

5010/1630 R147

99 JAN 15 AM 10:45  
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:

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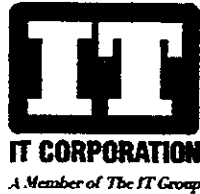
Comments:

We are sending you herewith the Fourth Quarter 1998 Groundwater Monitoring and Sampling Report dated January 15, 1999, for the Sears Store No. 1039 located at 1911 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*  
 \_\_\_\_\_  
 Ned Borglin  
 Staff Scientist

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



ST. D 1630

January 15, 1999

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

99 JAN 15 AM 10:45  
ENVIRONMENTAL  
PROTECTION

Subject: Fourth Quarter 1998, Groundwater Monitoring and Sampling Report  
Sears 1039; 1911 Telegraph Avenue, Oakland, California  
IT Corporation Project 103231

Dear Mr. Klettke:

On behalf of Sears, Roebuck and Co., IT Corporation (formerly Fluor Daniel GTI, Inc.), presents the quarterly groundwater monitoring and sampling data collected on November 9, 1998, from the above referenced site. The seven 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 not detected in the monitoring wells. A potentiometric surface map is provided in attachment 1, figure 1. A summary of monitoring data is provided in attachment 2, table 1.

After measuring depth to water, all monitoring wells were purged and sampled. Groundwater monitoring and sample collection protocol and field data sheets are provided in attachment 3. The groundwater samples were analyzed for dissolved benzene, toluene, ethylbenzene and total xylenes (BTEX), methyl tert-butyl ether (MTBE), and total petroleum hydrocarbons as gasoline (TPH-g) using EPA Methods 8020/8015 modified, and halogenated hydrocarbons using EPA Method 8010. Additionally, wells MW-4 and MW-6 were analyzed for total oil and grease (SM5520 C&F).

Static groundwater elevations for the fourth quarter 1998 ranged from 76.38 to 77.71 feet above mean sea level. Groundwater elevations have decreased by 0.6 foot since third quarter 1998 (August 10, 1998). The apparent groundwater flow is to the east at an average hydraulic gradient of 0.01 ft/ft, and is consistent with previous quarterly data.

Results of quarterly sampling indicated detectable concentrations of BTEX and TPH-g in monitoring wells MW-2, MW-4, MW-5, and MW-7. MTBE was present in monitoring wells MW-1, and MW-7. Monitoring wells MW-1, MW-2, MW-3, MW-6, and MW-7 contained detectable concentrations of halogenated volatile organics. A summary of the groundwater analytical results is provided in attachment 2, table 2. A distribution map of dissolved benzene, TPH-g, and MTBE concentrations is

provided in attachment 1, figure 2. Hydrographs and detectable concentrations versus time data are illustrated in graphs 1 through 7 (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.


A site assessment performed in September 1998 indicated that the on-site plume has not migrated to the downgradient portion of the site and/or off-site. The hydrocarbon plume will need to be addressed and a feasibility study report will be prepared. Based on the data from the fourth quarter 1998 groundwater sampling event, continued monitoring of the on-site dissolved-phase plume will be conducted.

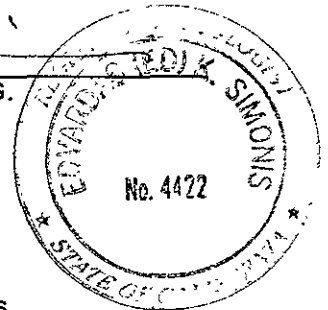
If you have comments or questions, please contact me at (925) 370-3990 extension 266.

Sincerely,  
IT CORPORATION  
Submitted by:

  
Melissa Gossell  
West Zone Project Manager

IT CORPORATION  
Approved by:

