



R0480

5010 1082

July 14, 1998

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

Subject: Second Quarter 1998, Groundwater Monitoring and Sampling Report
Former Sears 1058, 2633 Telegraph Avenue, Oakland, California
Fluor Daniel GTI Project 103232

Dear Mr. Klettke:

On behalf of Sears, Roebuck and Co., Fluor Daniel GTI, Inc., presents the quarterly groundwater monitoring data collected on May 20, 1998, from the above referenced site. The ten groundwater monitoring wells were gauged to determine depth to groundwater and to check for the presence of separate-phase petroleum hydrocarbons, in accordance with correspondence from the Alameda Health Care Services Agency dated May 1, 1996. A potentiometric surface map is provided in Attachment 1 (Figure 1). A historical summary of groundwater monitoring data is provided in Attachment 2 (Table 1).

After measuring depth to water, six of the seven scheduled monitoring wells were purged and sampled. Because separate-phase hydrocarbons were detected in well MW-3, this well was not sampled. Groundwater monitoring and sample collection protocol and field data sheets are provided in Attachment 3. The groundwater samples were analyzed for benzene, toluene, ethyl-benzene, xylenes (BTEX), methyl tert-butyl ether (MTBE) and for total petroleum hydrocarbons as gasoline (TPH-g) by EPA Methods 8020/modified 8015, and for TPH as motor oil (TPH-MO) by modified EPA Method 8015 (GC/FID).

Static groundwater elevations for the second quarter 1998, ranged from 13.47 to 15.31 feet above mean sea level. Groundwater elevations have decreased by 0.8 foot since first quarter 1998 (February 12, 1998). The apparent groundwater flow is to the south, at an average hydraulic gradient of 0.017 ft/ft, and is consistent with previous quarterly data.

Results of quarterly sampling indicated detectable concentrations of BTEX compounds in monitoring wells MW-1, -9, and EW-1. None of the monitoring wells contained detectable concentrations of MTBE except for monitoring well EW-1. Monitoring wells MW-1, -9, and EW-1 contained detectable concentrations of TPH-g. Monitoring wells MW-2, -4, and EW-1 contained detectable concentrations of TPH-MO. A 0.03-foot-thick layer of separate-phase hydrocarbons was measured in monitoring well MW-3, which is consistent with past measurements. Monitoring wells MW-5 through MW-7 were not sampled during this quarterly round of sampling. A summary of the groundwater analytical results is provided in Attachment 2 (Table 2). A distribution map of dissolved benzene, TPH-g, TPH-MO, & MTBE concentrations is provided

in Attachment 1 (Figure 2). Laboratory reports and chain-of-custody documents are provided in Attachment 4.

Fluor Daniel GTI will review this site for applicable remediation methods to address the dissolved-phase plume. A feasibility study report will be prepared and submitted to Alameda County Health Care Services Agency for approval.

If you have any comments or questions, please contact me at (925) 370-3990 extension 266.

Sincerely,
Fluor Daniel GTI, Inc.



Melissa Gossell
West Zone Project Manager

Attachments:

- 1) Figures
- 2) Tables
- 3) Groundwater Monitoring and Sample Collection Protocol and Field Data Sheets
- 4) Laboratory Reports and Chain-of-Custody Documents

cc: Scott M. DeMuth, Sears, Roebuck and Co.
Central Files, Lenexa, Kansas



ATTACHMENT 1

Figures

1. Potentiometric Surface Map (5/20/98)
2. Concentrations of Benzene, TPH-as-Gasoline, TPH-as-Motor Oil, & MTBE in Groundwater (5/20/98)

a:\Srs2Qtr98\1058QE98.wpd

ENVIRONMENTAL
PROTECTION
98 JUL 15 AM 9:45

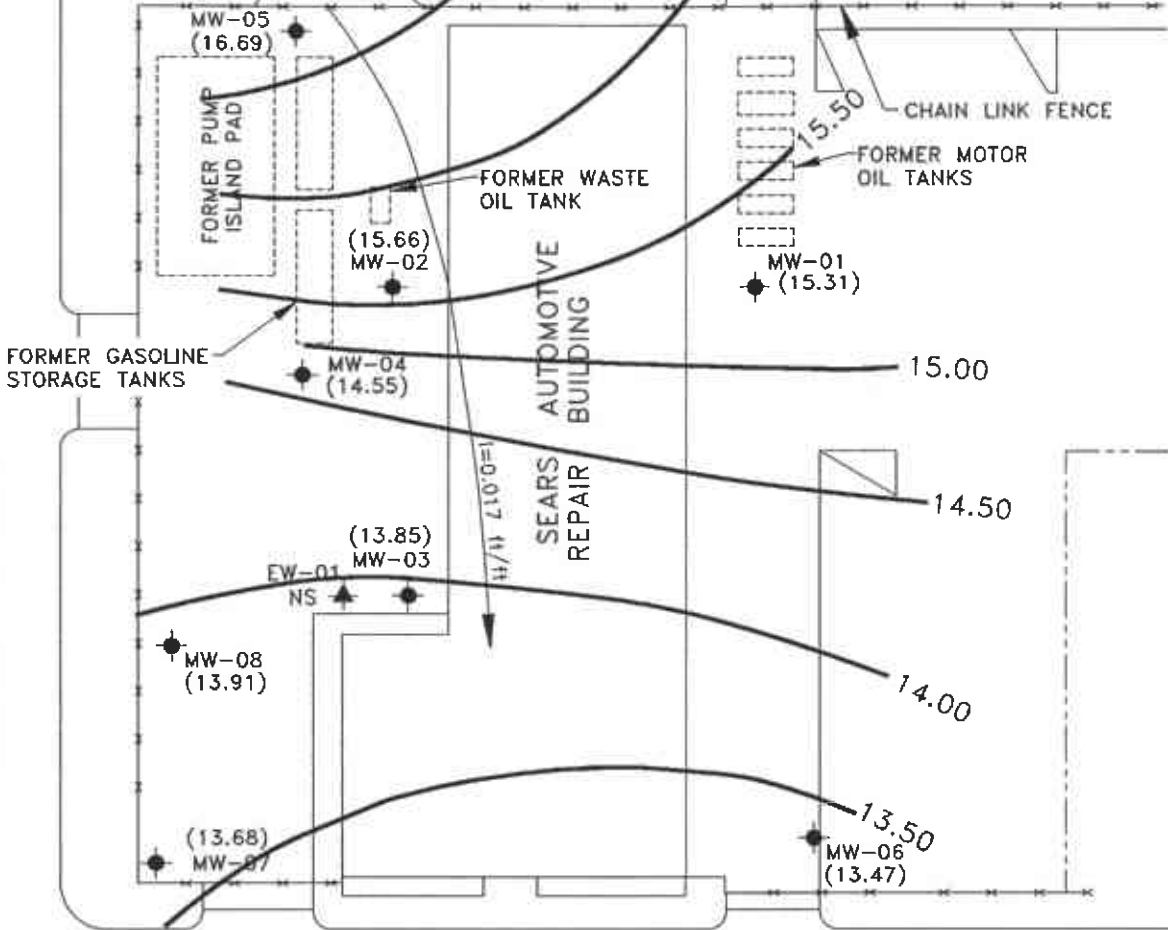
FLUOR DANIEL GTI





TELEGRAPH AVENUE

27th STREET 16.50 16.00



26th STREET

MW-09 NS

LEGEND

- MONITORING WELL
 - EXTRACTION WELL
 - POTENTIOMETRIC SURFACE ELEVATION (FT)
 - NOT SURVEYED
 - SEPARATE-PHASE HYDROCARBONS
 - POTENTIOMETRIC SURFACE CONTOUR
 - GROUNDWATER FLOW DIRECTION AND AVERAGE GRADIENT (ft/ft)
- $i=0.017$



