18/95	11.12	--	--	13.76
		06/09/95	11.25	--	--	13.63
		07/13/95	11.15	--	--	13.73
		08/03/95	11.32	--	--	26.79
		08/29/95	11.53	--	--	13.35
		09/15/95	11.65	--	--	13.23
		10/20/95	11.64	--	--	13.24
		11/15/95	11.60	--	--	13.28
		01/15/96	11.07	--	--	13.81
		03/05/96	10.50	--	--	14.38
		04/19/96	12.02	--	--	12.86
		05/10/96	11.14	--	--	13.74
		08/03/96	11.10	--	--	13.78
		09/04/96	11.45	--	--	13.43

(Table 1 continues)

TABLE 1
Summary of Historical Groundwater Monitoring Data
(All measurements are in feet; all elevations are in feet above mean sea level)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
MW-6	26.12	12/27/93	12.45	--	--	13.67
		01/05/94	12.57	--	--	13.55
		02/06/94	12.02	--	--	14.10
		03/09/94	12.22	--	--	13.90
		04/01/94	12.33	--	--	13.79
		05/10/94	12.00	--	--	14.12
		06/30/94	12.52	--	--	13.60
		07/28/94	12.61	--	--	13.51
		08/31/94	12.72	--	--	13.40
		09/27/94	12.80	--	--	13.32
		10/28/94	12.84	--	--	13.28
		11/15/94	11.72	--	--	14.40
		12/01/94	11.87	--	--	14.25
		01/04/95	11.75	--	--	14.37
		02/01/95	11.64	--	--	14.48
		03/08/95	12.04	--	--	14.08
		04/03/95	11.86	--	--	14.26
		05/18/95	12.11	--	--	14.01
		06/09/95	12.34	--	--	13.78
		07/13/95	12.37	--	--	13.75
		08/03/95	12.50	--	--	13.62
		08/29/95	12.55	--	--	13.57
		09/15/95	12.70	--	--	13.42
		10/20/95	12.69	--	--	13.43
		11/15/95	12.67	--	--	13.45
		12/11/95	11.80	--	--	14.32
		01/15/96	12.38	--	--	13.74
		03/05/96	11.44	--	--	14.68
		04/19/96	10.80	--	--	15.32
		05/10/96	12.40	--	--	13.72
		06/03/96	12.26	--	--	13.86
		09/04/96	12.51	--	--	13.61

Notes: "--" indicates no datum for the cell, including "product not detected"
NM = Not monitored
NA = Not Available

TABLE 2
Summary of Historical Groundwater Sample Analyses
(All results expressed in parts per billion)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TPH as Motor Oil	TPH (mg/l)	Dissolved Metals	MTBE
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	--	--	--
	12/01/93	0.4	1	2	7	--	--	--	--	--
	12/30/93	--	--	--	--	--	<100	--	--	--
	03/09/94	<0.3	<0.3	1	4.2	--	<100	--	--	--
	06/30/94	0.6	0.7	2.4	15	--	<100	--	--	--
	09/27/94	0.9	0.5	1.4	10	--	*<250	--	--	--
	12/01/94	0.4	0.4	<0.3	6.6	--	*<250	--	--	--
	03/08/95	<0.3	0.6	<0.3	2.7	--	*<250	--	--	--
	06/09/95	<0.3	1.4	4.7	5.6	--	*<250	--	--	--
	08/29/95	0.3	0.9	3.9	2.8	--	*<250	--	--	--
	11/15/95	<0.5	<0.5	<0.5	27	--	*<200	--	--	--
	03/05/96	<0.5	<1.0	<1.0	<2.0	--	*<200	--	--	--
	06/03/96	<0.5	<1.0	<1.0	3.4	340	*<200	-	--	--
	09/04/96	<0.5	<1.0	3.7	<2.0	390	310	--	--	<10
MW-2	12/30/92	0.7	<0.3	<0.3	3	190	--	1	*ND	--
	03/24/93	0.6	<0.3	<0.3	2	120	--	<1	*ND	--
	06/21/93	0.3	<0.3	<0.3	0.7	82	**<100	--	*ND	--
	09/16/93	<0.3	<0.3	<0.3	<0.5	28	**<100	--	*ND	--
	12/01/93	<0.3	<0.3	<0.3	1	68	--	--	*ND	--
	12/30/93	--	--	--	--	--	310	-	--	--
	03/09/94	<0.3	<0.3	<0.3	<0.5	47	<100	--	ND	--
	06/30/94	<0.3	<0.3	<0.3	<0.5	<10	100	--	ND	--
	09/27/94	<0.3	<0.3	<0.3	<0.5	<10	*<250	--	[d]15	--
	12/01/94	<0.3	<0.3	<0.3	<0.5	54	[f]1,300	--	[g]6	--
	03/08/95	<0.3	<0.3	<0.3	<0.5	<10	3,000	--	ND	--
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	2,000	--	ND	--
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	4,300	--	[h]20	--
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	6,100	--	ND	--
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	3,200	--	ND	--
	06/04/96	<0.5	<1.0	<1.0	<2.0	<100	3,800	--	ND	--
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	3,100		--	<10
MW-3	12/30/92	11	0.9	<0.3	2	910	SPH	20	*ND	--
	03/24/93	28	0.7	1	8	3,300	SPH	28	**15	--
	06/21/93	21	5	2	19	**2,600	32,000	26	[e]5	--
	09/16/93	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	12/01/93	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	03/09/94	2	1.4	4.5	13	2,000	**5,700	**63	*ND	--
	06/30/94	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	09/27/94	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	12/01/94	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	03/08/95	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	06/09/95	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	08/29/95	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	11/15/95	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	03/05/96	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	06/03/96	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	09/04/96	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	<10