  
Ed K. Simonis, R.G.  
Senior Geologist

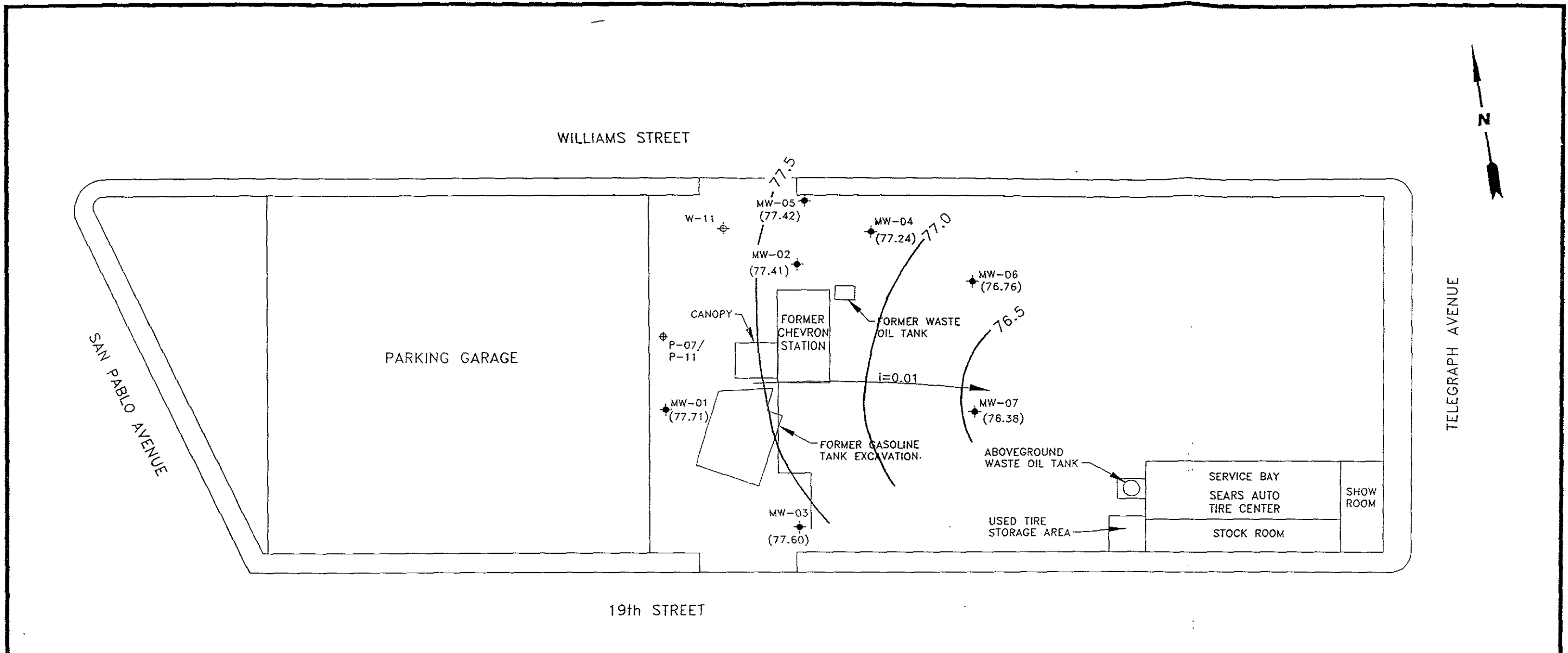


Attachments:



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

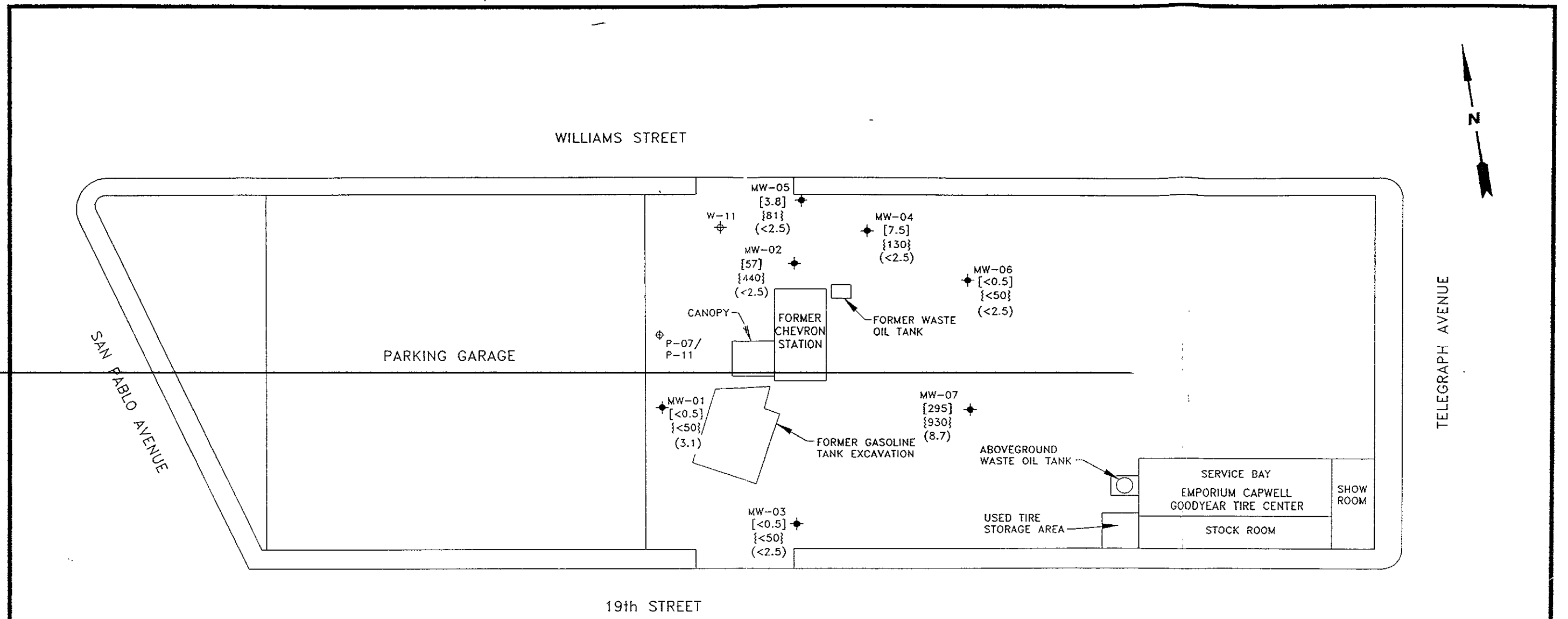
**Attachment 1**

**Figures**




- LEGEND**
- ◆ MONITORING WELL
  - ⊕ SOIL PROBE
  - ( ) POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL)
  - POTENTIOMETRIC SURFACE CONTOUR; INTERVAL = 0.5 FT
  - ← GROUNDWATER FLOW DIRECTION AND  
 $i=0.01$  AVERAGE GRADIENT (ft/ft)