NOTES:
 CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE SEA LEVEL.
 CONTOUR INTERVAL = 0.5 ft
 DEPTH TO WATER GAUGED ON 20 MAY 1998.
 GROUNDWATER GRADIENT = 0.017 ft/ft

FLUOR DANIEL GTI



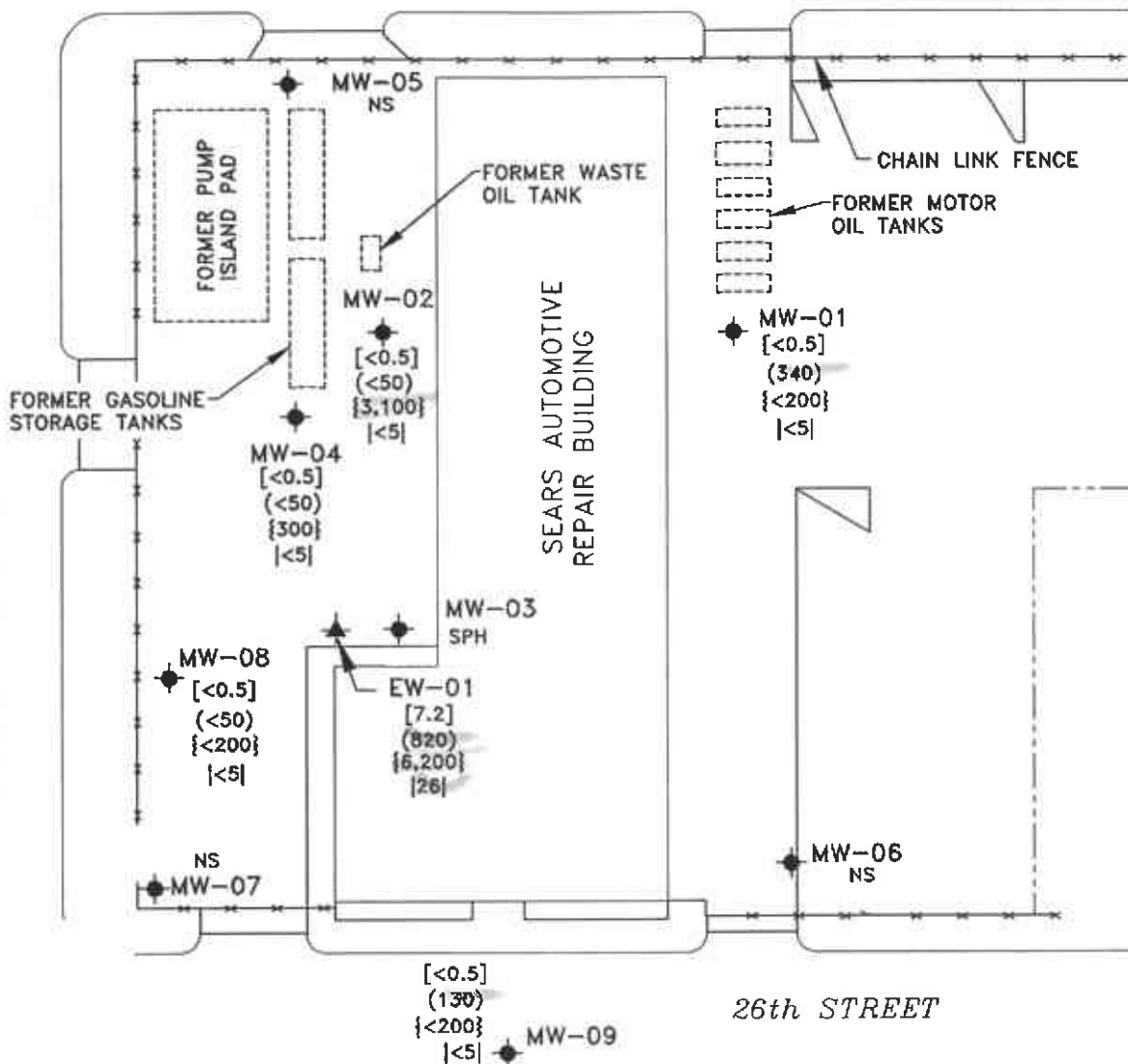
**POTENTIOMETRIC SURFACE MAP
5/20/98**

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058	FILE: PSM52098 (1:40)	PROJECT NO.: 103232	PM	PE/RG <i>EDS</i>
	REV.	FIGURE: 1		
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	DES. BP	DET. VR	DATE: 6/26/98	



27th STREET

TELEGRAPH AVENUE



LEGEND

- MONITORING WELL
- EXTRACTION WELL
- [] BENZENE CONCENTRATIONS [$\mu\text{g/l}$]
- () TPH-AS-GASOLINE ($\mu\text{g/l}$)
- { } TPH-AS-MOTOR OIL [$\mu\text{g/l}$]
- | | METHYL TERT-BUTYL ETHER (MTBE) [$\mu\text{g/L}$]
- SPH SEPARATE-PHASE HYDROCARBONS
- NS NOT SAMPLED



FLUOR DANIEL GTI



CONCENTRATIONS OF BENZENE, TPH-AS GASOLINE, TPH-AS-MOTOR OIL & MTBE IN GROUNDWATER (5/20/98)

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058	FILE: BEN52098	PROJECT NO.: 103232	PM	PE/RG <i>ES</i>
	REV.	FIGURE: 2		
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	DES. BP	DET. VR	DATE: 6/26/98	

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		
12/02/96	10.61	--	--	15.59		
02/26/97	10.31	--	--	15.89		
06/09/97	11.25	--	--	14.95		
08/25/97	11.15	--	--	15.05		
11/28/97	10.07	--	--	16.13		
02/12/98	8.70	--	--	17.50		
05/20/98	10.89	--	--	15.31		



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
		05/28/93	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
		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
		03/08/95	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
		12/02/96	10.80	--	--	15.70
		02/26/97	10.70	--	--	15.80
		06/09/97	11.10	--	--	15.40
		08/25/97	11.05	--	--	15.45
		11/28/97	10.59	--	--	15.91
		02/12/98	10.04	--	--	16.46
		05/20/98	10.84	--	--	15.66