(Table 2 continues)

TABLE 2
Summary of Historical Groundwater Sample Analyses
(All results expressed in parts per billion)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TPH as Motor Oil	TPH (mg/l)	Dissolved Metals	MTBE
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	–
	12/01/93	<0.3	<0.3	<0.3	<0.5	150	390	–	[a]ND	–
	03/09/94	0.7	0.8	2	3.6	1,500	780	–	[a]ND	–
	06/30/94	<0.3	1.7	0.5	1.0	450	130	–	ND	–
	09/27/94	0.5	<0.3	<0.3	<0.5	110	1,100	–	ND	–
	12/01/94	0.6	0.5	0.3	0.8	290	580	–	[a]<5	–
	03/08/95	<0.3	<0.3	<0.3	<0.5	360	1,000	–	[a]<5	–
	06/09/95	<0.3	0.4	<0.3	<0.5	64	1,100	–	[a]<5	–
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	1,200	–	[a]<5	–
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	2,100	–	[a]ND	–
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	590	–	[a]ND	–
	06/03/96	<0.5	<1.0	<1.0	<2.0	<100	860	–	ND	–
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	600	–	–	<10
MW-5	12/30/92	<0.3	<0.3	<0.3	<0.5	37	–	<1	[b]5	–
	03/24/93	<0.3	<0.3	<0.3	0.5	19	–	2	[b]341	–
	06/21/93	<0.3	<0.3	<0.3	<0.5	<10	<100	–	[a]ND	–
	09/16/93	0.3	<0.3	<0.3	1	<10	<100	–	[a]ND	–
	12/01/93	<0.3	<0.3	<0.3	1	17	–	–	[a]ND	–
	12/30/93	–	–	–	–	–	<100	–	–	–
	03/09/94	<0.3	<0.3	<0.3	<0.5	22	<100	–	[a]ND	–
	06/30/94	<0.3	<0.3	<0.3	<0.5	<10	<100	–	ND	–
	09/27/94	0.5	0.4	<0.3	<0.5	<10	560	–	ND	–
	12/01/94	<0.3	<0.3	<0.3	<0.5	<10	<250	–	ND	–
	03/08/95	<0.3	<0.3	<0.3	<0.5	<10	<250	–	ND	–
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	<250	–	[b]7	–
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	<250	–	[b]36	–
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	<200	–	ND	–
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	<200	–	ND	–
	06/03/96	NS	NS	NS	NS	NS	NS	NS	NS	–
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	310	–	–	<10
MW-6	12/27/93	<0.3	<0.3	<0.3	<0.5	<10	<100	<1	[b]70	–
	03/09/94	<0.3	<0.3	<0.3	<0.5	15	<100	–	[a]ND	–
	06/30/94	<0.3	<0.3	<0.3	<0.5	<10	<100	–	ND	–
	09/27/94	<0.3	<0.3	<0.3	<0.5	<10	<250	–	[b]8	–
	12/01/94	<0.3	<0.3	<0.3	<0.5	<10	<250	–	[b]32	–
	03/08/95	<0.3	<0.3	<0.3	<0.5	<10	<250	–	ND	–
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	<250	–	ND	–
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	<250	–	[b]24	–
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	<200	–	[b]31	–
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	<200	–	ND	–
	06/03/96	NS	NS	NS	NS	NS	NS	NS	NS	–
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	230	–	–	<10
MW-7	12/27/93	<0.3	<0.3	1	2	140	<100	<1	[a]40	–
	03/09/94	<0.3	<1.0	1.5	4.1<	620	<100	–	[a]ND	–
	06/30/94	<0.3	<0.3	<0.3	0.5	33	<100	–	ND	–
	09/27/94	<0.3	<0.3	0.4	0.7	52	[c]<250	–	ND	–
	12/01/94	<0.3	<0.3	<0.3	1.1	<10	[c]<250	–	[b]28	–
	03/08/95	<0.3	<0.3	<0.3	<0.5	<10	[c]<250	–	ND	–
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	<250	–	ND	–
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	<250	–	[b]13	–
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	<200	–	ND	–
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	270	–	ND	–
	06/03/96	NS	NS	NS	NS	NS	NS	NS	NS	–
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	310	–	–	<10