<b>FLUOR DANIEL GTI</b> 			
<b>POTENTIOMETRIC SURFACE MAP (GAUGED 11/9/98)</b>			
CLIENT:		SEARS, ROEBUCK & CO. SITE NO. 1039	
LOCATION:		1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	
ACAD FILE:	PSMN998	PROJECT NO.:	103231
REV.:	1		
DES.:	BP	DET.:	ML
DATE:	12/1/98		FIGURE:
PM:	PE/RG:		<b>1</b>



**LEGEND**

- ◆ MONITORING WELL
- ⊕ SOIL PROBE
- [ ] BENZENE CONCENTRATION [ug/l]
- { } TPH-AS-GASOLINE CONCENTRATIONS {ug/l}
- ( ) METHYL TERT-BUTYL ETHER (MTBE) CONCENTRATIONS (ug/l)

<b>FLUOR DANIEL GTI</b> 		0 FEET 50 SCALE	
<b>CONCENTRATIONS OF BENZENE, TPH-AS-GASOLINE &amp; MTBE IN GROUNDWATER (SAMPLED 11/9/98)</b>			
CLIENT:		SEARS, ROEBUCK & CO. SITE NO. 1039	
LOCATION:		1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	
ACAD FILE:	TPHN998	PROJECT NO.:	103231
REV.:	1		
DES.:	BP	DET.:	ML
DATE:	12/5/98		FIGURE:
PM:	PE/RG:		2

**Attachment 2**

**Tables**

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

Sears Store 1039  
 1911 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
MW-1	94.34	06/12/96	16.21	-	-	78.13
		09/05/96	16.89	-	-	77.45
		12/03/96	17.07	-	-	77.27
		02/27/97	15.55	-	-	78.79
		06/10/97	16.46	-	-	77.88
		08/27/97	16.97	-	-	77.37
		11/26/97	17.24	-	-	77.10
		02/11/98	16.07	-	-	78.27
		05/19/98	15.43	-	-	78.91
		08/10/98	15.98	-	-	78.36
		11/09/98	16.63	-	-	77.71
MW-2	93.94	06/12/96	16.01	-	-	77.93
		09/05/96	16.66	-	-	77.28
		12/03/96	16.20	-	-	77.74
		02/27/97	14.46	-	-	79.48
		06/10/97	14.00	-	-	79.94
		08/27/97	16.55	-	-	77.39
		11/26/97	16.86	-	-	77.08
		02/11/98	15.85	-	-	78.09
		05/19/98	15.32	-	-	78.62
		08/10/98	15.82	-	-	78.12
		11/09/98	16.53	-	-	77.41
MW-3	95.67	06/12/96	17.56	-	-	78.10
		09/05/96	18.32	-	-	77.35
		12/03/96	18.57	-	-	77.10
		02/27/97	17.43	-	-	78.24
		06/10/97	18.12	-	-	77.55
		08/27/97	18.47	-	-	77.20
		11/26/97	18.70	-	-	76.97
		02/11/98	17.76	-	-	77.91
		05/19/98	16.99	-	-	78.68
		08/10/98	17.51	-	-	78.16
		11/09/98	18.07	-	-	77.60
MW-4	91.99	06/12/96	14.21	-	-	77.78
		09/05/96	14.83	-	-	77.16
		12/03/96	13.99	-	-	78.00
		02/27/97	12.44	-	-	79.55
		06/10/97	14.20	-	-	77.79
		08/27/97	14.62	-	-	77.37
		11/26/97	15.00	-	-	76.99



