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ENVIRONMENTAL  
PROTECTION

# Transmittal Letter

Date: January 15, 1999

To: Mr. Dale Klettke, CHMM

Company: Alameda County Health Care Services Agency

Address: 1131 Harbor Bay Parkway, Suite 250

City: Alameda State/Zip: CA 94502-6577

**We are sending via:**

Courier     U.S. Mail     UPS     Overnight Mail     Other \_\_\_\_\_

**The following:**

Report                       Shop Drawings                       Samples  
 Proposal                       Specifications                       Other \_\_\_\_\_

**Transmitted as checked:**

Approved                       For Approval                       Approved as Noted  
 For Correction                       For Your Use                       As Requested  
 For Comments                       For Your Records                       For Distribution

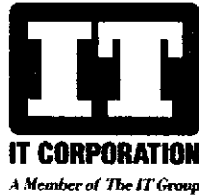
**Comments:**

We are sending you herewith the Fourth Quarter 1998 Groundwater Monitoring and Sampling Report dated January 15, 1999, for the Sears Store No. 1058 located at 2633 Telegraph Avenue, in Oakland, California. If you have comments or questions, please contact me at (925) 370-3990 extension 222.

Sincerely,  
**IT Corporation**

Ned Borglin  
 Staff Scientist

c: Mr. Scott M. DeMuth, Sears, Roebuck and Co.  
 Mr. Russ Zora, IT Corporation, Central Files  
 USA Petroleum files  
 Project Files



January 15, 1999

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

Subject: Fourth Quarter 1998 Groundwater Monitoring and Sampling Report  
Former Sears 1058, 2633 Telegraph Avenue, Oakland, California  
IT Corporation Project 103232

99 JAN 15 11:10:45  
COMMUNICATIONS  
PROJECTS

Dear Mr. Klettke:

On behalf of Sears, Roebuck and Co., IT Corporation (formerly Fluor Daniel GTI, Inc.) presents the quarterly groundwater monitoring data collected on November 10, 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. Separate-phase hydrocarbons were present in monitoring well MW-3; therefore, the well was not sampled. 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 monitoring wells were purged and sampled. Groundwater monitoring and sample collection protocol and field data sheets are provided in attachment 3. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tert-butyl ether (MTBE) and total petroleum hydrocarbons as gasoline (TPH-g) using EPA Methods 8020/modified 8015, and TPH as motor oil (TPH-mo) using modified EPA Method 8015 (GC/FID).

Static groundwater elevations for the fourth quarter 1998 ranged from 13.50 to 16.39 feet above mean sea level. Groundwater elevations have increased by 0.5 foot since third quarter 1998 (August 11, 1998). The apparent groundwater flow is to the south at an average hydraulic gradient of 0.02 foot per foot, and is consistent with previous quarterly data.

Results of quarterly sampling indicated no detectable benzene concentrations in any of the sampled monitoring wells. Except for monitoring well EW-1, none of the monitoring wells contained detectable concentrations of MTBE. Monitoring wells MW-1, MW-4, MW-8, MW-9 and EW-1 contained detectable concentrations of TPH-g. Monitoring wells MW-2, MW-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. Previous analyses of dissolved hydrocarbons in MW-3 indicate

1058QK98.WPD

that the product in this well is predominantly motor oil. A summary of the groundwater analytical results is provided in attachment 2, table 2. A distribution map of dissolved benzene, TPH-g, TPH-mo, and MTBE concentrations is provided in attachment 1, figure 2. Hydrograph and detectable concentration versus time data are illustrated in graphs 1 through 10 (attachment 4). Hydrocarbon concentrations below detection limits are not shown on the graphs. Laboratory reports and chain-of-custody documents are provided in attachment 5.


IT Corporation has reviewed this site for applicable remediation methods to address the dissolved-phase plume and separate-phase hydrocarbons. A remedial action plan (RAP) will be prepared, based on data from pilot tests conducted in 1996, and submitted to Alameda County Health Care Services Agency for approval.

The pilot test report concluded that according to the 1995 Lawrence Livermore National Laboratory (LLNL) report and the January 1996 RWQCB memorandum on interim *Guidance on Required Cleanup at Low-Risk Fuel Sites* "would classify this site as a low-risk case because of the low to nondetectable concentrations of BTEX in the subsurface and no drinking wells nearby. Due to this classification, it is assumed that the HMW (high-molecular weight) hydrocarbons adsorbed on the vadose zone will not need to be actively remediated. The SPH will require removal, however."


The RAP will focus on separate-phase hydrocarbons removal by installation of a passive skimmer in monitoring well MW-3. A small fenced compound will be needed to house a 55-gallon drum into which the skimmer will be manually emptied on a regular basis.

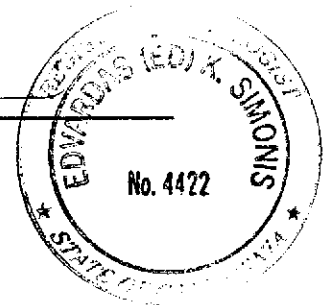
If you have any comments or questions, please contact me at (925) 370-3990 extension 266.

Sincerely,  
**IT CORPORATION**  
Submitted by:

  
\_\_\_\_\_  
Melissa Gossell  
West Zone Project Manager

**IT CORPORATION**  
Approved by:

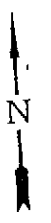
  
\_\_\_\_\_  
Ed K. Simonis, R.G.  
Senior Geologist



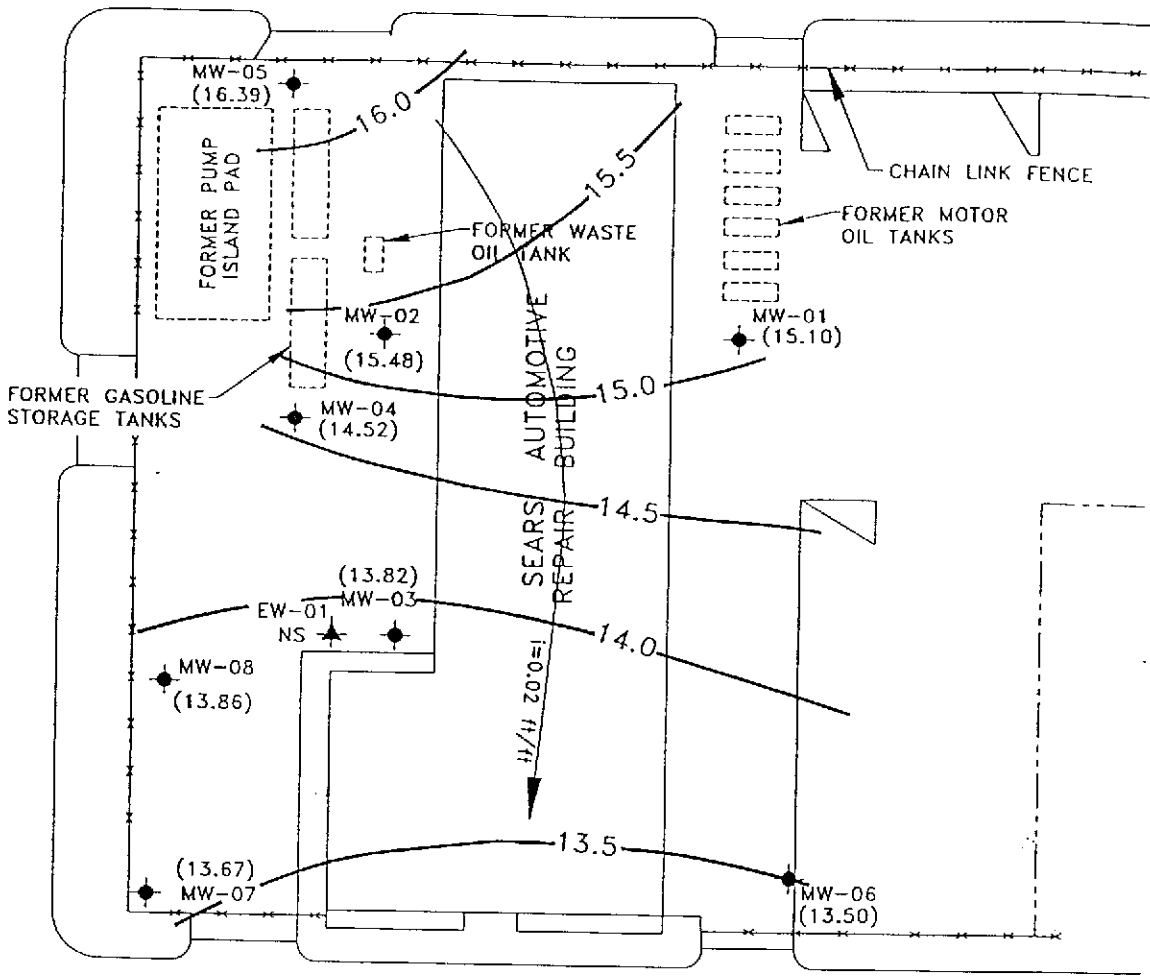
Attachments:

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

c: Scott M. DeMuth, Sears, Roebuck and Co.  
USA Petroleum files  
Mr. Russ Zora, IT Corporation, Central Files  
Project File



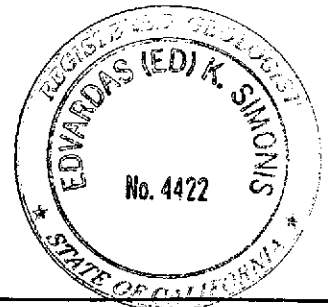
27th STREET



26th STREET

**LEGEND**

- MONITORING WELL
- EXTRACTION WELL
- ( ) NS POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL) NOT SURVEYED
- POTENTIOMETRIC SURFACE CONTOUR; INTERVAL = 0.5 ft
- $i=0.02$  GROUNDWATER FLOW DIRECTION AND AVERAGE GRADIENT (ft/ft)