(Table 2 continues)

TABLE 2
Summary of Historical Groundwater Sample Analyses
(All results expressed in parts per billion)

Sears Store 1058
2633 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TPH as Motor Oil	TPH (mg/l)	Dissolved Metals	MTBE
MW-8	12/27/93	0.4	4	0.4	1	390	<100	<1	[a]18	--
	03/09/94	0.6	0.8	0.5	1.5	420	<100	--	[a]ND	--
	06/30/94	0.9	<0.3	<0.3	1.1	250	<100	--	ND	--
	09/27/94	<0.3	<0.3	<0.3	<0.5	210	[e]<250	--	[d]9	--
	12/01/94	5.4	<0.3	0.7	1.3	230	[e]<250	--	[c]ND	--
	03/08/95	<0.3	<0.3	<0.3	<0.5	230	[e]<250	--	ND	--
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	[e]<250	--	ND	--
	08/29/95	0.9	0.4	<0.3	0.6	200	[e]<250	--	[b]15	--
	11/15/95	0.58	<0.5	<0.5	0.54	120	--	--	[a]21	--
	12/11/95	--	--	--	--	--	[e]<200	--	--	--
	03/05/96	0.6	<1.0	<1.0	<2.0	<100	[e]<200	--	ND	--
	06/03/96	<0.5	<1.0	<1.0	<2.0	100	--	--	--	--
	09/04/96	<0.5	<1.0	<1.0	<2.0	110	<200	--	--	<10
EW-1	09/04/96	<0.5	<1.0	<1.0	<2.0	1100	1700	--	---	<10

Source: GTEL Environmental Laboratories

Notes: "--" indicates no datum for the cell, including "not analyzed for this constituent". Values beginning with "<" indicate the compound was not detected above the laboratory reporting limits.

mg/l = Milligrams per liter
TPH = Total petroleum hydrocarbons
ND = Non-detectable (detection limits for each metal is listed in laboratory reports, included in attachment 4)
SPH = Separate phase hydrocarbon
NS = Not sampled
* = 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.
[e] = Hydrocarbon pattern not characteristic of motor oil.
[f] = Uncategorized compounds included in concentration
[g] = Zinc only analyte detected
[h] = Chromium only analyte detected
MTBE = Methyl tert-butyl ether

(Table 2 continues)

ATTACHMENT 3

Groundwater Monitoring and Sample Collection Protocol
and
Field Data Sheets

GROUNDWATER TECHNOLOGY GROUNDWATER MONITORING AND SAMPLE COLLECTION PROTOCOL

Groundwater Monitoring

Groundwater monitoring is accomplished using a INTERFACE PROBE™ Well Monitoring System. The INTERFACE PROBE™ Well Monitoring System is a hand held, battery operated device for measuring the depth to separate-phase hydrocarbons and depth to water. The INTERFACE PROBE™ Well Monitoring System consists of a dual-sensing probe which utilizes an optical liquid sensor and electrical conductivity to distinguish between water and petroleum products.