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
		05/28/93	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	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
		07/28/94	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		
12/02/96	12.11	12.00	0.03	14.25		
02/26/97	12.03	12.02	0.01	14.32		
06/09/97	12.39	12.35	0.04	13.98		
08/25/97	12.28	12.25	0.03	14.04		
11/28/97	12.13	12.10	0.03	14.24		
02/12/98	11.85	11.82	0.03	14.51		
05/20/98	12.51	12.48	0.03	13.85		

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



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	11.81	--	--	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		
12/02/96	11.45	--	--	14.72		
02/26/97	11.42	--	--	14.75		
06/09/97	11.70	--	--	14.47		
08/25/97	11.63	--	--	14.54		
11/28/97	11.27	--	--	14.90		
02/12/98	11.00	--	--	15.17		
05/20/98	11.62	--	--	14.55		



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	--	--	15.60
		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		
12/02/96	10.45	--	--	16.53		
02/26/97	10.38	--	--	16.60		
06/09/97	10.78	--	--	16.20		
08/25/97	10.69	--	--	16.29		
11/28/97	10.15	--	--	16.83		
02/12/98	9.55	--	--	17.43		
05/20/98	10.29	--	--	16.69		



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
		12/02/96	10.46	--	--	13.86
02/26/97	10.46	--	--	13.86		
06/09/97	10.90	--	--	13.42		
08/25/97	10.84	--	--	13.48		
11/28/97	10.07	--	--	14.25		
02/12/98	9.39	--	--	14.93		
05/20/98	10.85	--	--	13.47		



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	--	--	13.56
		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
		06/03/96	11.10	--	--	13.78
09/04/96	11.45	--	--	13.43		
12/02/96	10.96	--	--	13.92		
02/26/97	11.02	--	--	13.86		
06/09/97	11.34	--	--	13.54		
08/25/97	11.25	--	--	13.63		
11/28/97	10.69	--	--	14.19		
02/12/98	10.11	--	--	14.77		
05/20/98	11.20	--	--	13.68		



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-8	26.12	12/27/93	12.45	--	--	13.67
		01/05/94	12.57	--	--	13.55
		02/08/94	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
12/02/96	11.99	--	--	14.13		
02/26/97	11.98	--	--	14.14		
06/09/97	12.36	--	--	13.76		
08/25/97	12.25	--	--	13.87		
11/28/97	11.70	--	--	14.42		
02/12/98	11.34	--	--	14.78		
05/20/98	12.21	--	--	13.91		
MW-9	N/A	12/02/96	11.52	--	--	N/A
		02/26/97	11.55	--	--	N/A
		06/09/97	11.91	--	--	N/A
		08/25/97	11.80	--	--	N/A
		11/28/97	11.15	--	--	N/A
		02/12/98	10.63	--	--	N/A
		05/20/98	11.73	--	--	N/A
EW-1	N/A	12/02/96	12.17	--	--	N/A
		02/26/97	12.13	--	--	N/A
		06/09/97	12.46	--	--	N/A
		08/25/97	12.35	--	--	N/A
		11/28/97	12.12	--	--	N/A
		02/12/98	11.83	--	--	N/A
		05/20/98	12.51	--	--	N/A

Notes: "--" indicates no datum for the cell, including "product not detected"

NM = Not monitored

N/A = 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	0.32	10	-	-	1	-	-
	06/21/93	<0.3	1	<0.3	6	-	**<100	-	-	-
	09/16/93	<0.3	0.7	2	7	-	**<100	-	-	-
	12/01/93	0.4	1	-	7	-	-	-	-	-
	12/30/93	-	-	1	-	-	<100	-	-	-
	03/09/94	<0.3	<0.3	2.4	4.2	-	<100	-	-	-
	06/30/94	0.6	0.7	1.4	15	-	<100	-	-	-
	09/27/94	0.9	0.5	<0.3	10	-	*<250	-	-	-
	12/01/94	0.4	0.4	<0.3	6.6	-	*<250	-	-	-
	03/08/95	<0.3	0.6	4.7	2.7	-	*<250	-	-	-
	06/09/95	<0.3	1.4	3.9	5.6	-	*<250	-	-	-
	08/29/95	0.3	0.9	<0.5	2.8	-	*<250	-	-	-
	11/15/95	<0.5	<0.5	<1.0	27	-	*<200	-	-	-
	03/05/96	<0.5	<1.0	<1.0	<2.0	-	*<200	-	-	-
	06/03/96	<0.5	<1.0	3.7	3.4	340	*<200	-	-	-
	09/04/96	<0.5	<1.0	<1.0	<2.0	390	310	-	-	-
	12/02/96	<0.5	<1.0	<1.0	2.7	400	*<200	-	-	-
	02/26/97	<0.5	<1.0	<1.0	4.5	390	*<200	-	-	-
	06/09/97	<0.5	<1.0	<0.5	2.3	340	<200	-	-	<10
08/25/97	<0.5	<0.5	<0.5	3	220	<200	-	-	<5	
11/28/97	<0.5	<0.5	<0.5	3	340	<200	-	-	6	
02/12/98	<0.5	<0.5	<0.5	<2.0	280	<200	-	-	<5	
05/20/98	<0.5	<0.5	<0.5	0.8	3	340	<200	-	<5	
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	-	*15	-
	12/01/94	<0.3	<0.3	<0.3	<0.5	54	1,300	-	*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	-	*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	-	-	-
	12/02/96	<0.5	<1.0	<1.0	<2.0	<100	2,200	-	-	-
	02/26/97	<0.5	<1.0	<1.0	<2.0	<100	2,100	-	-	-
	06/09/97	<0.5	<1.0	<1.0	<2.0	<100	2,400	-	-	<10
08/25/97	<0.5	<0.5	<0.5	<2.0	<50	<200	-	-	<5	
11/28/97	0.6	<0.5	<0.5	<2.0	<50	1,900	-	-	<5	
02/12/98	<0.5	<0.5	<0.5	<2.0	<50	1,600	-	-	<5	
05/20/98	<0.5	<0.5	<0.5	<2.0	<50	3,100	-	-	<5	