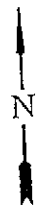


**FLUOR DANIEL GTI**



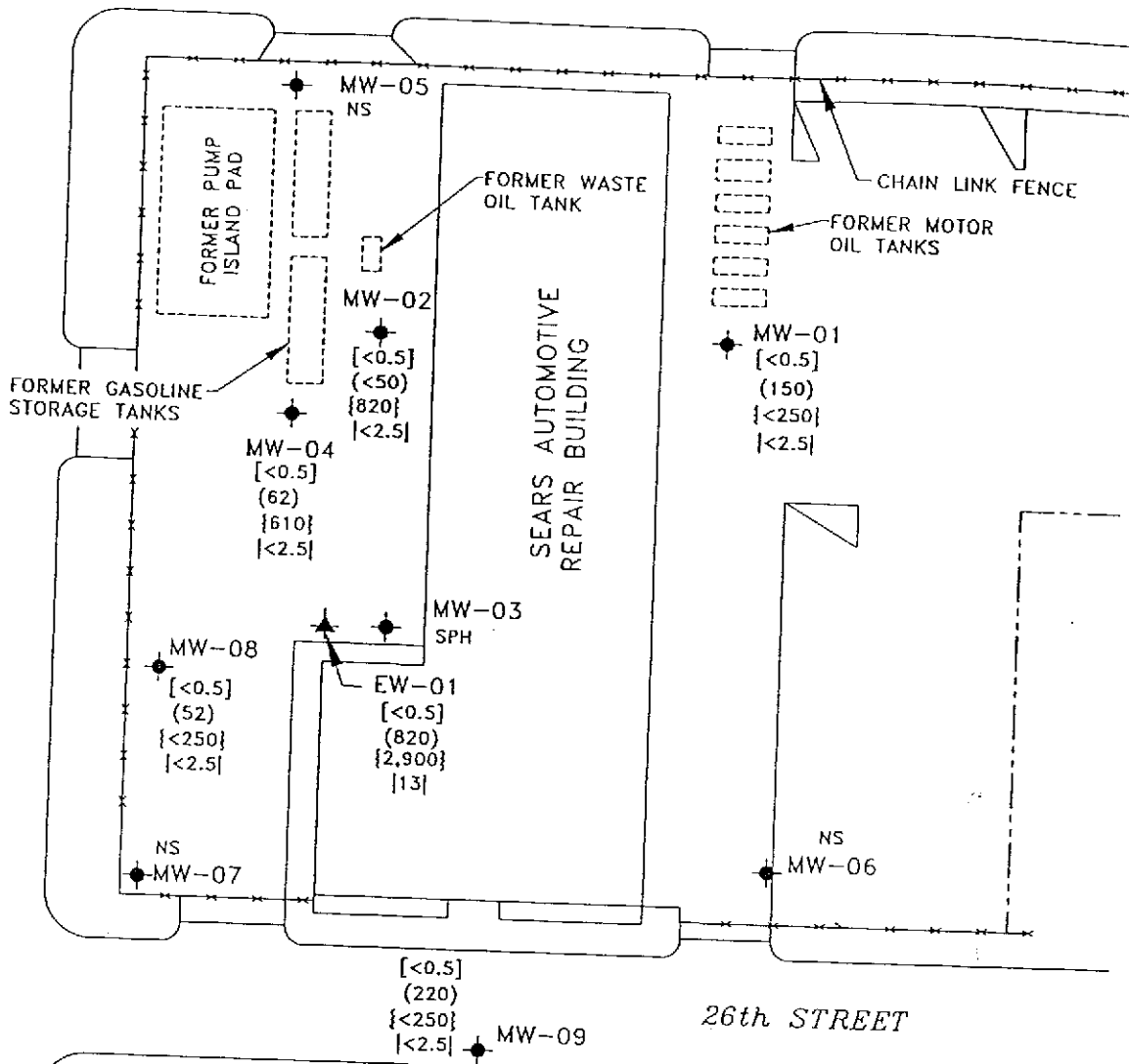
**POTENTIOMETRIC SURFACE MAP (GAUGED 11/10/98)**

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058	FILE: PSMN1098 (1:40)	PROJECT NO.: 103232	PM	PE/RG
	REV.	DATE: 12/1/98		FIGURE: 1
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	DES. BP	DET. ML		



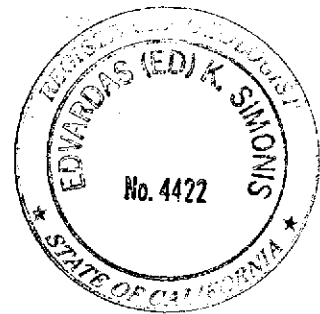
27th STREET

TELEGRAPH AVENUE



**LEGEND**

- ◆ MONITORING WELL
- ▲ EXTRACTION WELL
- [ ] BENZENE CONCENTRATIONS [ug/l]
- ( ) TPH-AS-GASOLINE (ug/l)
- { } TPH-AS-MOTOR OIL [ug/l]
- | | METHYL TERT-BUTYL ETHER (MTBE) [ug/l]
- SPH SEPARATE-PHASE HYDROCARBONS
- NS NOT SAMPLED



**CONCENTRATIONS OF BENZENE, TPH-AS GASOLINE, TPH-AS-MOTOR OIL & MTBE IN GROUNDWATER SAMPLED (11/10/98)**

**FLUOR DANIEL GTI**

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

LOCATION: 2633 TELEGRAPH AVENUE  
OAKLAND, CALIFORNIA

FILE: BENN1098	PROJECT NO.: 103232	PM	PE/RG
REV.	DATE: 12/5/98		FIGURE: 2
DES. BP	DET. ML		

**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		
08/11/98	11.60	--	--	14.60		
11/10/98	11.10	--	--	15.10		

**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		
08/11/98	11.56	--	--	14.94		
11/10/98	11.02	--	--	15.48		

**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		
08/11/98	12.97	12.79	0.18	13.51		
11/10/98	12.54	12.51	0.03	13.82		

\* 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	11.61	--	--	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		
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		
08/11/98	11.90	--	--	14.27		
11/10/98	11.65	--	--	14.52		

**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		
08/11/98	10.67	--	--	16.31		
11/10/98	10.59	--	--	16.39		

**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		
08/11/98	11.21	--	--	13.11		
11/10/98	10.82	--	--	13.50		

**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		
08/11/98	11.55	--	--	13.33		
11/10/98	11.21	--	--	13.67		

**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		
08/11/98	12.60	--	--	13.52		
11/10/98	12.26	--	--	13.86		
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
		08/11/98	12.15	--	--	N/A
11/10/98	11.81	--	--	N/A		

**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.
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
		08/11/98	12.85	--	--	N/A
		11/10/98	12.55	--	--	N/A

Notes:

- = 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	-	<sup>e</sup> <250	-	-	-
	12/01/94	0.4	0.4	<0.3	6.6	-	<sup>e</sup> <250	-	-	-
	03/08/95	<0.3	0.6	4.7	2.7	-	<sup>e</sup> <250	-	-	-
	06/09/95	<0.3	1.4	3.9	5.6	-	<sup>e</sup> <250	-	-	-
	08/29/95	0.3	0.9	<0.5	2.8	-	<sup>e</sup> <250	-	-	-
	11/15/95	<0.5	<0.5	<1.0	27	-	<sup>e</sup> <200	-	-	-
	03/05/96	<0.5	<1.0	<1.0	<2.0	-	<sup>e</sup> <200	-	-	-
	06/03/96	<0.5	<1.0	3.7	3.4	340	<sup>e</sup> <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	<sup>e</sup> <200	-	-	-
	02/26/97	<0.5	<1.0	<1.0	4.5	390	<sup>e</sup> <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	0.8	3	340	<200	-	-	<5	
08/11/98	<0.5	<0.5	<0.5	<0.5	230	<500	-	-	<2.5	
11/10/98	<0.50	<0.50	<0.50	<0.50	150	<250	-	-	<2.5	
MW-2	12/30/92	0.7	<0.3	<0.3	3	190	-	1	<sup>a</sup> ND	-
	03/24/93	0.6	<0.3	<0.3	2	120	-	<1	<sup>a</sup> ND	-
	06/21/93	0.3	<0.3	<0.3	0.7	82	**<100	-	<sup>c</sup> ND	-
	09/16/93	<0.3	<0.3	<0.3	<0.5	28	**<100	-	<sup>c</sup> ND	-
	12/01/93	<0.3	<0.3	<0.3	1	68	-	-	<sup>c</sup> 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	<sup>e</sup> <250	-	<sup>d</sup> 15	-
	12/01/94	<0.3	<0.3	<0.3	<0.5	54	<sup>f</sup> 1,300	-	<sup>g</sup> 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	-	<sup>h</sup> 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	
08/11/98	<0.5	<0.5	<0.5	<0.5	<50	1,200	-	-	<2.5	
11/10/98	<0.50	<0.50	<0.50	<0.50	<50	820	-	-	<2.5	

**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	<sup>a</sup> ND	--
	03/24/93	28	0.7	1	8	3,300	SPH	28	<sup>a</sup> 15	--
	06/21/93	21	5	2	19	**2,600	32,000	26	<sup>cd</sup> 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	<sup>a</sup> 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	SPH
02/12/98	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
05/20/98	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
08/11/98	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	--	SPH
11/10/98	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
MW-4	12/30/92	2	<0.3	1	<0.5	1,200	--	<1	<sup>a</sup> ND	--
	03/24/93	<0.3	<0.3	<0.3	<0.5	750	--	2	<sup>a</sup> 7	--
	06/21/93	<0.3	2	<0.3	0.5	660	19,000	--	<sup>a</sup> ND	--
	09/16/93	0.3	<0.3	2	3	410	2,500	--	<sup>a</sup> ND	--
	12/01/93	<0.3	<0.3	<0.3	<0.5	150	390	--	<sup>a</sup> ND	--
	03/09/94	0.7	0.8	2	3.6	1,500	780	--	<sup>a</sup> ND	--
	06/30/94	<0.3	1.7	0.5	1	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	--	<sup>a</sup> <5	--
	03/08/95	<0.3	<0.3	<0.3	<0.5	360	1,000	--	<sup>a</sup> <5	--
	06/09/95	<0.3	0.4	<0.3	<0.5	64	1,100	--	<sup>a</sup> <5	--
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	1,200	--	<sup>a</sup> <5	--
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	2,100	--	<sup>a</sup> ND	--
	03/05/96	<0.5	<1.0	<1.0	<2.0	<100	590	--	<sup>a</sup> ND	--
	06/04/96	<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	
08/11/98	<0.5	<0.5	<0.5	<0.5	<50	<500	--	--	<2.5	
11/10/98	<0.50	<0.50	<0.50	<0.50	62	610	--	--	<2.5	



**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	<sup>b</sup> c5	--
	03/24/93	<0.3	<0.3	<0.3	0.5	19	--	2	<sup>a</sup> c341	--
	06/21/93	<0.3	<0.3	<0.3	<0.5	<10	<100	--	<sup>c</sup> ND	--
	09/16/93	0.3	<0.3	<0.3	1	<10	<100	--	<sup>c</sup> ND	--
	12/01/93	<0.3	<0.3	<0.3	1	17	--	--	<sup>c</sup> ND	--
	12/30/93	--	--	--	--	--	<100	--	--	--
	03/09/94	<0.3	<0.3	<0.3	<0.5	22	<100	--	<sup>c</sup> 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	--	<sup>d</sup> 7	--
	08/29/95	<0.3	<0.3	<0.3	<0.5	<50	<250	--	<sup>h</sup> 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	--	--	<5	
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	Y	--	<5	
05/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	
08/11/98	<0.5	<0.5	<0.5	<0.5	<50	<500	--	--	<2.5	
11/10/98	NS	NS	NS	NS	NS	NS	--	--	NS	
MW-6	12/27/93	<0.3	<0.3	<0.3	<0.5	<10	<100	<1	<sup>a</sup> 70	--
	03/09/94	<0.3	<0.3	<0.3	<0.5	15	<100	--	<sup>c</sup> ND	--
	06/30/94	<0.3	<0.3	<0.3	<0.5	<10	<100	--	<sup>h</sup> D	--
	09/27/94	<0.3	<0.3	<0.3	<0.5	<10	<250	--	<sup>a</sup> 8	--
	12/01/94	<0.3	<0.3	<0.3	<0.5	<10	<250	--	<sup>g</sup> 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	--	<sup>h</sup> 24	--
	11/15/95	<0.5	<0.5	<0.5	<0.5	<50	<200	--	<sup>g</sup> 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	--	--	<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	
08/11/98	<0.5	<0.5	<0.5	<0.5	<50	<500	--	--	<2.5	
11/10/98	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	<sup>a</sup> 40	--
	03/09/94	<0.3	<1.0	1.5	4.1	620	<100	--	<sup>c</sup> 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	<sup>e</sup> <250	--	ND	--
	12/01/94	<0.3	<0.3	<0.3	1.1	<10	<sup>e</sup> <250	--	<sup>g</sup> 28	--
	03/08/95	<0.3	<0.3	<0.3	<0.5	<10	<sup>e</sup> <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	--	<sup>h</sup> 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
08/11/98	<0.5	<0.5	<0.5	<0.5	<50	<500	--	--	<2.5	
11/10/98	NS	NS	NS	NS	NS	NS	--	--	NS	
MW-8	12/27/93	0.4	4	0.4	1	390	<100	<1	<sup>h</sup> 18	--
	03/09/94	0.6	0.8	0.5	1.5	420	<100	--	<sup>a</sup> 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	<sup>e</sup> <250	--	<sup>g</sup> 9	--
	12/01/94	5.4	<0.3	0.7	1.3	230	<sup>e</sup> <250	--	<sup>c</sup> ND	--
	03/08/95	<0.3	<0.3	<0.3	<0.5	230	<sup>e</sup> <250	--	ND	--
	06/09/95	<0.3	<0.3	<0.3	<0.5	<50	<sup>e</sup> <250	--	ND	--
	08/29/95	0.9	0.4	<0.3	0.8	200	<sup>e</sup> <250	--	<sup>h</sup> 15	--
	11/15/95	0.58	<0.5	<0.5	0.54	120	--	--	<sup>g</sup> 21	--
	12/11/95	--	--	--	--	--	<sup>e</sup> <200	--	--	--
	03/05/96	0.6	<1.0	<1.0	<2.0	<100	<sup>e</sup> <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	
08/11/98	<0.5	<0.5	<0.5	<0.5	64	<500	--	--	<2.5	
11/10/98	<0.50	<0.50	<0.50	<0.50	52	<250	--	--	<2.5	