Monitoring is accomplished by measuring from the surveyed top of well casing or grade to groundwater and separate-phase hydrocarbons if present. The static water elevation is then calculated for each well and a potentiometric surface map is constructed. If separate-phase hydrocarbons are detected the water elevation is adjusted by the following calculation:

(Product thickness) x (0.8) + (Water elevation) = Corrected water elevation

Groundwater monitoring wells are monitored in order of wells with lowest concentrations of volatile organic compounds to wells with the highest concentrations, based upon historical concentrations. If separate-phase hydrocarbons are encountered in a well, the product is visually inspected to confirm and note color, amount, and viscosity. Monitoring equipment is washed with laboratory grade detergent and rinsed with distilled or deionized water before monitoring each well.

Groundwater Sampling

Before groundwater samples are collected, sufficient water is purged from each well to ensure representative formation water is entering the well. Wells are purged and sampled in the same order as monitoring, from wells with the lowest concentrations of volatile organic compounds to wells with the highest concentrations. Wells are purged using either a polyvinyl chloride (PVC) bailer fitted with a check valve or with a stainless steel submersible Grundfos pump. The purge equipment is decontaminated before use in each well by washing with laboratory grade detergent and tripled rinsing with deionized or distilled water. A minimum of 3 well-casing volumes of water are removed from each well while pH, electrical conductivity, and temperature are recorded to verify that "fresh" formation water is being sampled and the parameters have stabilized. If the well is low yielding, it may be purged dry and sampled before 3 casing volumes are purged. The wells are then allowed to recharge to approximately 80 percent of the initial water level before a sample is collected.

Groundwater samples are collected from each well using a new, prepackaged disposable bailer and string. The water sample is decanted from the bailer into laboratory-provided containers (appropriate for the analyses required) so that there is no headspace in the containers. Samples collected for benzene, toluene, ethylbenzene, xylene, and total petroleum hydrocarbons (TPH)-as-gasoline analyses are collected in 40-milliliter vials fitted with Teflon® septum lids. Samples are preserved with hydrochloric acid (HCL) to a pH of less than 2. Dissolved metals samples are filtered through a 0.45-micron paper filter in the field and preserved as required before submitting to the laboratory for analyses. All samples are labeled immediately upon collection and logged on the chain-of-custody record. Sample label and chain-of-custody recorded information includes the project name and number, sample identification, date and time of collection, analyses requested, and the sampler's name. Sample bottles are placed in plastic bags (to protect the bottles and labels) and on ice (frozen water) in an insulated cooler and are shipped under chain-of-custody protocol to the laboratory.

The chain-of-custody record documents who has possession of the samples until the analyses is performed. Other pertinent information is also noted for the laboratory use on the chain-of-custody record.

Trip blanks (TBLBs) are used for each project as a quality assurance/quality control measure. The TBLBs are prepared by the laboratory and are placed in the insulated cooler and accompany the field samples throughout the sampling event.

SITE VISIT FORM
GROUNDWATER TECHNOLOGY, INC.

Project: Sears/2633 Telegraph
Store #: 1058
Project Manager: Mike Wray

Technician: HECTOR MERINO
Schedule:
Job No. 020200136.030543

WELL WATER SAMPLING - TASK Nr: 030804 [QUARTERLY]
Gauge wells for volume of water & bail 3 well Vol,s. DECON all equipment & change gloves, string, etc. between each well.

Well ID				
MW-1:	DTB_21.72	DTW 11.31	SAT. THICK ___	#GAL. BAILED_____
MW-2:	DTB_21.79	DTW 11.24	SAT. THICK___	#GAL. BAILED_____
MW-3:	DTB_24.67	DTW 12.60	SAT. THICK 12.55	#GAL. BAILED_____
MW-4:	DTB_22.97	DTW 11.85	SAT. THICK___	#GAL. BAILED_____
MW-5:	DTB_25.27	DTW 10.86	SAT. THICK___	#GAL. BAILED_____
MW-6:	DTB_22.05	DTW 10.84	SAT. THICK ___	#GAL. BAILED_____
MW-8:	DTB_21.70	DTW 12.51	SAT. THICK___	#GAL. BAILED_____
MW-7	DTB_22.14	DTW 11.45	SAT. THICK___	#GAL. BAILED_____
EW	DTB 22.35	DTW 12.87	SAT. THICK___	#GAL. BAILED_____

4" SHEEN on Bailer

NOTES: _____

HOURS ESTIMATED: HOURS USED:

FINAL CHECKS

Are Wells Locked? YES NO Why Not?