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-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	cd5	--
	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	--
	12/02/96	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
	02/26/97	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--
06/09/97	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	
08/25/97	5	6	5	16	5,600	110,000	--	--	<30	
11/28/97	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	
02/12/98	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	
05/20/98	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	
MW-4	12/30/92	2	<0.3	1	<0.5	1,200	--	<1	*ND	--
	03/24/93	<0.3	<0.3	<0.3	<0.5	750	--	2	**7	--
	06/21/93	<0.3	2	<0.3	0.5	660	19,000	--	*ND	--
	09/16/93	0.3	<0.3	2	3	410	2,500	--	*ND	--
	12/01/93	<0.3	<0.3	<0.3	<0.5	150	390	--	*ND	--
	03/09/94	0.7	0.8	2	3.6	1,500	780	--	*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	--	*<5	--
	03/08/95	<0.3	<0.3	<0.3	<0.5	360	1,000	--	*<5	--
	06/09/95	<0.3	0.4	<0.3	<0.5	64	1,100	--	*<5	--
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	1,200	--	*<5	--
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	2,100	--	*ND	--
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	590	--	*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	--	--	--
	12/02/96	<0.5	<1.0	<1.0	<2.0	<100	940	--	--	--
	02/26/97	<0.5	<1.0	<1.0	<2.0	<100	390	--	--	--
06/09/97	<0.5	<1.0	<1.0	<2.0	<100	630	--	--	<10	
08/25/97	<0.5	<0.5	<0.5	<2.0	<50	<200	--	--	<5	
11/28/97	3.6	3.9	3.7	12	120	<200	--	--	<5	
02/12/98	<0.5	<0.5	<0.5	<2.0	<50	<200	--	--	<5	
05/20/98	<0.5	<0.5	<0.5	<2.0	<50	300	--	--	<5	



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-5	12/30/92	<0.3	<0.3	<0.3	<0.5	37	--	<1	^{bc5} 5	--
	03/24/93	<0.3	<0.3	<0.3	0.5	19	--	2	^{bc341} 341	--
	06/21/93	<0.3	<0.3	<0.3	<0.5	<10	<100	--	^{bc} ND	--
	09/16/93	0.3	<0.3	<0.3	1	<10	<100	--	^{bc} ND	--
	12/01/93	<0.3	<0.3	<0.3	1	17	--	--	^{bc} ND	--
	12/30/93	--	--	--	--	--	<100	--	--	--
	03/09/94	<0.3	<0.3	<0.3	<0.5	22	<100	--	^{bc} 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	--	^{bc} 7	--
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	<250	--	^{bc} 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	NS
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	310	--	--	--
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/26/97	<0.5	<1.0	<1.0	<2.0	<100	<200	--	--	--
	06/09/97	NS	NS	NS	NS	NS	NS	NS	NS	NS
08/25/97	>0.5	<0.5	<0.5	<2.0	<50	<200	--	--	Δ	
11/28/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
02/12/98	<0.5	<0.5	<0.5	<0.5	<50	<200	--	--	Δ	
05/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-6	12/27/93	<0.3	<0.3	<0.3	<0.5	<10	<100	<1	^{bc} 70	--
	03/09/94	<0.3	<0.3	<0.3	<0.5	15	<100	--	^{bc} 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	--	^{bc} 8	--
	12/01/94	<0.3	<0.3	<0.3	<0.5	<10	<250	--	^{bc} 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	--	^{bc} 24	--
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	<200	--	^{bc} 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	NS
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	230	--	--	--
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/26/97	<0.5	<1.0	<1.0	<2.0	<100	<200	NS	NS	NS
	06/09/97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/97	<0.5	1.1	<0.5	<2.0	<50	<200	--	--	Δ
11/28/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
02/12/98	<0.5	<0.5	<0.5	<2.0	<50	<200	--	--	Δ	
05/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	



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-7	12/27/93	<0.3	<0.3	1	2	140	<100	<1	*40	-
	03/09/94	<0.3	<1.0	1.5	4.1	620	<100	-	*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	*<250	-	ND	-
	12/01/94	<0.3	<0.3	<0.3	1.1	<10	*<250	-	*28	-
	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	-	*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	NS
	09/04/96	<0.5	<1.0	<1.0	<2.0	<100	<200	-	-	-
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/26/97	<0.5	<1.0	<1.0	<2.0	<100	<200	NS	NS	NS
	06/09/97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/97	<0.5	<0.5	<0.5	<2.0	<50	<200	-	-	<5
	11/28/97	NS	NS	NS	NS	NS	NS	NS	NS	NS
02/12/98	<0.5	<0.5	<0.5	<2.0	<50	<200	-	-	<5	
05/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-8	12/27/93	0.4	4	0.4	1	390	<100	<1	*18	-
	03/09/94	0.6	0.8	0.5	1.5	420	<100	-	*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	*<250	-	*9	-
	12/01/94	5.4	<0.3	0.7	1.3	230	*<250	-	*ND	-
	03/08/95	<0.3	<0.3	<0.3	<0.5	230	*<250	-	ND	-
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	*<250	-	ND	-
	08/29/95	0.9	0.4	<0.3	0.8	200	*<250	-	*15	-
	11/15/95	0.58	<0.5	<0.5	0.54	120	-	-	*21	-
	12/11/95	-	-	-	-	-	*<200	-	-	-
	03/05/96	0.6	<1.0	<1.0	<2.0	<100	*<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	-	-	-
	12/02/96	<0.5	<1.0	<1.0	<2.0	110	<200	-	-	-
	02/26/97	<0.5	<1.0	<1.0	<2.0	<100	<200	-	-	-
	06/09/97	<0.5	<1.0	<1.0	<2.0	110	<200	-	-	<10
	08/25/97	<0.5	<0.5	<0.5	<2.0	70	<200	-	-	<5
11/28/97	<0.5	<0.5	<0.5	<2.0	110	<200	-	-	<5	
02/12/98	<0.5	<0.5	0.6	<2.0	70	<200	-	-	<5	
05/20/98	<0.5	<0.5	<0.5	<2.0	<50	<200	-	-	<5	
MW-9	12/02/96	<0.5	<1.0	<1.0	<2.0	210	250	-	-	-
	02/26/97	<0.5	<1.0	<1.0	<2.0	170	340	-	-	-
	06/09/97	0.8	<1.0	<1.0	<2.0	130	350	-	-	<10
	08/25/97	<0.5	0.8	<0.5	<2.0	110	<200	-	-	<5
	11/28/97	<0.5	0.5	0.9	<2.0	150	<200	-	-	<5
	02/12/98	<0.5	<0.5	<0.5	<2.0	60	<200	-	-	<5
05/20/98	<0.5	<0.5	0.9	<2.0	130	<200	-	-	<5	



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
EW-1	09/04/96	<0.5	<1.0	<1.0	<2.0	1,100	1,700	--	--	--
	12/02/96	6.2	<1.0	<1.0	<2.0	1,000	14,00	--	--	--
	02/26/97	12	<1.0	<1.0	<2.1	1,200	2,100	--	--	--
	06/09/97	83	<1.0	<1.0	<2.0	1,400	12,000	--	--	13
	08/25/97	7.5	0.9	0.9	2.0	1,400	15,000	--	--	12
	11/28/97	4.5	1.1	1.1	4.0	560	5,700	--	--	5
	02/12/98	9.8	0.6	1.2	2.0	1,000	6,300	--	--	30
	05/20/98	7.2	<0.5	<0.5	<2.0	820	6,200	--	--	26

Notes:

- "L" = No datum for the cell, including "not analyzed for this constituent."
- "<" = 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



ATTACHMENT 3

**Groundwater Monitoring and Sample Collection Protocol
and Field Data Sheets**

a:\Srs2Qt98\1058QE98.wpd



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:

$$(\text{Product thickness}) \times (0.8) + (\text{Water elevation}) = \text{Corrected water elevation}$$

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 triple 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.