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

Sears Store 1039  
 1911 Telegraph Avenue, Oakland, California

Well ID	Casing Elev.	Date	Depth to Water	Depth to Product	Product Thickness	Groundwater Elev.
MW-4		02/11/98	14.10	--	--	77.89
		05/19/98	13.57	--	--	78.42
		08/10/98	14.10	--	--	77.89
		11/09/98	14.75	--	--	77.24
MW-5	92.09	06/12/96	14.13	--	--	77.96
		09/05/96	14.77	--	--	77.32
		12/03/96	13.99	--	--	78.10
		02/27/97	12.08	--	--	80.01
		06/10/97	16.00	--	--	76.09
		08/27/97	14.55	--	--	77.54
		11/26/97	14.95	--	--	77.14
		02/11/98	13.97	--	--	78.12
		05/19/98	13.52	--	--	78.57
		08/10/98	13.97	--	--	78.12
		11/09/98	14.67	--	--	77.42
MW-6	92.15	06/12/96	14.99	--	--	77.16
		09/05/96	15.50	--	--	76.65
		12/03/96	15.07	--	--	77.08
		02/27/97	14.14	--	--	78.01
		06/10/97	15.30	--	--	76.85
		08/27/97	15.42	--	--	76.73
		11/26/97	15.70	--	--	76.45
		02/11/98	14.87	--	--	77.28
		05/19/98	14.32	--	--	77.83
		08/10/98	14.90	--	--	77.25
		11/09/98	15.39	--	--	76.76
MW-7	93.36	06/12/96	16.56	--	--	76.80
		09/05/96	17.10	--	--	76.26
		12/03/96	17.12	--	--	76.24
		02/27/97	16.20	--	--	77.16
		06/10/97	17.00	--	--	76.36
		08/27/97	17.18	--	--	76.18
		11/26/97	17.40	--	--	75.96
		02/11/98	16.65	--	--	76.71
		05/19/98	15.96	--	--	77.40
		08/10/98	16.48	--	--	76.88
		11/09/98	16.98	--	--	76.38

**Notes:**

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

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

Sears Store 1039  
 1911 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	MTBE	Benzene	Toulene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TCE	1,2-DCA	cis-1,2 DCE	1,1-DCE	OIL/ GREASE	PCE
MW-1	10/01/95	--	ND	ND	ND	ND	<50	ND	ND	--	--	--	9.9
	01/01/96	--	ND	ND	ND	ND	<50	14	ND	--	--	--	9.9
	06/12/96	--	<0.5	1.4	<0.5	<2	<50	<0.5	<0.5	--	--	--	12
	09/05/96	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	--	--	--	12
	12/03/96	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5
	02/27/97	<5.0	<0.5	<0.5	<0.5	<2	<50	1.3	<0.5	<0.5	<0.5	--	31
	06/10/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	19
	08/27/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	16
	11/26/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	17
	02/11/98	<5.0	<0.5	<0.5	<0.5	<3	<50	<0.5	<0.5	<0.5	<0.5	--	20
	05/19/98	<5.0	<0.5	<0.5	<0.5	<4	<50	<0.5	<0.5	<0.5	<0.5	--	14
08/10/98	<2.5	<0.5	<0.5	<0.5	<5	<50	<0.5	<0.5	<0.5	<0.5	--	14	
11/09/98	3.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	16	
MW-2	10/01/95	--	1,200	5.4	41	5.9	2,900	40	280	--	--	--	ND
	01/01/96	--	1,100	11.0	100	6.9	780	38	270	--	--	--	ND
	06/12/96	--	890	7.0	56	10	3,600	40	160	--	--	--	<3
	09/05/96	<5.0	350	3.0	17	10	2,100	29	55	1.9	55	--	<0.5
	12/03/96	40	230	2.4	7.8	7	1,100	20	86	7	<0.5	--	<0.5
	02/27/97	12	210	2.2	6	3	1,000	25	43	<0.5	<0.5	--	0.8
	06/10/97	<30	510	3.0	6	<10	1.8	19	47	4.9	<0.5	--	1
	08/27/97	11	51	<0.5	1.4	<2	450	16	29	4.2	<0.5	--	0.5
	11/26/97	<30	380	5.0	9	12	1,200	13	29	3.1	<0.5	--	0.6
	02/11/98	8	310	4.0	9.8	9	1,100	16	<0.5	2.6	0.6	--	<0.5
	05/19/98	20	320	2.1	9.9	8	1,200	14	47	1.6	<0.5	--	0.5
08/10/98	40	37	1.0	1.2	0.9	300	11	30	2.4	<0.5	--	<0.5	
11/09/98	<2.5	57	<0.5	1.7	<0.5	440	12	25	2.3	<0.5	--	<0.5	
MW-3	10/01/95	--	ND	ND	ND	ND	<50	ND	ND	--	--	--	ND
	01/01/96	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	06/12/96	--	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	--	--	<0.5	<0.5
	09/05/96	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	--	--	<0.5	<0.5
	12/03/96	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	2.3
	02/27/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	6.3
	06/10/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	5.9
	08/27/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	5.8
	11/26/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	7.9
	02/11/98	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	7.9
	05/19/98	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	5.5
08/10/98	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	
11/09/98	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	5.5	