Are Manholes Bolted Down? YES NO Why Not?

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 1 **of** _____
Project Manager: Mike Wray

Well ID: MW-5
Well Diameter: 2

DTW Measurements:
Initial: 10.86 Calc Well Volume: 2.3 gal
Recharge: _____ Well Volume: x3 7 gal
DTB: 12527

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth 24' ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Calibrated YSI to 4+7 Buffer solution @ 12:00 am on 9/4/96

Time	Temp X C F	Conductivity mV/cm	pH	Purge Volume Gallons	Turbidity	Comments
12:30	24.1	0.37	6.73	2	cloudy	
12:31	24.2	0.54	6.60	3		
12:32	24.2	0.53	6.61	4		
12:33	24.2	0.54	6.48	5		
12:34	24.5	0.53	6.45	6		
12:35	24.4	0.52	6.46	7	↓	

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 2 **of** _____
Project Manager: Mike Wray

Well ID: MW-1
Well Diameter: 2

DTW Measurements: Initial: 11.31 Recharge: _____ DTB 21.72
Calc Well Volume: 1.6 gal
Well Volume: X3 5. gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth 20' ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Time	Temp X C / F	Conductivity mS/cm	pH	Purge Volume Gallons	Turbidity	Comments
12:40	24.4	0.43	6.42	1	cloudy	
12:41	24.3	0.42	6.42	2	↓	
12:42	24.2	0.41	6.42	3		
12:43	24.2	0.42	6.41	4		
12:44	24.2	0.42	6.40	5	↓	

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/93
Page 3 **of** _____
Project Manager: Mike Wray

Well ID: MW-6
Well Diameter: 2

DTW Measurements: Initial: 10.84 Recharge: _____
DTB: 22.05
Calc Well Volume: 1.8 gal
Well Volume: X3 5 gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth 21' ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: _____
Hydac: _____
Omega: _____
Other: _____

Time	Temp ~~C~~ F	Conductivity mV/cm	pH	Purge Volume Gallons	Turbidity	Comments
12:50	24.2	0.37	6.40	1	cloudy	
12:57	24.1	0.36	6.41	2	↓	
12:52	23.6	0.35	6.39	3	↓	
12:53	23.5	0.35	6.40	4	↓	
12:54	23.3	0.35	6.38	5	↓	

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 4 **of** _____
Project Manager: Mike Wray

Well ID: MW-7
Well Diameter: 2
DTW Measurements: Initial: 12.51 Recharge: _____
DTB: 21.70
Calc Well Volume: 1.4 gal
Well Volume: X3 4 gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth 20' ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Time	Temp ~~C~~ F	Conductivity mV/cm	pH	Purge Volume Gallons	Turbidity	Comments
13:05	23.1	0.37	6.34	1	cloudy	
13:06	23.1	1.39	6.34	2	↓	
13:07	23.1	0.40	6.34	3		
13:08	23.0	0.41	6.35	4		
13:09	23.1	0.42	6.36	5		

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 5 **of** _____
Project Manager: Mike Wray

Well ID: MW-8
Well Diameter: 2

DTW Measurements:
Initial: 11.45
Recharge: _____
DTB - 22.14

Calc Well Volume: 1.7 gal
Well Volume: x3 5 gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth 21' ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Time	Temp X C / F	Conductivity mS/cm	pH	Purge Volume Gallons	Turbidity	Comments
13:16	23.0	0.41	6.40	1	Cloudy	
13:17	23.1	0.44	6.39	2	↓	
13:18	23.2	0.45	6.39	3		
13:19	23.1	0.46	6.38	4		
13:20	23.3	0.47	6.37	5	↓	

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 6 **of** _____
Project Manager: Mike Wray