-120170

SITE VISIT FORM
Fluor Daniel GTI - Martinez, California

Project: 103232.00
Site: SEARS/#1058/Oakland, CA
Project Mgr: Melissa Gossell

Technician: *A. M. B. S. U.*
Scheduled: 5/11/98
Site Mgr:

PREPARATORY COMMENTS

Visit Date: 5-20-98 Arrival Time: 10:30 AM Departure Time: 14:30

Work Order read in office: Y/N upon arrival: Y/N upon departure: Y/N

Called PM? Y/N Time: _____ Who: _____ Topic: _____

Are You In Possession of a Site Safety Plan? Y/N

DOC: Complete with store #, site address & proj office address? Y/N

Job # and task #

GROUNDWATER SAMPLING - Task Nr: 030543 [Quarterly]

Notify Tom Peacock 72 hrs in advance (510) 567-6782 DONE: 5/15/98 @ 2:40

SITE ADDRESS: 2633 Telegraph Avenue, Oakland, CA

cc: Melissa Gossell, Brian Pierskalla

During any sampling activities, a minimum work zone will be defined by a 10ft by 10ft square centered around the monitor well and marked with 36" -high orange traffic cones with flag poles and flags placed in the center of the cone and caution tape stretched between the cones. Employees will be constantly aware of the public access to the work zone and keep them within the outer perimeter of the cones and caution tape at all times.

BRING 9/16 BOLTS FOR ALL 8 WELLS. Need three (3) new drums for this site.

1. MARCH(1st)/SEPT(3rd): Monitor and sample all wells (MW-1 through MW-9 and EW-1) in the following order: MW-5, MW-1, MW-6, MW-7, MW-8, MW-2, MW-4, MW-3, MW-9 and the new extraction well (EW-1) located next to MW-3. USE DISPOSABLE BAILERS.

JUNE(2nd)/DEC(4th): Monitor all wells (MW-1 through MW-9, and EW-1). Sample seven (7) wells in the following order: MW-9, MW-1, MW-8, MW-2, MW-4, MW-3 and EW-1. USE DISPOSABLE BAILERS.

2. Record DTW, DTP, pH, Conductivity and temperature. NOTE: Recharge DTW.

3. Collect one trip blank and one duplicate from MW-4 and submit for BTEX-8020 only.

[Signature]

SITE VISIT FORM
Fluor Daniel GTI - Martinez, California

Project: 103232.00
Site: SEARS/#1058/Oakland, CA
Project Mgr: Melissa Gossell

Technician:
Scheduled: 5/11/98
Site Mgr:

GROUNDWATER SAMPLING (Continued) - Task Nr: 030543 [Quarterly]

4. Complete detailed drum count. Check with owner if drums can be left in corner. Label drums properly (Non Haz).
5. Submit samples to AEN Lab. in Pleasant Hill, CA ph# (510) 930-9090. To be analyzed for BTEX/MTBE/TPH-G (EPA 8020/8015), and TPH-Motor Oil (EPA 8015).

Note: Add TPH-MO to concentration map

6. COMPLETED ALL THREE PAGES OF WASTE INVENTORY FORM? YES. IF NO, EXPLAIN _____

HOURS ESTIMATED FOR MARCH/SEPT 6.0

JUNE/DEC 5.0

Hours Estimated	5.00	Hours Used
-----------------	------	------------

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? Y/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water 2, Soil , Empty , Other

DRUMS labeled? NA/Y/N Gen. Date: 5/20/98 Label Type: NON CLASS

OIL pile? Y/N size: cu.yds.

SITE LEFT CLEAN? (Y)N

**SITE VISIT FORM
FLUOR DANIEL GTI**

Project: Sears/#1058/Oakland
Store #: 1058/2633 Telegraph
Project Manager: Melissa Gossell

Technician: AMERINO
Schedule: 5-20-98
Job No. 103232.030543

**WELL WATER SAMPLING - TASK Nr: 030543 [QUARTERLY]
Gauge wells for volume of water & bail 3 well Vol.s. DECON
PREPARATORY COMMENTS**

Visit Date: 5/20/98 Arrival Time: 10:30 Departure Time: 14:30

Called Project Manager? YES NO Time: _____ Who: _____

If you did not call, why not? NO NEED TO

Weather: Rain Snow Sunny Cloudy Temperature: _____

Well ID

MW-1:	DTB_21.72	DTW <u>10.89</u>	SAT. THICK _____	#GAL. BAILED _____
MW-2:	DTB_21.79	DTW <u>10.84</u>	SAT. THICK _____	#GAL. BAILED _____
MW-3:	DTB_24.67	DTW <u>12.50</u>	SAT. THICK <u>DIP! 12.48</u>	#GAL. BAILED <u>PT = 1.03</u>
MW-4:	DTB_22.97	DTW <u>11.62</u>	SAT. THICK _____	#GAL. BAILED _____
MW-5:	DTB_25.27	DTW <u>10.29</u>	SAT. THICK _____	#GAL. BAILED _____
MW-6:	DTB_22.05	DTW <u>10.85</u>	SAT. THICK _____	#GAL. BAILED _____
MW-7:	DTB_21.70	DTW <u>11.20</u>	SAT. THICK _____	#GAL. BAILED _____
MW-8:	DTB_22.14	DTW <u>12.21</u>	SAT. THICK _____	#GAL. BAILED _____
MW-9:	DTB_20.30	DTW <u>11.73</u>	SAT. THICK _____	#GAL. BAILED _____
EW-1:	DTB_22.30	DTW <u>12.51</u>	SAT. THICK _____	#GAL. BAILED _____

NOTES: Mts all wells sampled ~~3~~ 10 wells.
see MW3 has product.
TOTAL travel: ~~2.00~~ 1.50
total time: 5.00