**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-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
	08/11/98	<0.5	<0.5	<0.5	0.76	240	<500	--	--	<2.5
	11/10/98	<0.50	<0.50	<0.50	<0.50	220	<250	--	--	<2.5
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	1,400	--	--	--
	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	1,400	15,000	--	--	12
	11/28/97	4.5	1.1	1.1	4	560	5,700	--	--	5
	02/12/98	9.8	0.6	1.2	2	1,000	6,300	--	--	30
	05/20/98	7.2	<0.5	<0.5	<2.0	820	6,200	--	--	26
	08/11/98	2.6	<0.5	<0.5	0.86	320	5,400	--	--	8.7
	11/10/98	<0.50	<0.50	<0.50	0.75	820	2,900	--	--	13

Notes:

- = 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 are 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**

## IT CORPORATION 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 utilized 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 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, ethyl benzene, xylene, and total petroleum hydrocarbons 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  
Fluor Daniel GTI - Martinez, California

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

Technician: AM  
Scheduled: 11/09/98  
Site Mgr: B. Pierskalla

11-10-98

PREPARATORY COMMENTS

Visit Date: 8:30 Arrival Time: 9:30 Departure Time: 14:00

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

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

Job # and task #

GROUNDWATER SAMPLING - Task Nr: 030543 [Quarterly]

SITE ADDRESS: 2633 Telegraph Avenue, Oakland, CA

cc: Melissa Gossell, Ned Borglin

Notify Tom Peacock 72 hrs in advance (510) 567-6782 DONE: 11/5/98 Left message @ KOS #111111

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)/AUG(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-4, MW-2, MW-9, MW-3 and the 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.

**SITE VISIT FORM**  
 Fluor Daniel GTI - Martinez, California

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

Technician: J. Medina  
 Scheduled: 11/09/98  
 Site Mgr: B. Pierskalla

**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 Sequioa Analytical in Redwood City, CA ph# (650) 364-9600. To be analyzed for BTEX/MTBE/TPH-G (EPA 8020/8015), and TPH-Motor Oil (EPA 8015).
6. COMPLETED ALL THREE PAGES OF WASTE INVENTORY FORM? Yes. IF NO, EXPLAIN \_\_\_\_\_
7. Record hours used on-site as well as travel time used.

HOURS ESTIMATED FOR MARCH/AUG <sup>5.0 onsite</sup> 6.0 <sup>1.0 travel</sup> JUNE/DEC 5.0

Hours Estimated	6.00	Hours Used	<u>6.00</u>
-----------------	------	------------	-------------

**FINAL CHECKS**

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

WASTE COMPLIANCE: # of Drums w/: Water \_\_\_\_, Soil \_\_\_\_, Empty \_\_\_\_, Other \_\_\_\_.  
 DRUMS labeled? NA/Y/N Gen. Date: \_\_\_\_\_ Label Type: \_\_\_\_\_

SOIL pile? Y/N size: \_\_\_\_\_ cu.yds. SITE LEFT CLEAN? Y/N

SITE VISIT FORM  
Fluor Daniel GTI - Martinez, California

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

Technician:  
Scheduled: 11/09/98  
Site Mgr: B. Pierskalla

TECHNICIAN'S COMMENTS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Hours Estimated	6.00	Total Hours Used	
Travel Time Estimated	1.50	Travel Time Used	

\_\_\_\_\_  
Technician



**SITE VISIT FORM  
FLUOR DANIEL GTI**

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

Technician: H. MERINO  
Schedule:  
Job No. 103232.030543

**PREPARATORY COMMENTS**

Visit Date: 11-10-98 Arrival Time: 9:00 Departure Time: 14:00

Called Project Manager? YES  NO  Time: \_\_\_\_\_ Who: \_\_\_\_\_

If you did not call, why not? \_\_\_\_\_

Weather: Rain Snow Sunny Cloudy Temperature: \_\_\_\_\_

**WELL GAUGING - TASK Nr: 030543 [MONTHLY]**  
Decon IP between each well. IP #: \_\_\_\_\_

MW-1:	DTB_21.72	DTW <u>11.10</u>	DTP _____	PT _____	\$
MW-2:	DTB_21.79	DTW <u>11.02</u>	DTP _____	PT _____	\$
MW-3:	DTB_24.67	DTW <u>12.54</u>	DTP <u>12.51</u>	PT <u>0.03</u>	\$
MW-4:	DTB_22.97	DTW <u>11.65</u>	DTP _____	PT _____	\$
MW-5:	DTB_25.27	DTW <u>10.59</u>	DTP _____	PT _____	
MW-6:	DTB_22.05	DTW <u>10.82</u>	DTP _____	PT _____	
MW-7:	DTB_21.70	DTW <u>11.21</u>	DTP _____	PT _____	
MW-8:	DTB_22.14	DTW <u>12.26</u>	DTP _____	PT _____	\$
MW-9:	DTB_20.30	DTW <u>11.81</u>	DTP _____	PT _____	\$
EW-1	DTB_22.30	DTW <u>12.55</u>	DTP _____	PT _____	\$

NOTES:

Monitored and Sampled all wells

HOURS ESTIMATED: \_\_\_\_\_

HOURS USED 6.00

\* NOTE: Make sure all wells are locked - Replace any locks which are damaged or missing.

SITE VISIT FORM  
FLUOR DANIEL GTI

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

Technician:  
Schedule:  
Job No. 103232.030543

TECHNICIAN'S COMMENTS

Area for handwritten technician comments, consisting of 15 horizontal lines.

TOTAL HOURS ESTIMATED:

HOURS USED:

TRAVEL TIME ESTIMATED:

TRAVEL TIME USED:

\_\_\_\_\_  
TECHNICIAN

Store Number 1058

Address/City/State/ZIP 2633 TELEGRAPH AVE OAKLAND CA

Sears Facility Contact and Phone # \_\_\_\_\_

Floor Daniel GTI Representative H. MERINO

Accumulation Start Date 11-10-97

Completion Date: 11-10-97

Exact Drum Storage Location BETWEEN OLD SEARS GARAGE NEXT TO BRACE, CLOSE TO 2617TH ST. SIDE OF PROPERTY EAST SIDE

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	<u>4</u>	<u>ABCD</u>	<u>O or B</u>	<u>H / N / U</u>	<u>WATER OF Black Bottom</u>
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!

**BULK MATERIAL INVENTORY FORM**

Store Number 1058 Address/City/State/ZIP OAKLAND CA

Sears Facility Contact and Phone # \_\_\_\_\_

Fluor Daniel GTI Representative H. MERINO

Accumulation Start Date 11-10-98 Completion Date 11-10-98

Exact Bulk Storage Location \_\_\_\_\_

CONTAMINANTS	SOIL (Cu Yds)	DEBRIS (Cu Yds)	LIQUID (Gallons)
GASOLINE			
FUEL OIL			
HYDRAULIC FLUID			
USED OIL			
CHLORINATED SOLVENT:			
NON-CHLORINATED SOLVENT:			
OTHER:			
OTHER:			

**SOIL PILE CALCULATIONS**

Calculation for a tent shaped soil pile:

Length \_\_\_\_\_ X Width \_\_\_\_\_ X Height \_\_\_\_\_  $\div 2 \div 27 =$  \_\_\_\_\_ Yds<sup>3</sup>

Calculation for a rectangular or square shaped soil pile:

Length \_\_\_\_\_ X Width \_\_\_\_\_ X Height \_\_\_\_\_  $\div 27 =$  \_\_\_\_\_ Yds<sup>3</sup>

Calculation for a conical (cone) shaped soil pile:

.04 X Radius \_\_\_\_\_ X Radius \_\_\_\_\_ X Height \_\_\_\_\_ = \_\_\_\_\_ Yds<sup>3</sup>



Project Number: 103232.030543

Project Manager: Melissa Gossell

Well ID: Mw-1

DTW Measurements:

Well Diameter: 2

Initial: 11.10

Calc Well Volume: 1.7 gal

Recharge: 11.25

Well Volume: 3 5.6 gal

DTB: 21.72

Purge Method

Pump Depth \_\_\_\_\_ ft.

Instruments Used

Peristaltic \_\_\_\_\_

Hand Bailed \_\_\_\_\_

YSI: X

Other: \_\_\_\_\_

Gear Drive \_\_\_\_\_

Air Lift \_\_\_\_\_

Hydac: \_\_\_\_\_

Submersible X

Other: \_\_\_\_\_

Omega: \_\_\_\_\_

Time	Temp <u>X</u> C F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
10:48	20.8	0.59	6.31	1	cloudy	
10:50	21.4	0.58	6.34	2	↓	
10:52	21.9	0.59	6.37	3		
10:54	22.0	0.60	6.30	4		
10:56	22.0	0.61	6.30	5		

Project number: 103232.030543

Project Manager: Melissa Gossell

Well ID: MW 9  
Well Diameter: 2

DTW Measurements:  
Initial: 11.81 Calc Well Volume: 1.3 gal  
Recharge: 12-10 Well Volume: X3 gal  
DTB: 20.30

Purge Method  
Peristaltic \_\_\_\_\_  
Gear Drive \_\_\_\_\_  
Submersible X  
Pump Depth \_\_\_\_\_ ft.  
Hand Bailed \_\_\_\_\_  
Air Lift \_\_\_\_\_  
Other \_\_\_\_\_

Instruments Used  
YSI: X  
Hydac: \_\_\_\_\_  
Omega: \_\_\_\_\_  
Other: \_\_\_\_\_

Time	Temp <u>X</u> C F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:08	19.1	0.18	6.43	1	Cloudy	GREY
11:09	19.3	0.71	6.42	2		
11:10	20.1	0.73	6.43	3		
11:11	20.5	0.75	6.45	4		
11:12	20.7	0.75	6.46	5	↓	↓

Well ID: MW-8  
 Well Diameter: 2

DTW Measurements:  
 Initial: 1226 Calc Well Volume: 116 gal  
 Recharge: 12.89 Well Volume: 4.8 gal  
 DTB: 22.14

Purge Method: Crystalline Pump Depth: \_\_\_\_\_ ft.  
 Crystalline \_\_\_\_\_ Hand Bailed \_\_\_\_\_  
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible Y Other \_\_\_\_\_  
 Instruments Used:  
 YSI: Y Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp <u>Y</u> C F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:24	21.9	0.66	6.37	1	cloudy	
11:25	22.1	0.67	6.38	2		
11:26	22.2	0.68	6.39	3		
11:27	22.2	0.68	6.40	4		
11:28	22.1	0.69	6.40	5	✓	