Well ID: MW-2
Well Diameter: 2
DTW Measurements Initial: 11.24
Recharge: _____
DTB: 21.75
Calc Well Volume: 1.7 gal
Well Volume: X3 5 gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth 20' ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Time	Temp X C F	Conductivity mS/cm	pH	Purge Volume Gallons	Turbidity	Comments
13:30	23.6	0.47	6.39	1	cloudy	
13:31	23.7	0.44	6.42	2	↓	
13:32	23.9	0.44	6.41	3		
13:33	23.9	0.44	6.42	4		
13:34	24.0	0.44	6.41	5	↓	

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 7 **of** _____
Project Manager: Mike Wray

Well ID: MW-4
Well Diameter: 2

DTW Measurements: Initial: 11.85 Recharge: 22.97
Calc Well Volume: 1.8 gal
Well Volume: X3 5 gal

Purge Method
Peristaltic_____
Gear Drive_____
Submersible X

Pump Depth 21' ft.
Hand Bailed_____
Air Lift_____
Other_____

Instruments Used
YSI: X
Hydac: _____
Omega:_____
Other:_____

Time	Temp ~~C~~ C / F	Conductivity mV/cm	pH	Purge Volume Gallons	Turbidity	Comments
13:48	23.9	0.41	6.36	1	cloudy	
13:49	24.2	0.45	6.40	2		
13:50	24.1	0.45	6.41	3		
13:51	24.4	0.45	6.42	4		
13:52	24.60	0.46	6.44	5	↓	

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 8 **of** _____
Project Manager: Mike Wray

Well ID: MW-3
Well Diameter: 2

DTW Measurements:
Initial: _____ Calc Well Volume: _____ gal
Recharge: _____ Well Volume: X3 _____ gal
DTB: 24.67

Purge Method
Peristaltic _____
Gear Drive _____
Submersible _____

Pump Depth [redacted] ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Time	Temp X C / F	Conductivity MT/cm	pH	Purge Volume Gallons	Turbidity	Comments
						DTP: 12.55 DTW: 12.60
						PT: .05

Project Name: Sears - #1 Telegraph
Site Address: 2633 Telegraph Ave., Oakland
Project Number: 020200136.030543

Date: 9/4/96
Page 9 of
Project Manager: Mike Wray

Well ID: EW
Well Diameter: 4

DTW Measurements:
Initial: 12.87
Recharge:
DTB: 22.35

Calc Well Volume: 6.1 gal
Well Volume: X3 19 gal

Purge Method
Peristaltic
Gear Drive
Submersible X

Pump Depth 21 ft.
Hand Bailed
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:
Other:

Time	Temp X C / F	Conductivity mS/cm	pH	Purge Volume Gallons	Turbidity	Comments
14:00	24.5	0.53	6.44	5	cloudy	
14:03	24.0	0.53	6.49	10	↓	
14:06	23.8	0.52	6.51	15		
14:09	23.7	0.53	6.53	20	↓	

ATTACHMENT 4

Laboratory Reports
and Chain-of-Custody Record

NEI/GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Midwest Region
4211 May Avenue
Wichita, KS 67209
(316) 945-2624
(800) 633-7936
(316) 945-0506 (FAX)

October 2, 1996

Mike Wray
Fluor Daniel GTI
757 Arnold Drive Suite D
Martinez, CA 94555

RE:	GTEL Client ID:	020200136
	Login Number:	W6090060
	Project ID (number):	020200136
	Project ID (name):	Sears/1058/2633 TELEGRAPH AVE/OAKLAND/CA

Dear Mike Wray:

This report, previously dated 09/19/96, is a reissue.

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 09/06/96 under Chain-of-Custody Number(s) 35137.

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. This report is to be reproduced only in full.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 1845.

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

Sincerely,
GTEL Environmental Laboratories, Inc.