HOURS ESTIMATED: _____ HOURS USED: _____

FINAL CHECKS

Are Wells Locked? YES NO Why Not? _____

Are Manholes Bolted Down? YES NO Why Not? _____

DRUMMED MATERIAL INVENTORY FORM

Store Number 1058 Address/City/State/ZIP 2633 TELEGRAPH AVE OAKLAND CA

Sears Facility Contact and Phone # _____

Fluor Daniel GTI Representative HECTOR MERINO

Accumulation Start Date 5-20-98 Completion Date: _____

Exact Drum Storage Location NEXT TO WOODEN FENCE, ACROSS FROM MW-1

CONTENTS	# OF DRUMS	DRUM ID (A,B,C...) OR (1,2,3...)	LID TYPE (OPEN OR BUNG)	LABEL TYPE: HAZARDOUS, NON-HAZARDOUS, UNCLASSIFIED	DRUM DESCRIPTION: COLOR, CONDITION, MARKINGS
GASOLINE			O or B	H / N / U	
GASOLINE/WATER MIXTURE			O or B	H / N / U	
GASOLINE IMPACTED PURGE WATER	1	A	O or B	H / N / U	Black w/white top
GASOLINE TANK BOTTOMS/SLUDGE			O or B	H / N / U	
GASOLINE IMPACTED DEBRIS			O or B	H / N / U	
GASOLINE IMPACTED SOIL			O or B	H / N / U	
FUEL OIL (INC. DIESEL & HEATING OIL)			O or B	H / N / U	
FUEL OIL/WATER MIXTURE			O or B	H / N / U	
FUEL OIL IMPACTED PURGE WATER			O or B	H / N / U	
FUEL OIL TANKS BOTTOMS/SLUDGE			O or B	H / N / U	
FUEL OIL IMPACTED DEBRIS			O or B	H / N / U	
FUEL OIL IMPACTED SOIL			O or B	H / N / U	
HYDRAULIC FLUID			O or B	H / N / U	
HYDRAULIC FLUID/WATER MIXTURE			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED PURGE WATER			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED SLUDGE			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED DEBRIS			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED SOIL			O or B	H / N / U	
USED OIL			O or B	H / N / U	
USED OIL/WATER MIXTURE			O or B	H / N / U	
USED OIL IMPACTED PURGE WATER			O or B	H / N / U	
USED OIL TANK BOTTOMS/SLUDGE			O or B	H / N / U	
USED OIL IMPACTED DEBRIS			O or B	H / N / U	
USED OIL IMPACTED SOIL			O or B	H / N / U	
CHLORINATED SOLVENT:			O or B	H / N / U	
NON-CHLORINATED SOLVENT:			O or B	H / N / U	
OTHER:			O or B	H / N / U	
OTHER:			O or B	H / N / U	
OTHER:			O or B	H / N / U	

NOTE: There should NEVER be 2 drums with the same ID present at a site at the same time!

DRUMMED MATERIAL INVENTORY FORM

Store Number 1058 City/State OAKLAND CA.

Floor Daniel GTI Representative HECTOR MERRINO

THERE SHOULD NEVER BE 2 DRUMS WITH THE SAME DRUM ID PRESENT AT A SITE AT THE SAME TIME

DRUM ID	ACCUMULATION START DATE	CONTENTS (as on label) VOLUME (if mixed waste)	SOURCE (be specific)	SLUDGE PRESENT Y/N	VOLUME (gallon)
A	5/20/98	PURGE WATER	EWWELLS	NO	50

EXAMPLE

A	6/24/94	diesel(3)/water(8)	diesel lines, flush water	no	11
---	---------	--------------------	---------------------------	----	----

NOTE: There should *NEVER* be 2 drums with the same ID present at a site at the same time!

BULK MATERIAL INVENTORY FORM

Store Number 1058 Address/City/State/ZIP 2633 TELEGRAPH AVE OAKLAND

Sears Facility Contact and Phone # _____

Fluor Daniel GTI Representative Hector Merino

Accumulation Start Date 5/20/98 Completion Date 5-20/98

Exact Bulk Storage Location Next to wood fence across from NW 1

CONTAMINANTS	SOIL (Cu Yds)	DEBRIS (Cu Yds)	LIQUID (Gallons)
GASOLINE			
FUEL OIL			
HYDRAULIC FLUID			
USED OIL			
CHLORINATED SOLVENT:			
NON-CHLORINATED SOLVENT:			
OTHER: <u>PURE WATER</u>			<u>50 GAL</u>
OTHER:			

SOIL PILE CALCULATIONS

Calculation for a tent shaped soil pile:

Length _____ X Width _____ X Height _____ $\div 2 \div 27 =$ _____ Yds³

Calculation for a rectangular or square shaped soil pile:

Length _____ X Width _____ X Height _____ $\div 27 =$ _____ Yds³

Calculation for a conical (cone) shaped soil pile:

.04 X Radius _____ X Radius _____ X Height _____ = _____ Yds³

Well ID: MW-9
 Well Diameter: 2

DTW Measurements: Initial: 11.73 Calc Well Volume: 1.3 gal
 Recharge: 11.85 Well Volume: 13 gal
 DTB: 20.30

Purge Method: Peristaltic _____ Gear Drive _____ Submersible X
 Pump Depth _____ ft. Hand Bailed _____ Air Lift _____ Other _____
 Instruments Used: YSI: X Other: _____
 Hydac: _____ Omega: _____

Time	Temp C F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:16	22.1	0.32	6.50	1	Cloudy	
11:17	21.1	0.35	6.49	2	↓	
11:18	20.7	0.36	6.50	3		
11:19	20.5	0.35	6.50	4		

Well ID: MW-1
 Well Diameter: 2

DTW Measurements
 Initial: 10.89 Calc Well Volume: 1.7 gal
 Recharge: 11.05 Well Volume: 13 5.2 gal
 DTB: 21.72

Purge Method: Submersible X
 Pump Depth: _____ ft.
 Hand Bailed: _____
 Air Lift: _____
 Other: _____
 Instruments Used
 YSI: X
 Hydac: _____
 Omega: _____

Time	Temp <u>X</u> C <u>F</u>	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:00	19.2	0.32	4.85	1	cloudy	
11:01	20.4	0.30	4.82	2	↓	
11:02	20.1	0.29	4.69	3		
11:03	20.8	0.32	4.79	4		
11:04	20.9	0.31	4.79	5		

Well ID: MW-8
2
 Well Diameter:

DTW Measurements:
 Initial: 12.21 Calc Well Volume: 1.6 gal
 Recharge: 12.24 Well Volume: 3 4.8 gal
 DTB: 22.14

Burge Method Pump Depth ft. Instruments Used
 Peristaltic Hand Bailed YSI: X Other:
 Gear Drive Air Lift Hydac:
 Submersible X Other Omega:

Time	Temp	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
	<u>C</u> <u>F</u>					
11:28	21.7	0.34	6.51	1	↓ ↓ ↓ ↓ ↓	Cloudy BROWN
11:30	21.7	0.34	6.46	2		
11:31	21.6	0.33	6.43	3		
11:32	21.3	0.32	6.43	4		
11:33	21.3	0.31	6.40	5		

Well ID: MW 2
2
 Well Diameter: _____

DTW Measurements: Initial: 10.89 Calc Well Volume: 1.17 gal
 Recharge: 10.89 Well Volume: 13 513 gal
 DTB: 21.79

Purge Method: Peristaltic Pump Depth _____ ft.
 Hand Bailed _____
 Gear Drive _____ Air Lift _____
 Submersible X Other _____
 Instruments Used: YSI: X Other: _____
 Hydac: _____
 Omega: _____