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

Sears Store 1039  
 1911 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	MTBE	Benzene	Toulene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TCE	1,2-DCA	cis-1,2 DCE	1,1-DCE	OIL/GREASE	PCE
MW-4	10/01/95	--	4.1	ND	ND	ND	<50	ND	ND	--	--	--	ND
	01/01/96	--	5.8	ND	ND	ND	<50	ND	ND	--	--	--	ND
	06/12/96	--	11	<0.5	<0.5	<2	320	<0.5	<0.5	--	--	<0.5	<0.5
	09/05/96	--	5.6	<0.5	<0.5	<2	70	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/96	15	11	<0.5	<0.5	<2	270	<0.5	0.9	<0.5	<0.5	<0.5	<0.5
	02/27/97	<5.0	3.1	<0.5	<0.5	<2	190	<0.5	<0.5	<0.5	<0.5	<500	<0.5
	06/10/97	<5.0	11	<0.5	<0.5	<2	200	<0.5	<0.5	<0.5	<0.5	--	<0.5
	08/27/97	<5.0	9.6	<0.5	<0.5	<2	170	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/26/97	<5.0	6.7	<0.5	<0.5	<2	100	<0.5	<0.5	<0.5	<0.5	<500	<0.5
	02/11/98	<5.0	8.4	<0.5	<0.5	<2	110	<0.5	<0.5	<0.5	<0.5	<500	<0.5
	05/19/98	7	4.6	<0.5	<0.5	<2	110	<0.5	<0.5	<0.5	<0.5	<500	<0.5
	08/10/98	11	4.1	<0.5	<0.5	<2	110	<0.5	<0.5	<0.5	<0.5	9,600	<0.5
11/09/98	<2.5	7.5	<0.5	<0.5	<2	130	<0.5	<0.5	<0.5	<0.5	<500	<0.5	
MW-5	10/01/95	--	86	ND	ND	ND	260	ND	ND	--	--	--	ND
	01/01/96	--	160	3.6	ND	ND	180	ND	ND	--	--	--	ND
	06/12/96	--	54	1.1	<0.5	<2	260	<0.5	<0.5	--	--	--	<0.5
	09/05/96	<5.0	22	1.0	<0.5	<2	160	<0.5	<0.5	--	--	--	<0.5
	12/03/96	6	18	0.6	<0.5	<2	170	<0.5	<0.5	<0.5	<0.5	--	<0.5
	02/27/97	<5	74	2.0	<0.5	<2	230	<0.5	<0.5	<0.5	<0.5	--	<0.5
	06/10/97	<30	490	19.0	<3.0	<10	1,200	<0.5	<0.5	<0.5	<0.5	--	<0.5
	08/27/97	<5.0	100	4.6	<0.5	<2	340	<0.5	<0.5	<0.5	<0.5	--	<0.5
	11/26/97	<5.0	78	4.5	0.6	<2	400	<0.5	<0.5	<0.5	<0.5	--	<0.5
	02/11/98	<5.0	62	2.9	<0.5	<2	320	<0.5	<0.5	<0.5	<0.5	--	<0.5
	05/19/98	<5.0	97	2.6	<0.5	<2	330	<0.5	<0.5	<0.5	<0.5	--	<0.5
	08/10/98	11	48	1.9	<0.5	<2	190	<0.5	<0.5	<0.5	<0.5	--	<0.5
11/09/98	<2.5	3.8	<0.5	<0.5	<2	81	<0.5	<0.5	<0.5	<0.5	--	<0.5	
MW-6	10/01/95	--	ND	ND	ND	ND	<50	11	33	--	--	--	6.2
	01/01/96	--	ND	ND	ND	ND	<50	12	5.3	--	--	--	7.2
	06/12/96	--	<0.5	<0.5	<0.5	<2	<50	5	7.9	--	--	<0.5	3.6
	09/05/96	<5	0.8	<0.5	<0.5	<2	<50	5.2	7.5	--	--	<0.5	5.4
	12/03/96	<5	<0.5	<0.5	<0.5	<2	<50	0.6	0.5	<0.5	<0.5	<0.5	0.9
	02/27/97	<5	<0.5	<0.5	<0.5	<2	<50	0.5	<0.5	<0.5	<0.5	<500	1.3
	06/10/97	<5	0.9	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	1
	08/27/97	<5	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.9
	11/26/97	7.6	15	0.9	9.1	<2	320	0.6	0.8	<0.5	<0.5	<500	1.2
	02/11/98	<5	<0.5	<0.5	<0.5	<2	<50	<0.5	0.5	<0.5	<0.5	<500	0.7
	05/19/98	<5	0.6	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	<500	0.6
	08/10/98	<2.5	<0.5	<0.5	<0.5	<2	<50	0.59	1.3	<0.5	<0.5	9,000	0.5
	11/09/98	<2.5	<0.5	<0.5	<0.5	<2	<50	0.92	1.7	<0.5	<0.5	<500	1.2

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

Sears Store 1039  
1911 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	MTBE	Benzene	Toulene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TCE	1,2-DCA	cis-1,2 DCE	1,1-DCE	OIL/GREASE	PCE
MW-7	10/01/95	--	ND	ND	ND	ND	<50	3.5	8.3	--	--	--	5.3
	01/01/96	--	ND	ND	ND	ND	<50	4.8	5.7	--	--	--	9.3
	06/12/96	--	0.6	<0.5	<0.5	<2	<50	3.4	2.9	--	--	--	6.1
	09/05/96	<5	1.2	<0.5	<0.5	<2	<50	4.2	5.9	--	--	--	8.3
	12/03/96	<5	850	<5	<5	30	120	4	75	<3	<3	<0.5	4
	02/27/97	<30	1500	3.0	23	<10	2,500	4	65	<0.5	<0.5	--	2.2
	06/10/97	<50	1700	<5	59	<20	3,200	4.2	85	<0.5	<0.5	--	2.2
	08/27/97	90	1700	8.0	200	40	3,900	5	93	<3	<3	--	<3
	11/26/97	90	3,100	15.0	190	30	5,600	5.9	120	1	<0.5	--	2.9
	02/11/98	90	3,800	25.0	250	80	8,500	8.9	93	1.2	<0.5	--	4
	05/19/98	300	2,100	440.0	150	220	5,000	3.8	74	0.6	<0.5	--	1.5
	08/10/98	<50	690	<10	13	<10	1,600	3.3	100	<2.5	<2.5	--	<2.5
	11/09/98	8.7	295	5.5	4.3	1.5	930	6.5	110	<2.5	<2.5	--	4.2