Terry R. Loucks
Laboratory Director

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 020200136
Login Number: W6090060
Project ID (number): 020200136
Project ID (name): Sears/1058/2633 TELEGRAPH AVE/OAKLAND/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number	W6090060-01	W6090060-02	W6090060-03	W6090060-04
Client ID	MW-5	MW-1	MW-6	MW-7
Date Sampled	09/04/96	09/04/96	09/04/96	09/04/96
Date Analyzed	09/17/96	09/17/96	09/18/96	09/18/96
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
MTBE	10.	ug/L	< 10.	< 10.	< 10.	< 10.
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	1.0	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	1.0	ug/L	< 1.0	3.7	< 1.0	< 1.0
Xylenes (total)	2.0	ug/L	< 2.0	< 2.0	< 2.0	< 2.0
TPH as Gas	100	ug/L	< 100	390	< 100	< 100

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 020200136
Login Number: W6090060
Project ID (number): 020200136
Project ID (name): Sears/1058/2633 TELEGRAPH AVE/OAKLAND/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number	W6090060-05	W6090060-06	W6090060-07	W6090060-08
Client ID	MW-8	MW-2	MW-4	EW
Date Sampled	09/04/96	09/04/96	09/04/96	09/04/96
Date Analyzed	09/18/96	09/18/96	09/18/96	09/18/96
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
MTBE	10.	ug/L	< 10.	< 10.	< 10.	< 10.
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	1.0	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	1.0	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes (total)	2.0	ug/L	< 2.0	< 2.0	< 2.0	< 2.0
TPH as Gas	100	ug/L	110	< 100	< 100	1100

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846. Third Edition including promulgated Update II.

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 020200136
Login Number: W6090060
Project ID (number): 020200136
Project ID (name): Sears/1058/2633 TELEGRAPH AVE/OAKLAND/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number	W6090060-09	W6090060-10	--	--
Client ID	DUPLICATE-4	TBLB	--	--
Date Sampled	09/04/96		--	--
Date Analyzed	09/18/96	09/17/96	--	--
Dilution Factor	1.00	1.00	--	--

Analyte	Reporting Limit	Units	Concentration:			
MTBE	10.	ug/L	< 10.	< 10.	--	--
Benzene	0.5	ug/L	< 0.5	< 0.5	--	--
Toluene	1.0	ug/L	< 1.0	< 1.0	--	--
Ethylbenzene	1.0	ug/L	< 1.0	< 1.0	--	--
Xylenes (total)	2.0	ug/L	< 2.0	< 2.0	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

GTEL ENVIRONMENTAL LABORATORIES, INC

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

35137

Company Name: FLOUR DANIEL GTI
Phone #: (510) 370-3990
FAX #:
Company Address: MARTINEZ CA 757 ARNOLD DR S. 1ED
Site Location: 2633 TELEGRAPH AVE OAK.
Project Manager: MIKE WRAY
Client Project ID: (#) 020200136 020543
(NAME) CDARS/ (GRKNOE)
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Hector Bueno

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	UNPRE-SERVED	OTHER (Specify)	Sampling: DATE	TIME
MW-5	01	6	X						X			X	X		9/4/96	14:20
MW-1	02	6	X						X			X	X			14:30
MW-6	9 03	6	X						X			X	X			14:40
MW-7	04	6	X						X			X	X			14:50
MW-8	05	6	X						X			X	X			15:00
MW-2	06	6	X						X			X	X			15:10
MW-4	07	6	X						X			X	X			15:20
EW	08	6	X						X			X	X			15:30
DUPLICATE	9 09	1	X						X			X	X			15:20
TBLB	10	1	X						X			X				—

ANALYSIS REQUEST / **OTHER**

Field Sample ID	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 ☐	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 Motor Oil (8015)	BTEX (8020)		
MW-5		X																				X			
MW-1		X																				X			
MW-6		X																				X			
MW-7		X																				X			
MW-8		X																				X			
MW-2		X																				X			
MW-4		X																				X			
EW		X																				X			
DUPLICATE																							X		
TBLB																							X		

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

Special Handling
GTEL Contact ______
Quote/Contract # ______
Confirmation # ______
P.O. # ______

QA/QC Level
Blue ☐ CLP ☐ Other ☐ ______

SPECIAL DETECTION LIMITS

REMARKS:

SPECIAL REPORTING REQUIREMENTS

FAX ☐

Lab Use Only Lot #: No Seals
Storage Location: 1°C
Work Order #:

CUSTODY RECORD

Relinquished by	Date	Time	Received by
Relinquished by Sampler: [signature]	9-5-96	14:50	Received by: [signature] Weber
Relinquished by: [signature] Weber	9-5-96	16:00	Received by:
Relinquished by:	9/6/96	08:40	Received by Laboratory: [signature] Waybill # 7006501871