Time	Temp <u>C</u> F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:47	21.3	0.35	6.88	1	cloudy	
11:49	20.9	0.33	6.48	2	↓	
11:50	20.8	0.33	6.44	3		
11:51	20.8	0.32	6.41	4		
11:52	20.8	0.32	6.44	5		

Reporting Information:

1. Client: LUCAS DANIEL GALT
 Address: 757 AVENUE DR. SUITE 20
MARTINEZ CA. 94533
 Contact: MRS LISA GUSSELL
 Alt. Contact: _____

Meri Environmental Network

3440 Vincent Road, Pleasant Hill, CA 94523
 Phone (510) 930-9090
 FAX (510) 930-0256

AEN

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number: _____
 Lab Destination: _____
 Date Samples Shipped: _____
 Lab Contact: _____
 Date Results Required: _____
 Date Report Required: _____
 Client Phone No.: (925) 370-3990
 Client FAX No.: (925) 370-3991

Address Report To:

2. SAMPLES 1 - 7

Send Invoice To:

3. 1-2

Send Report To: 1 or 2 (Circle one)

Client P.O. No.:

Client Project I.D. No.:

SEARS # 1058
103232, 030543

Sample Team Member (s)

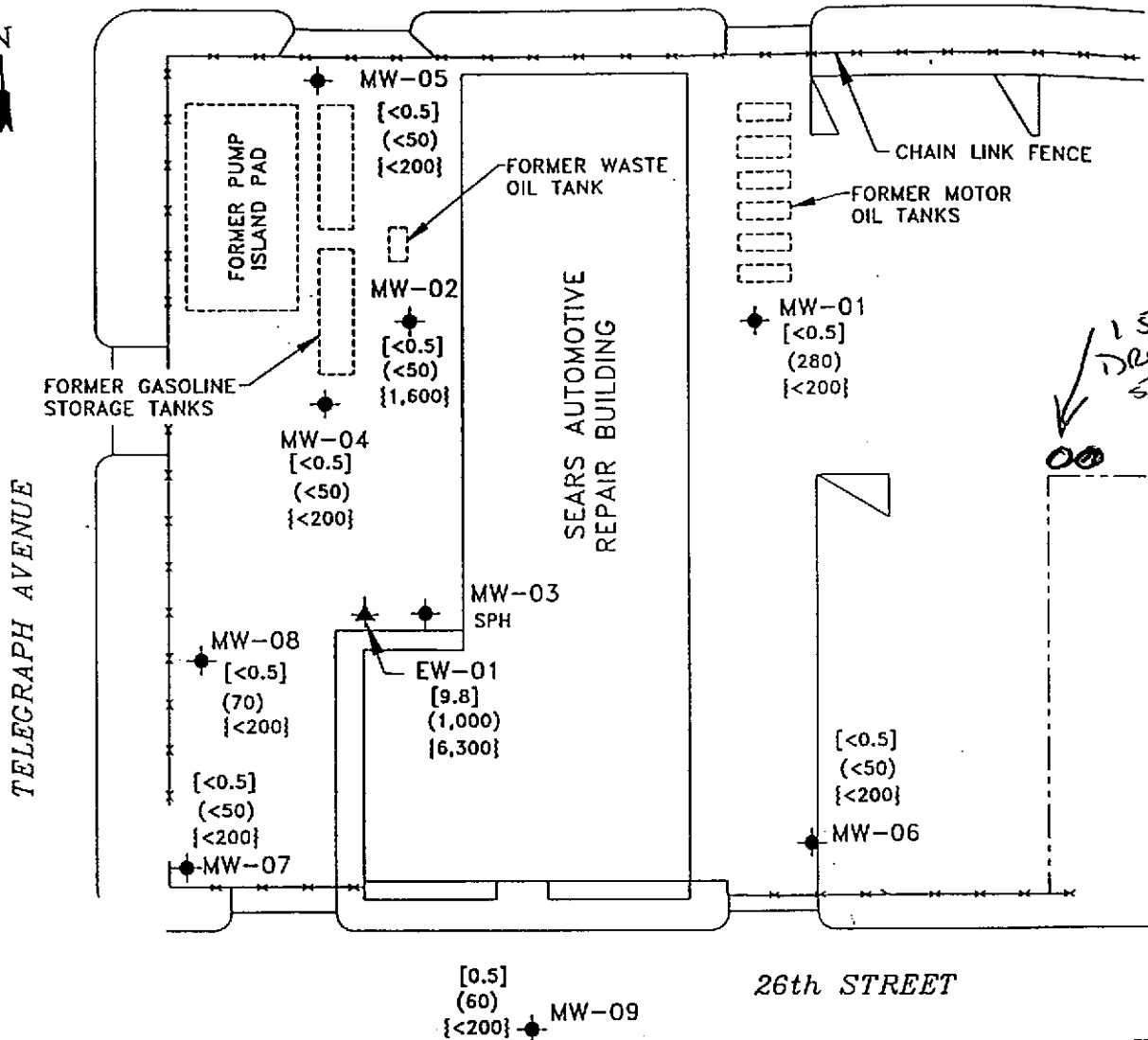
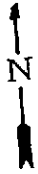
HECTOR MERINO

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS	Comments / Hazards
	MW-9		5/13:30	← WATER		6		X X	
	MW-1		13:40			6		X X	
	MW-8		13:50			6		X X	
	MW-2		14:00			6		X X	
	MW-4		14:00			6		X X	
	EW-1		14:20			6		X X	
	DUP MW4		14:05					X	

Relinquished by: (Signature) <u>[Signature]</u>	DATE <u>5-20-98</u>	TIME <u>18:40</u>	Received by: (Signature) <u>Robin Byars</u>	DATE <u>5-20-98</u>	TIME <u>18:42</u>
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	DATE	TIME
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	DATE	TIME
Method of Shipment			Lab Comments		

*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter
 4) PVC filter, diam. _____ pore size _____ 5) Charcoal tube 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample
 10) Other _____ 11) Other _____

27th STREET



LEGEND

- MONITORING WELL
- EXTRACTION WELL
- [] BENZENE CONCENTRATIONS [ug/l]
- () TPH-AS-GASOLINE (ug/l)
- { } TPH-AS-MOTOR OIL {ug/l}
- SPH SEPARATE-PHASE HYDROCARBONS



FLUOR DANIEL GTI



CONCENTRATIONS OF BENZENE, TPH-AS GASOLINE & TPH-AS-MOTOR OIL IN GROUNDWATER (2/12/98)

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058	FILE: BEN21298	PROJECT NO.: 103232	PM	PE/RG <i>ES</i>
	REV.		FIGURE: 2	
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	DES. BP	DET. ML	DATE: 3/26/98	