Notes: Historical data before June 1996 as reported by previous consultants

- = No datum for the cell, including "not analyzed for this constituent"
- < = Compound was not detected above the laboratory reporting limits.
- TPH = Total petroleum hydrocarbons
- ND = Non-detectable (Detection limits for each metal are listed in laboratory reports included in Attachment 4.)
- PCE = Tetrachloroethene
- 1,2 DCA = 1,2 Dichloroethane
- TCE = Trichloroethene
- MTBE = Methyl tert-Butyl ether
- cis 1,2-DC = CIS-1,2-Dichloroethene
- 1,1-DCE = 1,1 Dichloroethene

**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 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, 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: 103231.00  
 Site: SEARS/1039/Oakland, CA  
 Project Mgr: Melissa Gossell

Technician: H. Merino  
 Scheduled: 11/09/98  
 Site Mgr: B. Pierksalla

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

Haz).

5. Submit samples to Sequioa Analytical in Redwood City, ph. # (650) 364-9600, to be analyzed for BTEX/MTBE/TPH-G (EPA Method 8020/8015M), and chlorinated hydrocarbons (EPA method 8010). Wells MW-4 and MW-6 additionally analyze for Oil and Grease (C/F).

6. COMPLETED ALL THREE PAGES OF WASTE INVENTORY FORM?  IF NO, EXPLAIN \_\_\_\_\_

Hours Estimated	5.00	Hours Used	6.00
-----------------	------	------------	------

FINAL CHECKS

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

WASTE COMPLIANCE: # of Drums w/: Water 3, Soil \_\_\_\_\_, Empty \_\_\_\_\_, Other \_\_\_\_\_

DRUMS labeled? NA/Y/N Gen. Date: \_\_\_\_\_ Label Type: \_\_\_\_\_

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

TECHNICIAN'S COMMENTS

Six hours total. 1 hr travel.  
Monitored & sampled all wells & drums total on site.

Total Hours Estimated	5.00	Total Hours Used	
Travel Time Estimated	1.00	Travel Time Used	

H. Merino

SITE VISIT FORM  
Fluor Daniel GTI - Martinez, California

Project: 103231.00  
Site: SEARS/1039/Oakland, CA  
Project Mgr: Melissa Gossell

Technician: H. MECINO  
Scheduled: 11/09/98  
Site Mgr: B. Pierksalla

PREPARATORY COMMENTS

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

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

Job # and task #

GROUNDWATER SAMPLING - Task Nr: 030543 [Quarterly]

SITE ADDRESS: 1911 Telegraph Avenue, Oakland, CA

cc: Melissa Gossell, Ned Borglin

NOTIFY: Jennie Pinocci 48 hrs. in advance (510) 444-7662. (She will insure that wells are not covered) 11/6/98 @ 8:45 J. Ellinger

Notify Tom Peacock 72 hrs. in advance (510) 567-6782. DONE: 11/5/98 @ 8:05 Melissa Gossell

During any sampling activities, a minimum work zone will be defined by 10 ft by 10 ft square centered around the monitor well and marked with 36" -high orange traffic cones with flag poles and flag 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.

1. Monitor and sample seven (7) wells in the following order: MW-3, MW-1, MW-6, MW-4, MW-5, MW-2 and MW-7. USE DISPOSABLE BAILERS.
2. Purge each well of 3 well volumes or until dry. Record pH, temp conductivity data.
3. Collect one trip blank and one duplicate from MW-2 and submit for BTEX- 8020 only. Pick up or have trip blank delivered from lab. Must use lab trip (Sequoia Analytical).
4. Make a complete drum count and note the general condition of the site, wells and drums. Keep drum area tidy. Label drums properly (Non



**SITE VISIT FORM  
FLUOR DANIEL GTI**

Project: Sears/1039/Oakland  
Store #: 1039, 1911 Telegraph Ave.  
Project Manager: Melissa Gossell

Technician:  
Schedule:  
Job No. 103231.030543

**WELL WATER SAMPLING - TASK Nr: 030543 [QUARTERLY]**

Gauge wells for volume of water & bail 3 well Vol.s. DECON  
all equipment & change gloves, string, etc. between each well.