Well ID: MW-2  
 Well Diameter: 2

DTW Measurements  
 Initial: 11.02 Calc Well Volume: 1.7 gal  
 Recharge: 11.15 Well Volume: 8.3 gal  
 DTB: 21.79

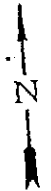
Purge Method: Crystalline Pump Depth: \_\_\_\_\_ ft.  
Clear Drive Hand Bailed: \_\_\_\_\_  
Submersible Air Lift: \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Instruments Used  
 YSI: 30 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp <u>20</u> C _____ F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:39	21.3	0.61	6.38	1	cloudy	
11:40	21.9	0.62	6.37	2	↓	
11:41	22.1	0.62	6.38	3		
11:42	22.2	0.62	6.39	4		
11:43	22.1	0.62	6.39	5		

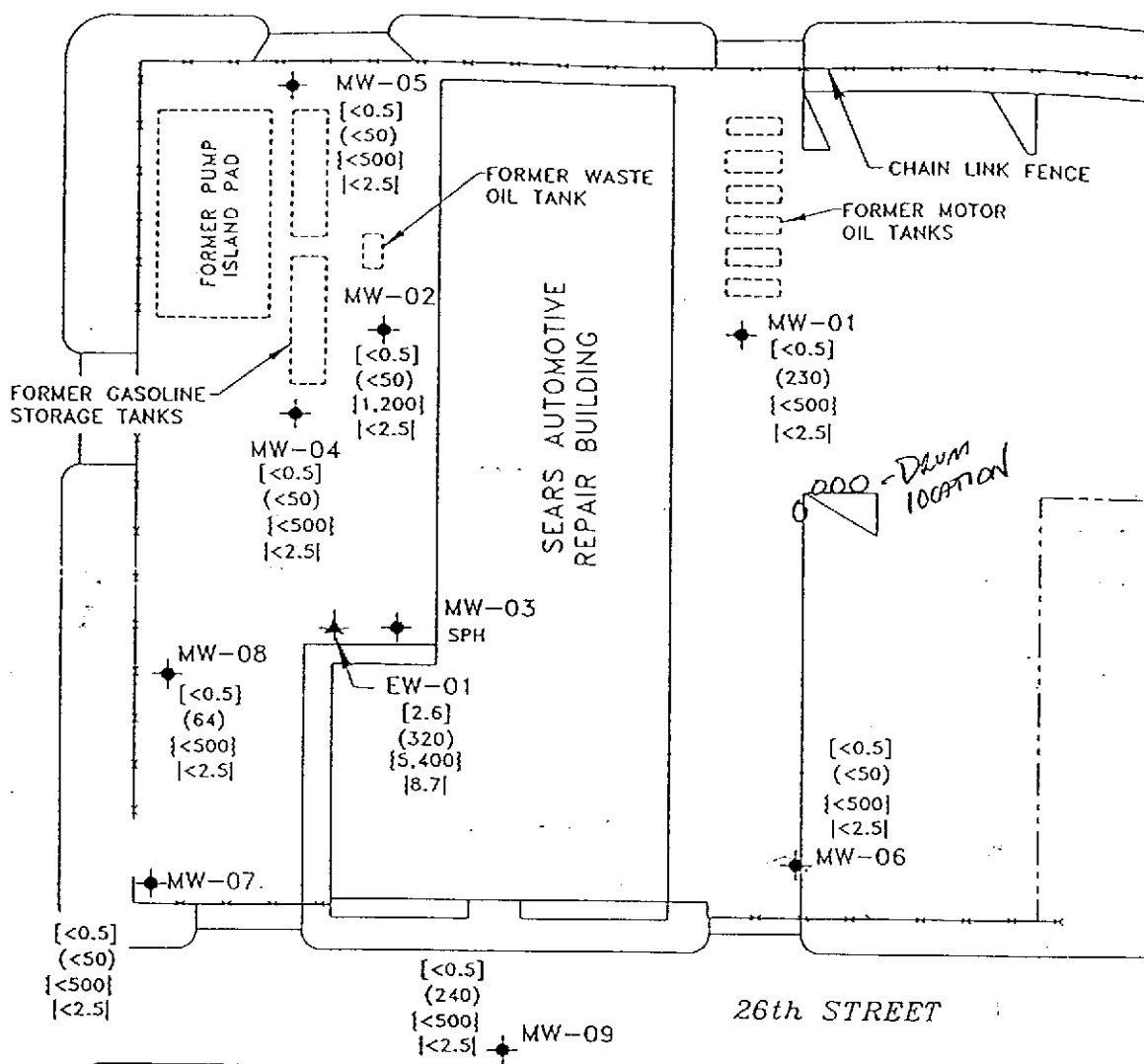




27th STREET



TELEGRAPH AVENUE



**LEGEND**

- ◆ MONITORING WELL
- ★ EXTRACTION WELL
- [ ] BENZENE CONCENTRATIONS [ug/l]
- ( ) TPH-AS-GASOLINE (ug/l)
- { } TPH-AS-MOTOR OIL [ug/l]
- | | METHYL TERT-BUTYL ETHER (MTBE) [ug/l]
- SPH SEPARATE-PHASE HYDROCARBONS

FLUOR DANIEL GTI



CONCENTRATIONS OF BENZENE, TPH-AS GASOLINE, TPH-AS-MOTOR OIL & MTBE IN GROUNDWATER SAMPLED (8/11/98)

CLIENT: SEARS, ROEBUCK AND CO. SITE NO. 1058		FILE: BEN81198	PROJECT NO.: 103232	PM	PE/RC
LOCATION: 2633 TELEGRAPH AVENUE OAKLAND, CALIFORNIA		REV.	DATE: 9/9/98		FIGURE: 2
		DES. BP	DET. ML		



# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (650) 364-9600 FAX (650) 364-9233  
 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100  
 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: FLUORDANIEL GT 1 Project Name: SEARS #1058 TELEGRAPH  
 Address: 757 ARNOLD DR. SUITE D Billing Address (if different):  
 City: MARTINEZ State: CA Zip Code: 94553 103232, 030543  
 Telephone: (925) 370-3990 FAX: (925) 370-3991 P.O. #:  
 Report To: NETTSA GOSSELL Sampler: LIEGOTR NERIND QC Data:  Level D (Standard)  Level C  Level B  Level A

Turnaround  10 Working Days  3 Working Days  2 - 8 Hours  
 Time:  7 Working Days  2 Working Days AS CONTRACTED  
 5 Working Days  24 Hours

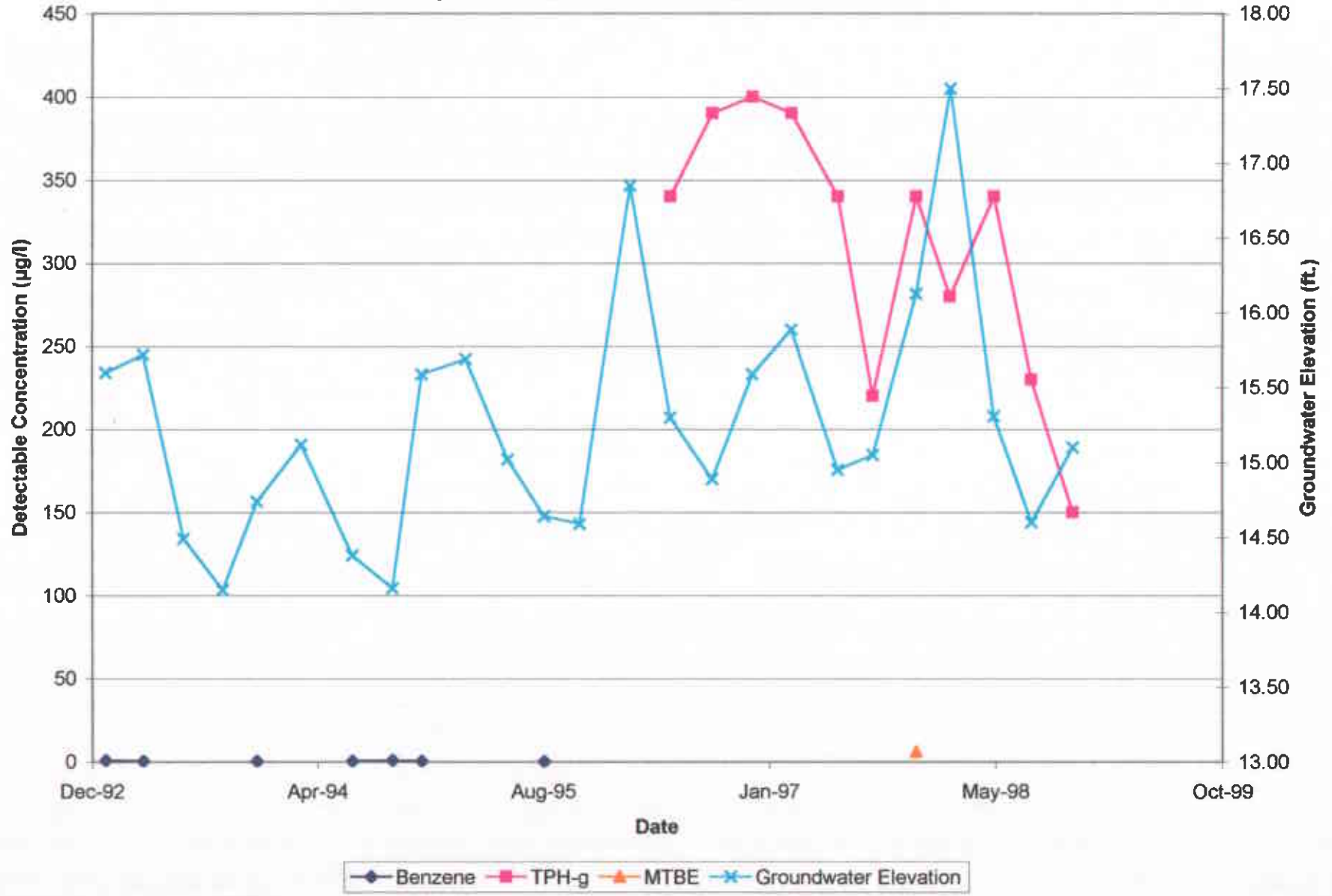
Analyses Requested  
 Drinking Water  
 Waste Water  
 Other

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	SEARS #1058 TELEGRAPH										Comments				
1. NW-9	11 12:30	GW	5	40ML GLASS		X	X													
2. NW-1	12:40		5			X	X													
3. NW-8	12:50		5			X	X													
4. MW-2	10 3:00		5			X	X													
5. MW-4	13:00		5			X	X													
6. EW-1	13:25		5			X	X													
7. DUP MW4	13:30		3	40ML		X	X													
8. TBLB	11 88	DI	1																	
9.																				
10.																				