ATTACHMENT 4

Laboratory Reports and Chain-of-Custody Documents

a:\Srs2Qtr98\1058QE98.wpd



FLUOR DANIEL GTI

SAMPLE ID: MW-9
 AEN LAB NO: 9805213-01
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	06/01/98
Toluene	108-88-3	ND	0.5	ug/L	06/01/98
Ethylbenzene	100-41-4	0.9 *	0.5	ug/L	06/01/98
Xylenes, Total	1330-20-1	ND	2	ug/L	06/01/98
Purgeable HCs as Gasoline	5030/GCFID	0.13 *	0.05	mg/L	06/01/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	06/01/98
#Extraction for TPH	EPA 3510	-		Extrn Date	06/01/98
TPH as Oil	GC-FID	ND	0.2	mg/L	06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: MW-1
 AEN LAB NO: 9805213-02
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5 ug/L		06/01/98
Toluene	108-88-3	ND	0.5 ug/L		06/01/98
Ethylbenzene	100-41-4	0.8 *	0.5 ug/L		06/01/98
Xylenes, Total	1330-20-7	3 *	2 ug/L		06/01/98
Purgeable HCs as Gasoline	5030/GCFID	0.34 *	0.05 mg/L		06/01/98
Methyl t-Butyl Ether	1634-04-4	ND	5 ug/L		06/01/98
#Extraction for TPH	EPA 3510	-	Exltn Date		06/01/98
TPH as Oil	GC-FID	ND	0.2 mg/L		06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: MW-8
 AEN LAB NO: 9805213-03
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5 ug/L		06/01/98
Toluene	108-88-3	ND	0.5 ug/L		06/01/98
Ethylbenzene	100-41-4	ND	0.5 ug/L		06/01/98
Xylenes, Total	1330-20-7	ND	2 ug/L		06/01/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05 mg/L		06/01/98
Methyl t-Butyl Ether	1634-04-4	ND	5 ug/L		06/01/98
#Extraction for TPH	EPA 3510	-		Extrn Date	06/01/98
TPH as Oil	GC-FID	ND	0.2 mg/L		06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: MW-2
 AEN LAB NO: 9805213.04
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5 ug/L		06/01/98
Toluene	108-88-3	ND	0.5 ug/L		06/01/98
Ethylbenzene	100-41-4	ND	0.5 ug/L		06/01/98
Xylenes, Total	1330-20-7	ND	2 ug/L		06/01/98
Purgable HCs as Gasoline	5030/GCFID	ND	0.05 mg/L		06/01/98
Methyl t-Butyl Ether	1634-04-4	ND	5 ug/L		06/01/98
#Extraction for TPH	EPA 3510	-		Extrn Date	06/01/98
TPH as Oil	GC-FID	3.1 *	0.2 mg/L		06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: MW-4
 AEN LAB NO: 9805213-05
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5 ug/L		06/02/98
Toluene	108-88-3	ND	0.5 ug/L		06/02/98
Ethylbenzene	100-41-4	ND	0.5 ug/L		06/02/98
Xylenes, Total	1330-20-7	ND	2 ug/L		06/02/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05 mg/L		06/02/98
Methyl t-Butyl Ether	1634-04-4	ND	5 ug/L		06/02/98
#Extraction for TPH	EPA 3510	-		Extrn Date	06/01/98
TPH as Oil	GC-FID	0.3 *	0.2 mg/L		06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: EW-1
 AEN LAB NO: 9805213-06
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	7.2*	0.5 ug/L		06/02/98
Toluene	108-88-3	ND	0.5 ug/L		06/02/98
Ethylbenzene	100-41-4	ND	0.5 ug/L		06/02/98
Xylenes, Total	1330-20-7	ND	2 ug/L		06/02/98
Purgeable HCs as Gasoline	5030/GCFID	0.82 *	0.05 mg/L		06/02/98
Methyl t-Butyl Ether	1634-04-4	26 *	5 ug/L		06/02/98
#Extraction for TPH	EPA 3510	-		Extrn Date	06/01/98
TPH as Oil	GC-FID	6.2 *	0.2 mg/L		06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: DUPMW4
 AEN LAB NO: 9805213-07
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	06/02/98
Toluene	108-88-3	ND	0.5	ug/L	06/02/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	06/02/98
Xylenes, total	1330-20-7	ND	2	ug/L	06/02/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/l	06/02/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

FLUOR DANIEL GTI

SAMPLE ID: TBL8
 AEN LAB NO: 9805213-08
 AEN WORK ORDER: 9805213
 CLIENT PROJ. ID: 103232.030543

DATE SAMPLED: 05/20/98
 DATE RECEIVED: 05/20/98
 REPORT DATE: 06/08/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	05/29/98
Toluene	108-88-3	ND	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	05/29/98
Xylenes, Total	1330-20 7	ND	2	ug/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	05/29/98

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

1. Client: FLUOR DANIELATI
 Address: 257 ARROYO DR. SUITE 100
IRVINE, CA 92618
 Contact: MR. LISA GOSSELL
 Alt. Contact: _____

American Environmental Network
 5440 Vincent Road, Pleasant Hill, CA 94523
 Phone (510) 930-9090
 FAX (510) 930-0256
R-3 S-3
R-1, S-F

AEN Page _____ of _____

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY
9805213
 Lab Job Number: _____
 Lab Destination: _____
 Date Samples Shipped: _____
 Lab Contact: _____
 Date Results Required: _____
 Date Report Required: _____
 Client Phone No.: (925) 370-3990
 Client FAX No.: (925) 370-3991

Address Report To:
 2. SAMPLES 1-7

Send Invoice To:
 3. 1-2

Send Report To: 1 or 2 (Circle one)
 Client P.O. No.: _____ Client Project I.D. No.: SEARS # 1058
103232, 030573
 Sample Team Member (s): HECTOR MERINO

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS				Comments / Hazards	
ABCDEF	MW-9		5/13/98 13:30	GW with membrane		6		X	X	X			
ABCDEF	MW-1		13:40			6		X	X	X			
ABCDEF	MW-8		13:50			6		X	X	X			
ABCDEF	MW-2		14:00			6		X	X	X			
ABCDEF	MW-4		14:05			6		X	X	X			
ABCDEF	EW-1		14:20			6		X	X	X			
ABC	DUP MW4		14:05			6		X	X	X			
SA	TBLB	5/20			HCL	1							

Requested by: (Signature) <u>[Signature]</u>	DATE <u>5-20-98</u>	TIME <u>18:40</u>	Received by: (Signature) <u>[Signature]</u>	DATE <u>5-20-98</u>	TIME <u>18:42</u>
Requested by: (Signature) _____	DATE _____	TIME _____	Received by: (Signature) _____	DATE _____	TIME _____
Requested by: (Signature) _____	DATE _____	TIME _____	Received by: (Signature) _____	DATE _____	TIME _____
Method of Shipment _____			Lab Comments _____		

*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter
 4) PVC filter, diam. _____ pore size _____ 5) Charcoal tube 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample
 10) Other _____ 11) Other _____
 COPIES: WHITE - JOB FILE YELLOW - PROJECT FILE PINK - CLIENT