Well ID

MW-1:	DTB_24.25	DTW <u>16.63</u>	SAT. THICK ___	#GAL. BAILED ___
MW-2:	DTB_24.10	DTW <u>16.53</u>	SAT. THICK ___	#GAL. BAILED ___
MW-3:	DTB_27.75	DTW <u>18.07</u>	SAT. THICK ___	#GAL. BAILED ___
MW-4:	DTB_23.55	DTW <u>14.75</u>	SAT. THICK ___	#GAL. BAILED ___
MW-5:	DTB_25.10	DTW <u>14.67</u>	SAT. THICK ___	#GAL. BAILED ___
MW-6:	DTB_26.75	DTW <u>15.39</u>	SAT. THICK ___	#GAL. BAILED ___
MW-7:	DTB_26.20	DTW <u>16.98</u>	SAT. THICK ___	#GAL. BAILED ___

NOTES:

Monitored and Sampled all wells, 4 drums  
total on site

HOURS ESTIMATED:

HOURS USED:

FINAL CHECKS

Are Wells Locked? YES NO Why Not?

Are Manholes Bolted Down? YES NO Why Not?

**SITE VISIT FORM  
FLUOR DANIELGTI**

Project: Sears/1039/Oakland  
Store #: 1039, 1911 Telegraph Ave.  
Project Manager: Melissa Gossell

Technician:  
Schedule:  
Job No. 103231.030543

TECHNICIAN'S COMMENTS


TOTAL HOURS ESTIMATED:

HOURS USED:

TRAVEL TIME ESTIMATED:

TRAVEL TIME USED:

\_\_\_\_\_  
TECHNICIAN

**BULK MATERIAL INVENTORY FORM**

Store Number 1039 Address/City/State/ZIP OAKLAND CA.

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

Fluor Daniel GTI Representative H MERINO

Accumulation Start Date 11-9-98 Completion Date 11-9-98

Exact Bulk Storage Location ~~6200~~ NEXT TO DUMPSTER SEARS AUTO CENTER

CONTAMINANTS	SOIL (Cu Yds)	DEBRIS (Cu Yds)	LIQUID (Gallons)
GASOLINE			
FUEL OIL			
HYDRAULIC FLUID			
USED OIL			
CHLORINATED SOLVENT:			
NON-CHLORINATED SOLVENT:			
OTHER: <u>Soil, Grease</u>	<u>55 GALLONS</u>		
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>

Store Number 10-39

Address/City/State/ZIP OAKLAND CA.

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

Fluor Daniel GTI Representative D. MERINO

Accumulation Start Date 11-9-98

Completion Date: 11-9-98

Exact Drum Storage Location GARAGE

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>3</u>	<u>C1D1E</u>	<u>O or B</u>	<u>H / N / U</u>	<u>WARETOP, 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	<u>1</u>		<u>O or B</u>	<u>H / N / U</u>	<u>4</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 1039 City/State OAKLAND CA.

Fluor Daniel GTI Representative ALMERINO

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	10-8-98	soil/geoplates	geoplate HLES	SOIL	55
C	8-10-98	WATER	GW WELLS	NO	55
D	8-10-98	WATER	GW WELLS	NO	55
E	11-11-98	WATER	GW WELLS	NO	55

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!

DRUM A NEXT TO SEARS AUTO CENTER, NEXT TO 19TH ST.





Well ID: MW-6  
 Well Diameter: 2

DTW Measurements:  
 Initial: 15.39 Calc Well Volume: 1.8 gal  
 Recharge: \_\_\_\_\_ Well Volume: X355 gal  
 DTB: 26.75

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

Time	Temp	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
	<u>X</u> C F					
11:40	19.7	0.65	6.75	1	CLOUDY	BROWN
11:41	19.7	0.64	6.75	2	↓	↓
11:42	21.5	1.37	6.53	3	↓	↓ DAY @ 3 GALLONS
				4		
				5		





Well ID: MW 5  
 Well Diameter: 2

DTW Measurements:  
 Initial: 14.67 Calc Well Volume: 1.7 gal  
 Recharge: \_\_\_\_\_ Well Volume: 3.51 gal  
 DTB: 25.10

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

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

Time	Temp <u>X</u> C F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
12:10	22.5	2.07	6.79	1	cloudy	
12:11	22.3	2.18	6.88	2	↓	
12:12	22.3	2.34	6.86	3	↓	DRY @ 3 Gallons
				4		
				5		



Well ID: MW-7  
 Well Diameter: 2

DTW Measurements:  
 Initial: 16.98 Calc Well Volume: 15 gal  
 Recharge: \_\_\_\_\_ Well Volume: x3 4.5 gal  
 DTB: 2620

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

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

Time	Temp <u>Y</u> C F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
12:48	22.2	2.20	6.46	1	CLOUDY	
12:49	22.0	1.52	6.48	2	↓	
				3		
				4		
				5		