Relinquished By: <u>[Signature]</u>	Date: <u>11/11/98</u>	Time: <u>1631</u>	Received By: <u>[Signature]</u>	Date: <u>11.11.98</u>	Time: <u>1631</u>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date:	Time:

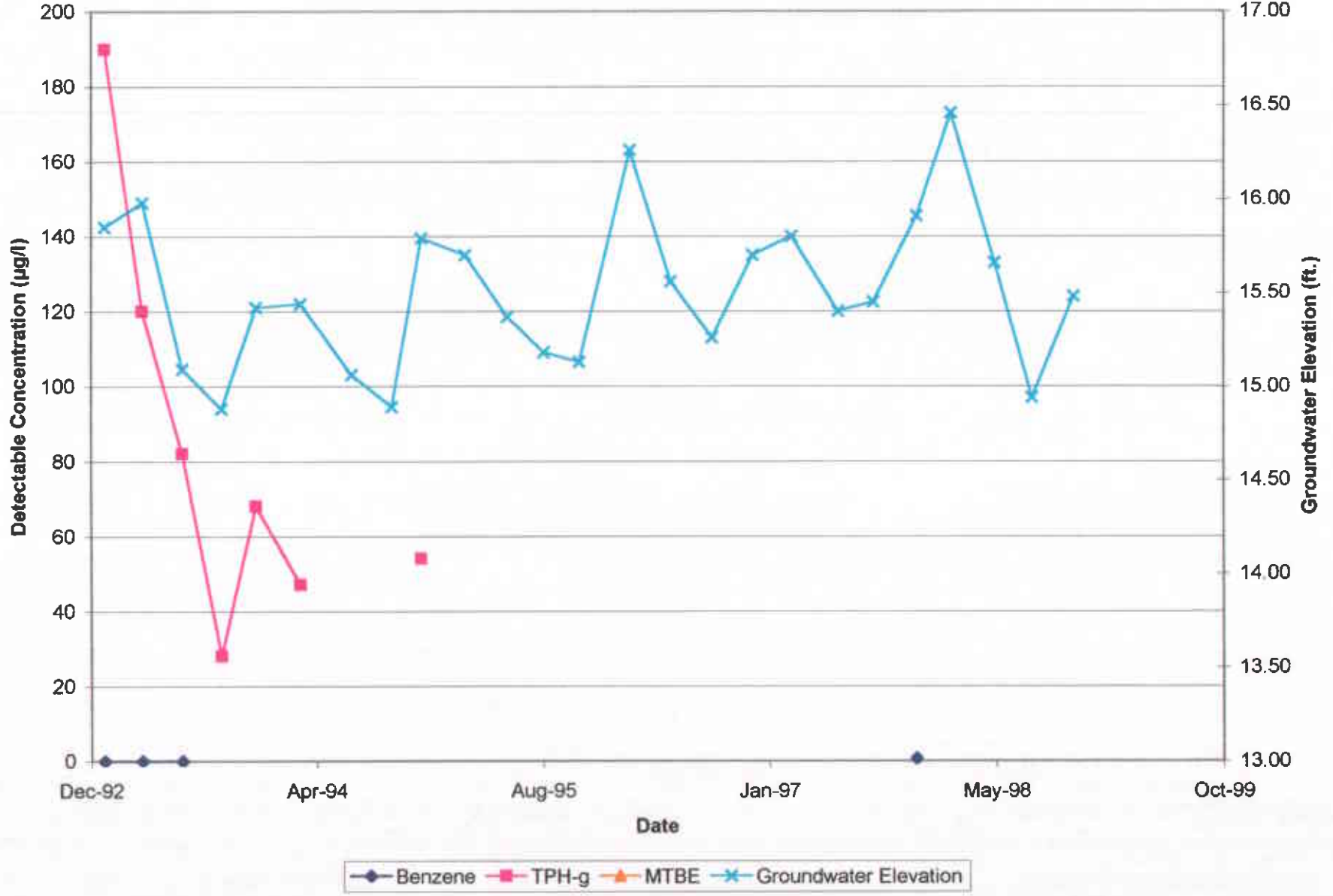
Graph 1, MW-1  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



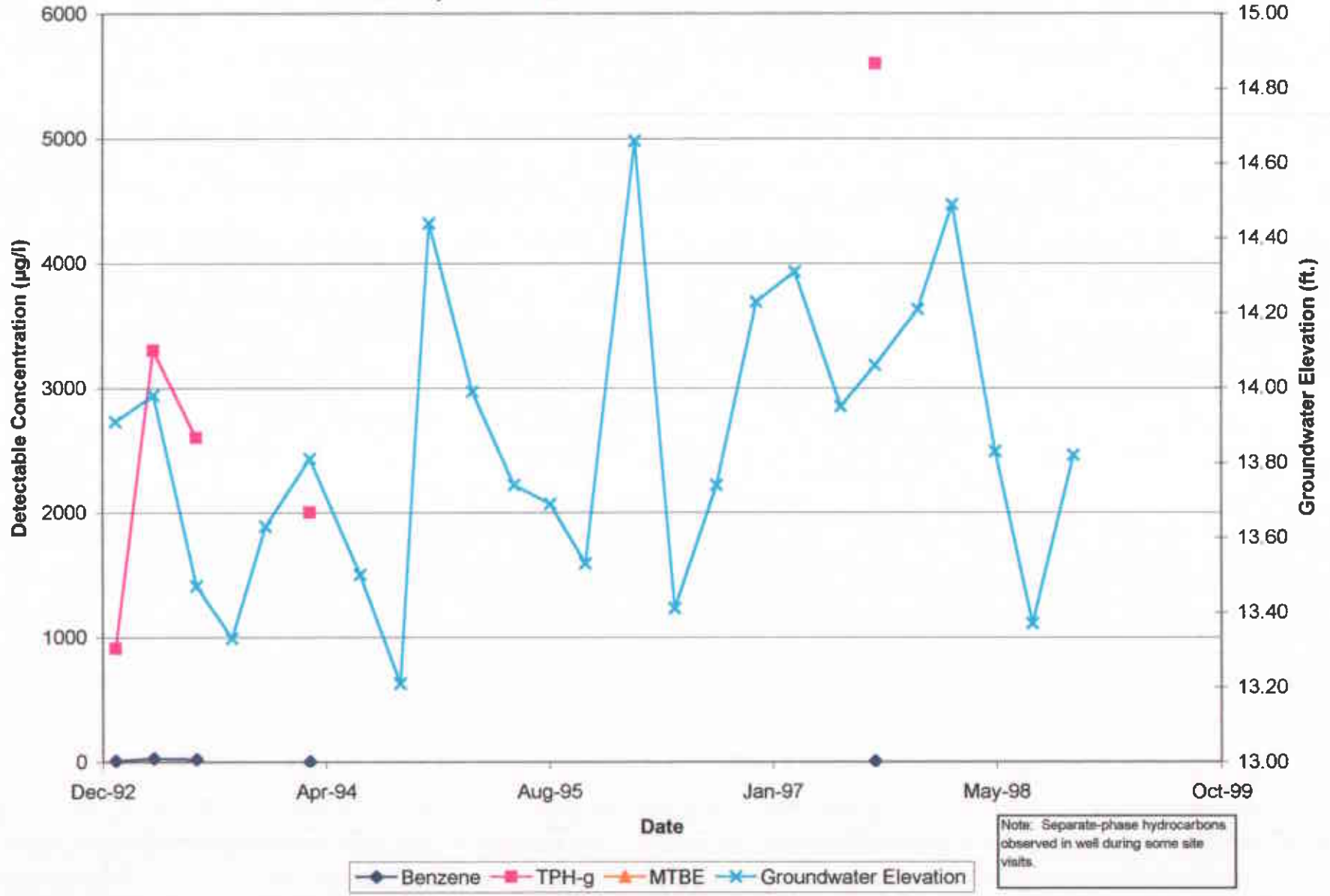
Graph 2, MW-2  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



Graph 3, MW-3  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

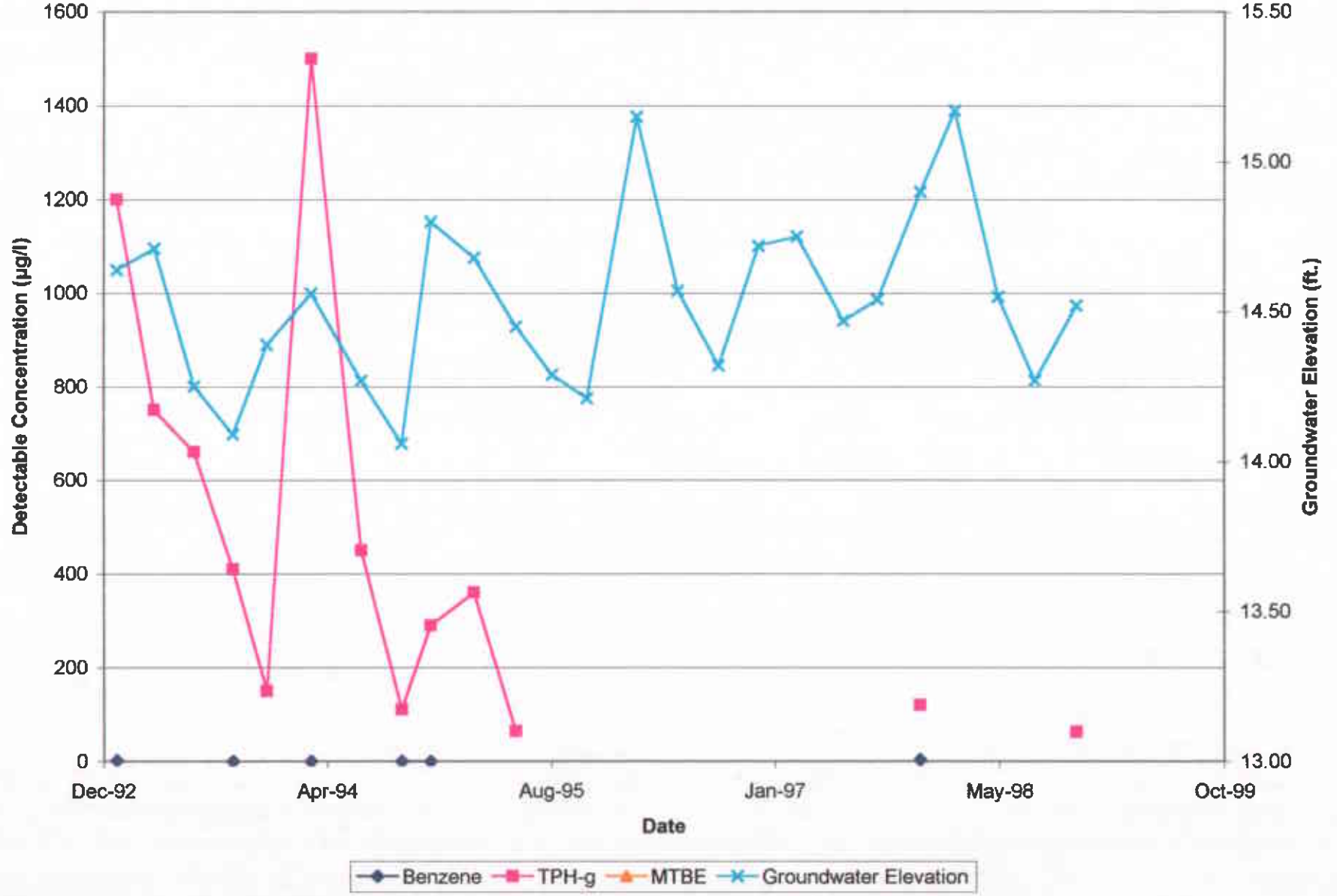
Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time





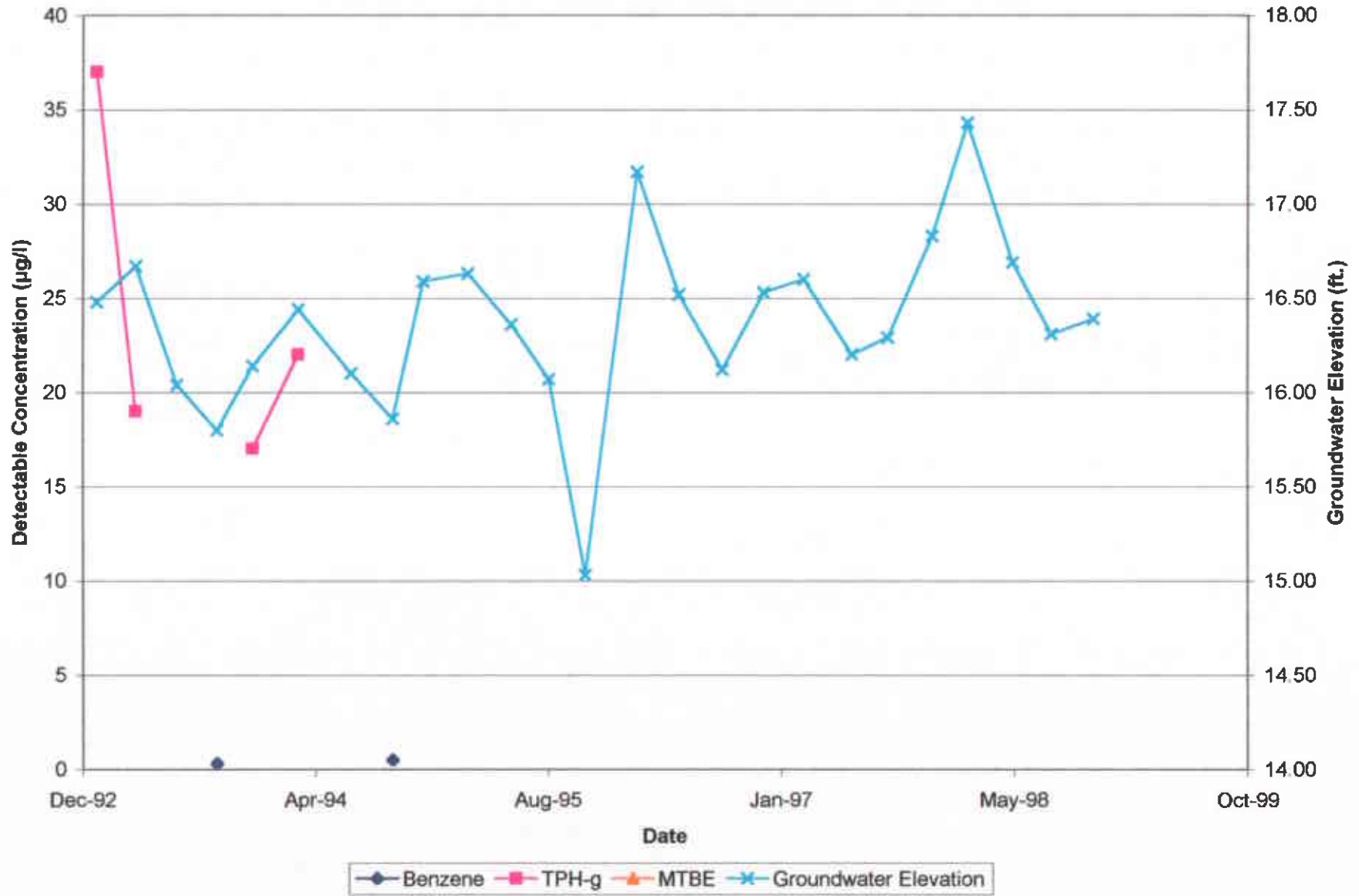
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Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



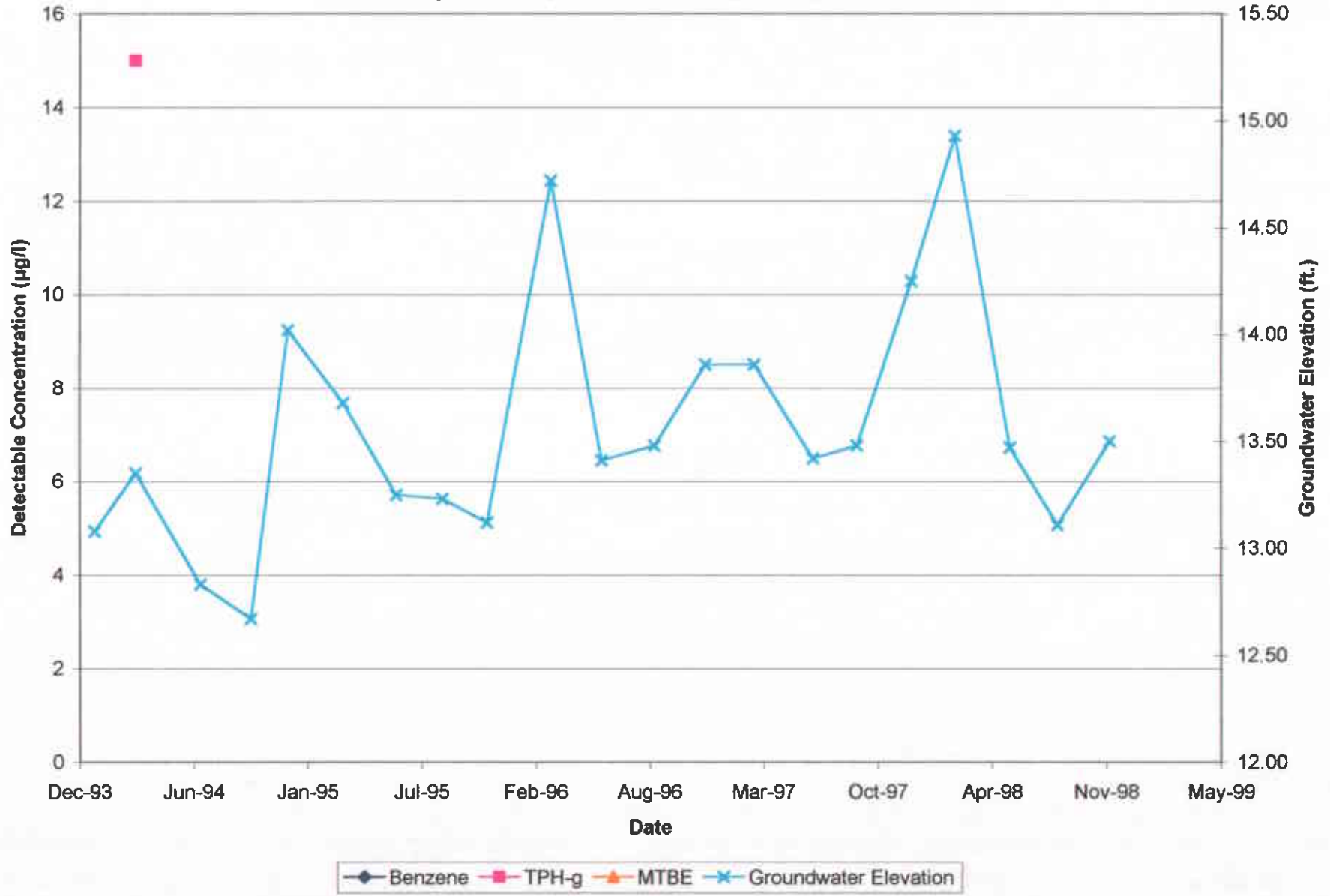
Graph 5, MW-5  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



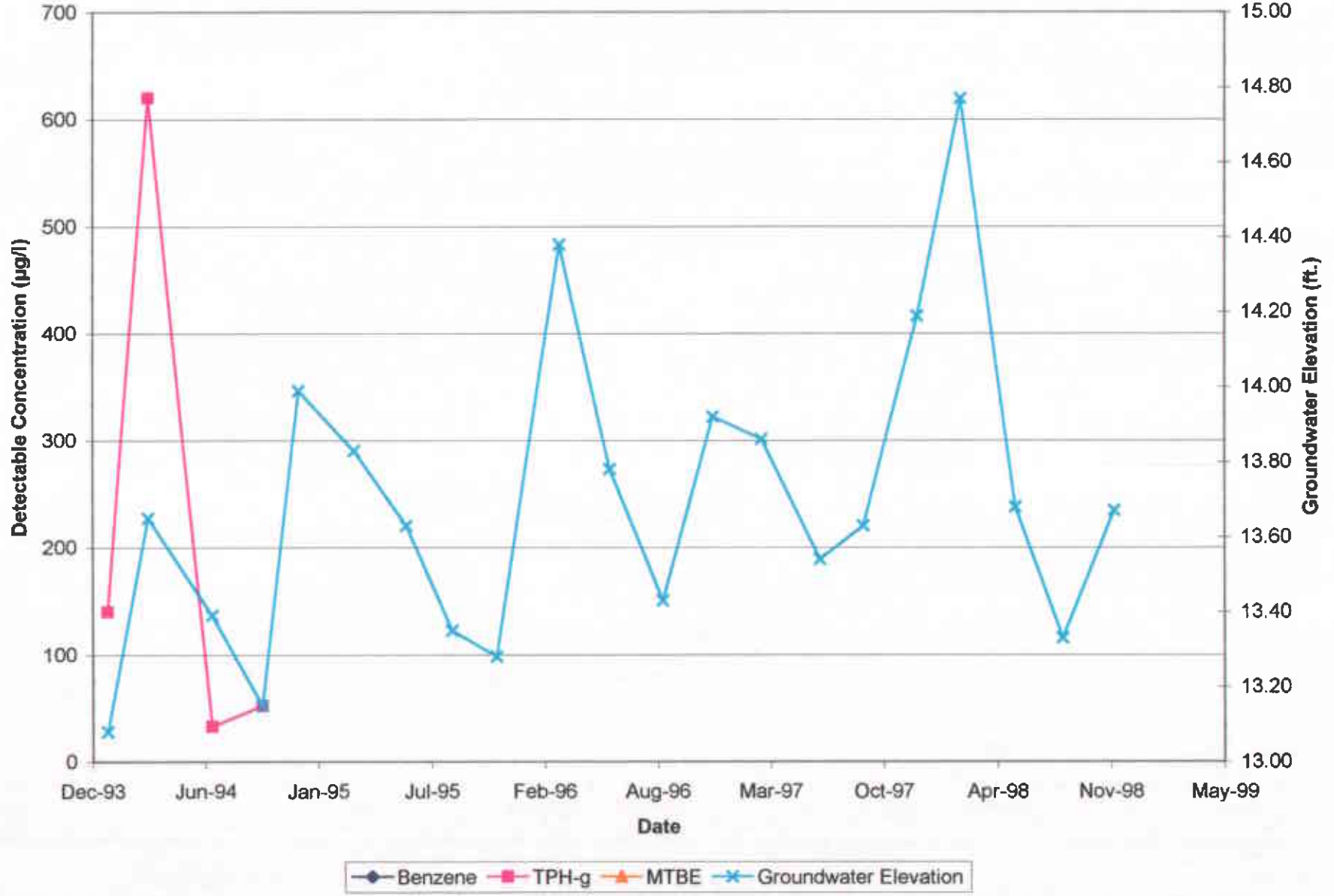
Graph 6, MW-6  
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Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



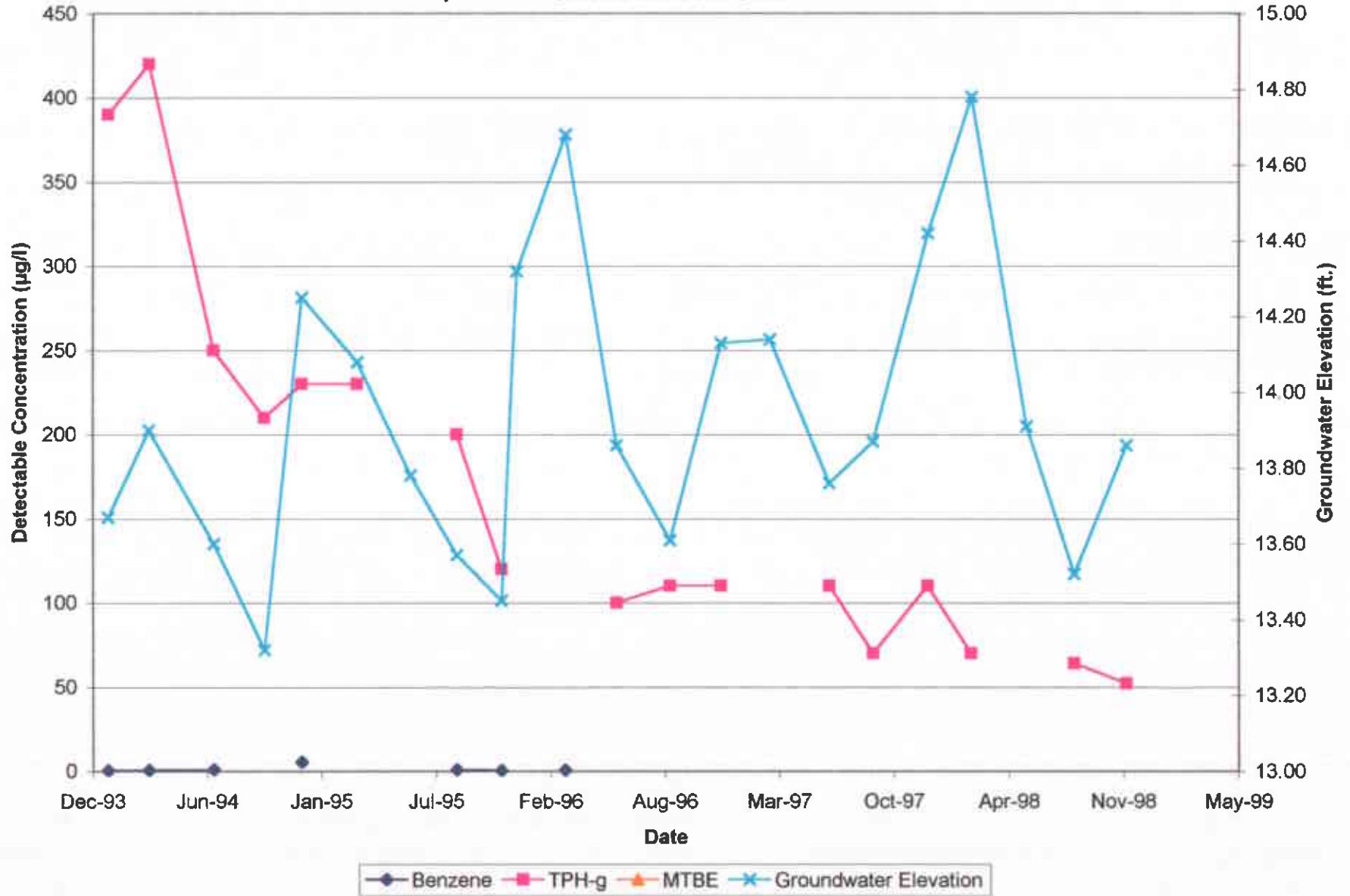
Graph 7, MW-7  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



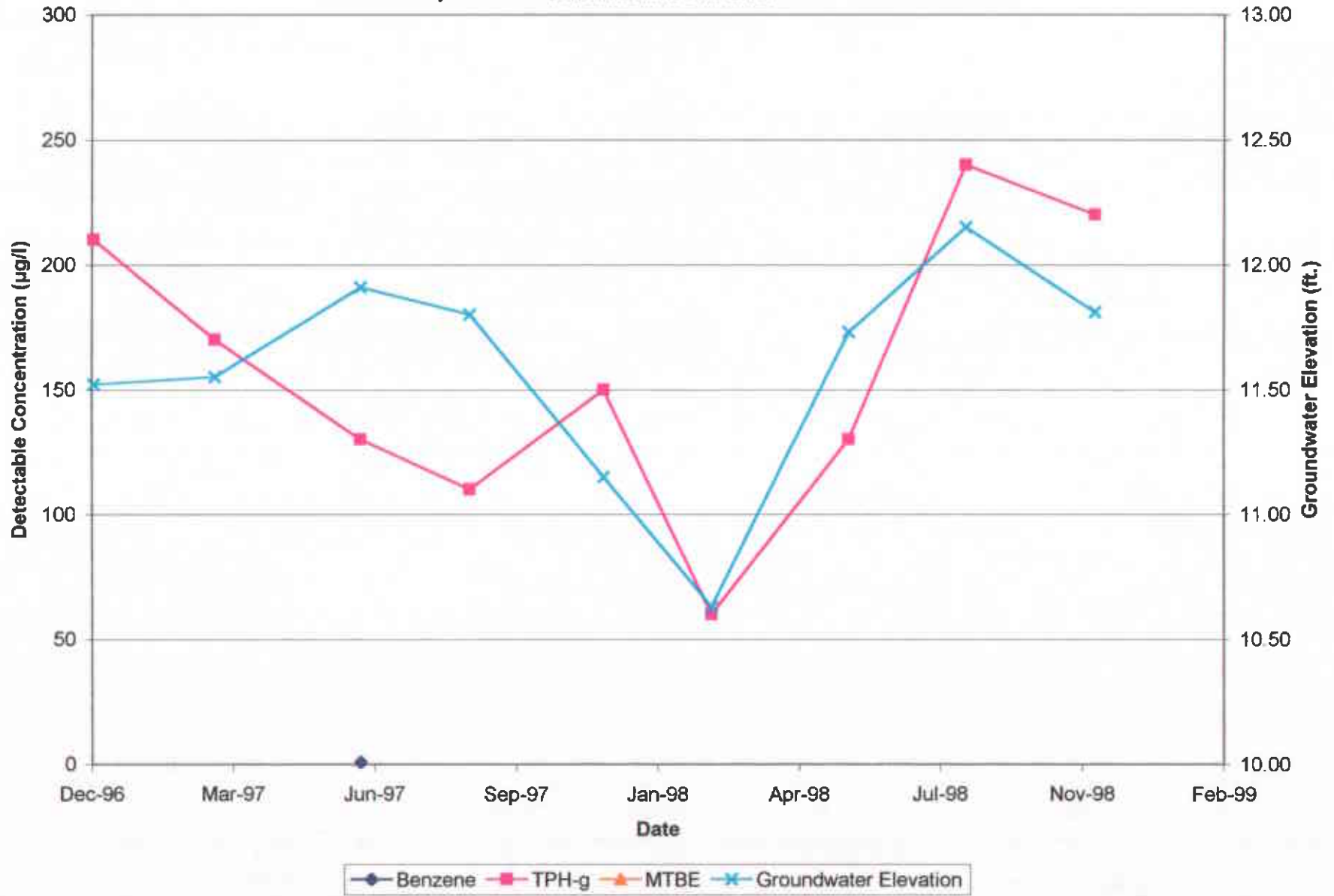
Graph 8, MW-8  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



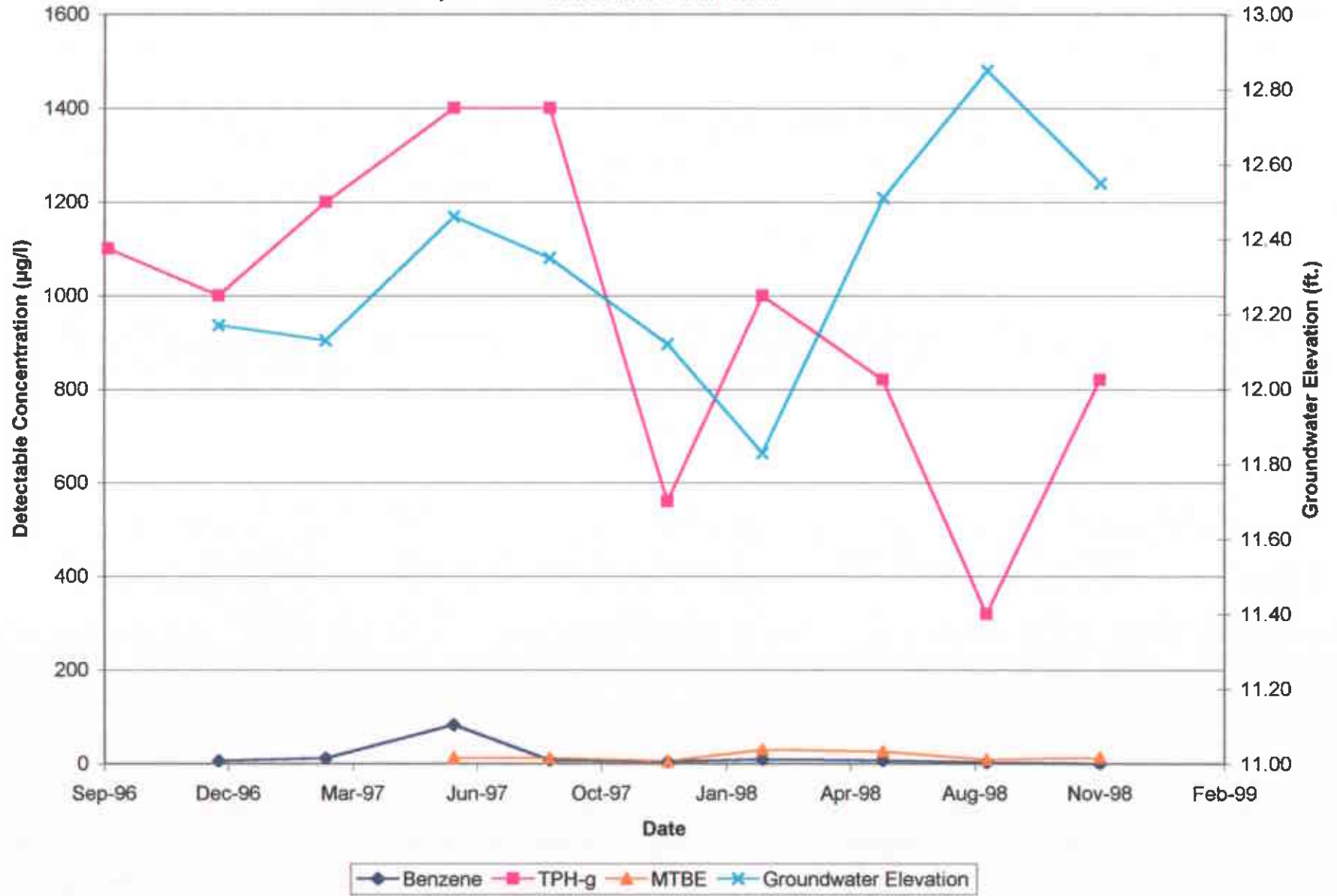
Graph 9, MW-9  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



Graph 10, EW-1  
Sears Store No. 1058, 2633 Telegraph Avenue  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



**Attachment 5**

**Laboratory Reports and Chain-of-Custody Documents**





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(925) 988-9600  
(916) 921-9600  
(707) 792-1865

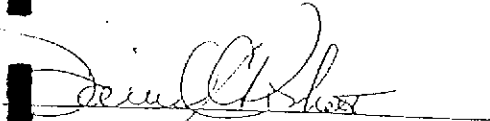
FAX (650) 364-9233  
FAX (925) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553 Attention: Melissa Gossell	Client Proj. ID: SEARS #1058 Telegraph Lab Proj. ID: 9811732	Received: 11/11/98 Reported: 11/30/98
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**LABORATORY NARRATIVE**

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 19 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL



David A. Pichette  
Project Manager





Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553

Client Proj. ID: SEARS #1058 Telegraph  
Sample Descript: MW-9  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9811732-01

Sampled: 11/10/98  
Received: 11/11/98  
Extracted: 11/20/98  
Analyzed: 11/24/98  
Reported: 11/30/98

Attention: Melissa Gossell

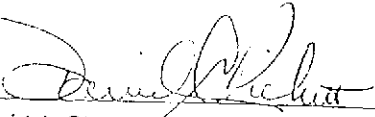
QC Batch Number: 8110361

**Fuel Fingerprint : Motor Oil**

Analyte	Detection Limit mg/L	Sample Results mg/L
Extractable HC as Motor Oil Chromatogram Pattern:	0.25	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50 150	102

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
David A. Pichotte  
Project Manager





Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553 Attention: Melissa Gossett	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9811732-02	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/20/98 Analyzed: 11/25/98 Reported: 11/30/98
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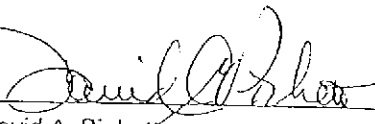
QC Batch Number: 8110361

**Fuel Fingerprint : Motor Oil**

Analyte	Detection Limit mg/L	Sample Results mg/L
Extractable HC as Motor Oil Chromatogram Pattern:	0.25	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	93

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
David A. Pichette  
Project Manager





Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553 Attention: Melissa Gossell	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811732-02	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 11/30/98
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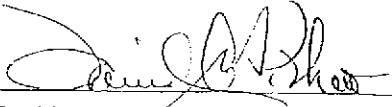
QC Batch Number: 8110310

**Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	150
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gasoline
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
David A. Pichette  
Project Manager





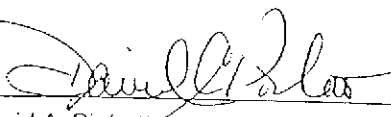
Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553 Attention: Melissa Gossell QC Batch Number: 8110361	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: MW-8 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9811732-03	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/20/98 Analyzed: 11/25/98 Reported: 11/30/98
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Fuel Fingerprint : Motor Oil

Analyte	Detection Limit mg/L	Sample Results mg/L
Extractable HC as Motor Oil Chromatogram Pattern:	0.25	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50                      150	% Recovery 107

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
 David A. Pichette  
 Project Manager





Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553

Client Proj. ID: SEARS #1058 Telegraph  
Sample Descript: MW-8  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9811732-03

Sampled: 11/10/98  
Received: 11/11/98  
Extracted: 11/18/98  
Analyzed: 11/18/98  
Reported: 11/30/98

Attention: Melissa Gossell

QC Batch Number: 8110310

**Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	52
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gasoline
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
		109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



David A. Pichette  
Project Manager





Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9811732-04	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/20/98 Analyzed: 11/25/98 Reported: 11/30/98
Attention: Melissa Gossell		
QC Batch Number: 8110361		

**Fuel Fingerprint : Motor Oil**

Analyte	Detection Limit mg/L	Sample Results mg/L
Extractable HC as Motor Oil Chromatogram Pattern:	0.25	0.82 Motor oil
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette  
Project Manager





Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553

Client Proj. ID: SEARS #1058 Telegraph  
Sample Descript: MW-2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9811732-04

Sampled: 11/10/98  
Received: 11/11/98  
Extracted: 11/18/98  
Analyzed: 11/18/98  
Reported: 11/30/98

Attention: Melissa Gossell

QC Batch Number: 8110315

**Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:	0.50	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	95

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette  
Project Manager







Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9811732-05	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/20/98 Analyzed: 11/25/98 Reported: 11/30/98
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QC Batch Number: 8110361

**Fuel Fingerprint : Motor Oil**

Analyte	Detection Limit mg/L	Sample Results mg/L
Extractable HC as Motor Oil Chromatogram Pattern:	0.25	0.61 Motor oil
Surrogates n-Pentacosane (C25)	Control Limits % 50                      150	% Recovery 72

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



David A. Pichette  
Project Manager



Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811732-05	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 11/30/98
QC Batch Number: 8110315		

**Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	62
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		N.D.
		Gasoline
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 - 130	105

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette  
Project Manager





Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: EW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9811732-06	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/20/98 Analyzed: 11/25/98 Reported: 11/30/98
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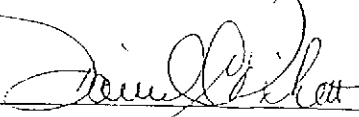
QC Batch Number: 8110361

**Fuel Fingerprint : Motor Oil**

Analyte	Detection Limit mg/L	Sample Results mg/L
Extractable HC as Motor Oil Chromatogram Pattern:	0.25	2.9 Motor oil
Surrogates n-Pentacosane (C25)	Control Limits % 50                      150	% Recovery 84

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
\_\_\_\_\_  
David A. Pichette  
Project Manager





Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: EW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811732-06	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 11/30/98
Attention: Melissa Gossell		
QC Batch Number: 8110315		

**Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	820
Methyl t-Butyl Ether	2.5	13
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		0.75
		Gasoline
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
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Petaluma, CA 94954

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(925) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (925) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553

Client Proj. ID: SEARS #1058 Telegraph  
Sample Descript: DUP MW-4  
Matrix: LIQUID  
Analysis Method: EPA 8020  
Lab Number: 9811732-07

Sampled: 11/10/98  
Received: 11/11/98  
Extracted: 11/18/98  
Analyzed: 11/18/98  
Reported: 11/30/98

QC Batch Number: 8110315

### Analyte

Detection Limit  
ug/L

Sample Results  
ug/L

Benzene  
Toluene  
Ethyl benzene  
Xylenes (Total)

0.50  
0.50  
0.50  
0.50

N.D.  
N.D.  
N.D.  
N.D.

### Surrogates

Trifluorotoluene

Control Limits %  
70 130

% Recovery  
104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette  
Project Manager





# Sequoia Analytical

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FAX (650) 364-9233  
FAX (925) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: SEARS #1058 Telegraph Sample Descript: TBLB Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9811732-08	Sampled: 11/10/98 Received: 11/11/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 11/30/98
Attention: Melissa Gossett		
QC Batch Number: 8110315		

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70                      130	102

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette  
Project Manager





Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553  
Attention: Melissa Gossell

Client Project ID: SEARS #1058 Telegraph  
Matrix: LIQUID

Work Order #: 9811732

Reported: Nov 30, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	8110310	8110310	8110310	8110310
Analy. Method:	EPA 8015M/8020M	EPA 8015M/8020M	EPA 8015M/8020M	EPA 8015M/8020M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyt:	Benzene	Toluene	Ethyl Benzene	Xylenes
Analyst:	-	-	-	-
MS/MSD #:	P811193-10	P811193-10	P811193-10	P811193-10
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/18/98	11/18/98	11/18/98	11/18/98
Analyzed Date:	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
Result:	118	108	105	320
MS % Recovery:	113	107	105	106
Dup. Result:	105	96.5	94.2	283
MSD % Recov.:	99.8	95.8	94.2	94
RPD:	11.7	11.2	10.8	12.3
RPD Limit:	0-5	0-6	0-4	0-5

LCS #:	LCS111898	LCS111898	LCS111898	LCS111898
Prepared Date:	11/18/98	11/18/98	11/18/98	11/18/98
Analyzed Date:	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
LCS Result:	110	103	101	310
LCS % Recov.:	110	103	101	103

MS/MSD	82-119	80-117	66-125	73-119
LCS	84-116	81-117	79-115	80-114
Control Limits				

SEQUOIA ANALYTICAL  
Elap #2245

David A. Pichette  
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553  
Attention: Melissa Gossell

Client Project ID: SEARS #1058 Telegraph  
Matrix: LIQUID

Work Order #: 9811732

Reported: Nov 30, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	8110315	8110315	8110315	8110315
Analy. Method:	EPA 8015M/8020M	EPA 8015M/8020M	EPA 8015M/8020M	EPA 8015M/8020M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	-	-	-	-
MS/MSD #:	P811197-02	P811197-02	P811197-02	P811197-02
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/18/98	11/18/98	11/18/98	11/18/98
Analyzed Date:	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
Result:	96.4	97.5	102	298
MS % Recovery:	96.4	90.6	92.3	90.2
Dup. Result:	106	107	107	321
MSD % Recov.:	106	100	97.3	97.8
RPD:	9.49	9.29	4.78	7.43
RPD Limit:	0-5	0-6	0-4	0-5

LCS #:	LCS111898	LCS111898	LCS111898	LCS111898
Prepared Date:	11/18/98	11/18/98	11/18/98	11/18/98
Analyzed Date:	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
LCS Result:	102	101	101	309
LCS % Recov.:	102	101	101	103

MS/MSD	82-119	80-117	66-125	73-119
LCS	84-116	81-117	79-115	80-114
Control Limits				

SEQUOIA ANALYTICAL  
Etap #2245

*David A. Pichette*  
David A. Pichette  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553  
Attention: Melissa Gossell

Client Project ID: SEARS #1058 Telegraph  
Matrix: LIQUID

Work Order #: 9811732

Reported: Nov 30, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Diesel
QC Batch#:	8110361
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3520B

Analyst: -  
LCS/LCSD #: P811289  
Sample Conc.: N.D.  
Prepared Date: 11/20/98  
Analyzed Date: 11/24/98  
Instrument I.D.#: -  
Conc. Spiked: 1.0 mg/L

Result: 0.949  
LCS % Recovery: 94.9

Dup. Result: 0.936  
LCSD % Recov.: 93.6

RPD: 1.38  
RPD Limit: 0.35

MS/MSD	28-138
LCS	28-138
Control Limits	

SEQUOIA ANALYTICAL  
Elap #2245

*David A. Pichette*  
David A. Pichette  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9811732.FFF <3>





# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

981113

Company Name: <u>FLUORDANIEL GT 1</u>		Project Name: <u>SEARS #1058 TELEGRAPH</u>	
Address: <u>757 ARNOLD DR. SUITED</u>		Billing Address (if different):	
City: <u>MARTINEZ</u>	State: <u>CA</u>	Zip Code: <u>94553</u>	<u>103232, 030543</u>
Telephone: <u>(925) 370-3990</u>	FAX: <u>(925) 370-3991</u>	P.O. #:	
Report To: <u>MELISSA GOSSELL</u>	Sampler: <u>HECTOR MERINO</u>	QC Data: <input type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A	

Turnaround  10 Working Days  3 Working Days  2 - 8 Hours  
 Time:  7 Working Days  2 Working Days  AS CONTRACTED  5 Working Days  24 Hours

Drinking Water  
 Waste Water  
 Other

Analyses Requested

BTEX IONES TOX-10  
 TPH IONES  
 BTEX 8/200

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested										Comments				
X 1. NW-9	11 12:30	GW	5	40ML GLASS	01	X	X													
✓ 2. NW-1	12:40		5		02	X	X													
✓ 3. NW-8	12:50		5		03	X	X													
X 4. MW-2	10 3:00		5		04	X	X													NO II B
✓ X 5. MW-4	13:10		5		05	X	X													
✓ X 6. EW-1	13:25		5		06	X	X													
✓ X 7. DUP MW4	13:2		3	40ML	07	X	X													
X 8. TBLB	11 8	DI	1		08			X												
9.																				
10.																				

Relinquished By: <u>[Signature]</u>	Date: <u>11/11/98</u>	Time: <u>163</u>	Received By: <u>[Signature]</u>	Date: <u>11-11-98</u>	Time: <u>163</u>
Relinquished By: <u>[Signature]</u>	Date: <u>11-11-98</u>	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: <u>Lab Jones</u>	Date: <u>11-11-98</u>	Time: <u>1810</u>