# 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

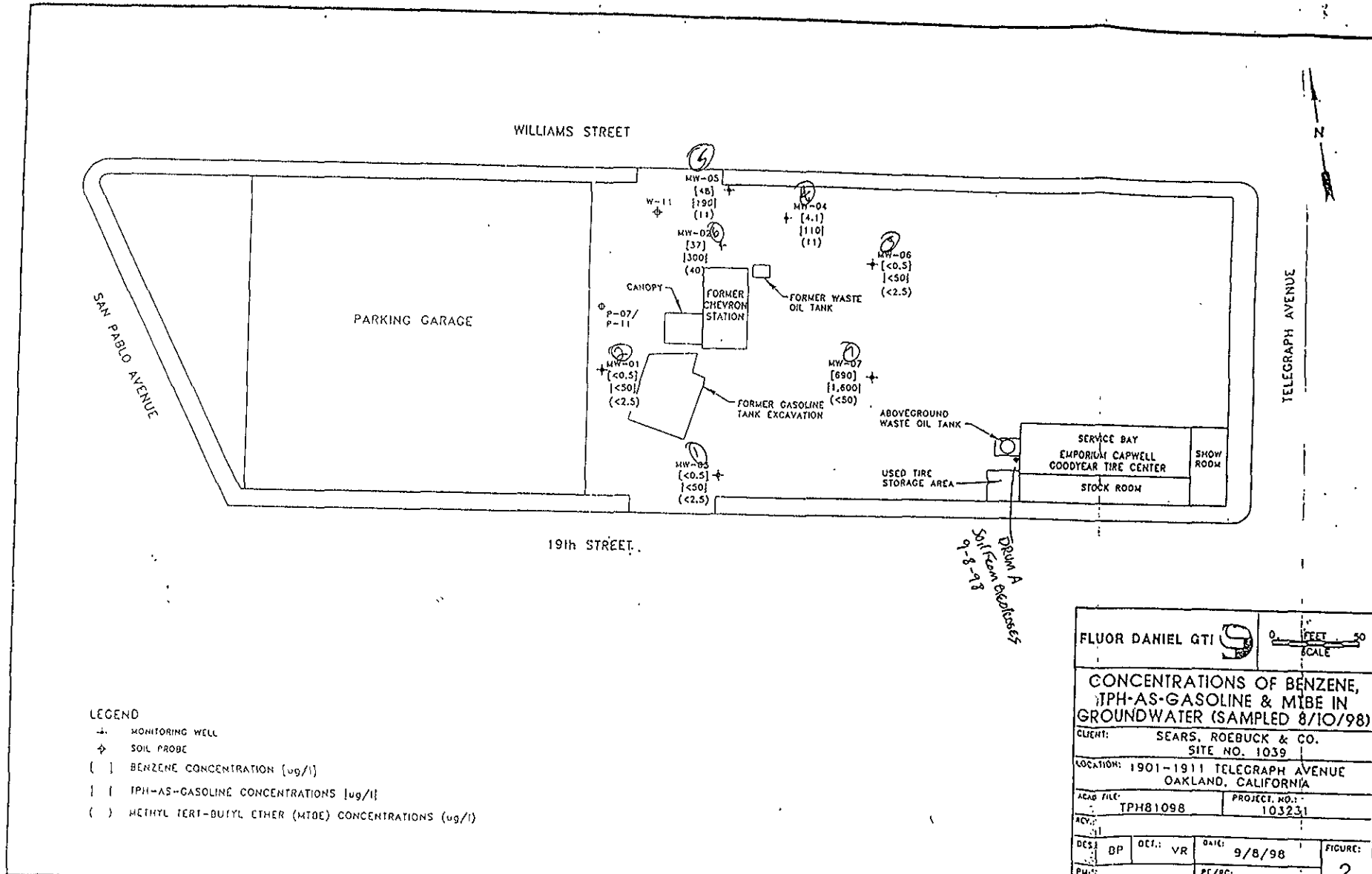
Company Name: FLUOR DANIEL GTI Project Name: SEARS/1039/OAKLAND  
 Address: 75.7 ARNOLD DR. SUITED Billing Address (if different):  
 City: MARTINEZ State: CA Zip Code: 94553 103231, 030543  
 Telephone: (925) 370-3990 FAX # (925) 370-3991 P.O. #:  
 Report To: MELISSA GOSSEL Sampler: H MERINO QC Data:  Level D (Standard)  Level C  Level B  Level A

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

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested										Comments		
1. NW-3	11/13:00	GW	6	40ML		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											
2. NW-1	11/13:10		6	↓		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											
3. NW-6	11/13:20		8	40ML		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
4. NW-4	11/13:30		8	↓		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
5. NW-5	11/13:40		6	40ML		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											
6. NW-2	11/13:50		6	↓		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											
7. NW-7	11/14:00		6	↓		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											
8. DUP 2	11/13:52	↓	3	↓														
9. TBLB		DI	1	↓														
10.																		

Relinquished By: <u>[Signature]</u>	Date: <u>11/10/98</u>	Time: <u>3:30p</u>	Received By: <u>[Signature]</u>	Date: <u>11/10/98</u>	Time: <u>3:30p</u>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By Lab: _____	Date: _____	Time: _____



FLUOR DANIEL GTI			
<b>CONCENTRATIONS OF BENZENE, TPH-AS-GASOLINE &amp; MIBE IN GROUNDWATER (SAMPLED 8/10/98)</b>			
CLIENT:		SEARS, ROEBUCK & CO.	
		SITE NO. 1039	
LOCATION: 1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA			
ACAD FILE:	PROJECT NO.:		
TPH81098	103231		
DCS:	BP	DEF.: VR	DATE: 9/8/98
PHYS:		PC/AC:	FIGURE: 2

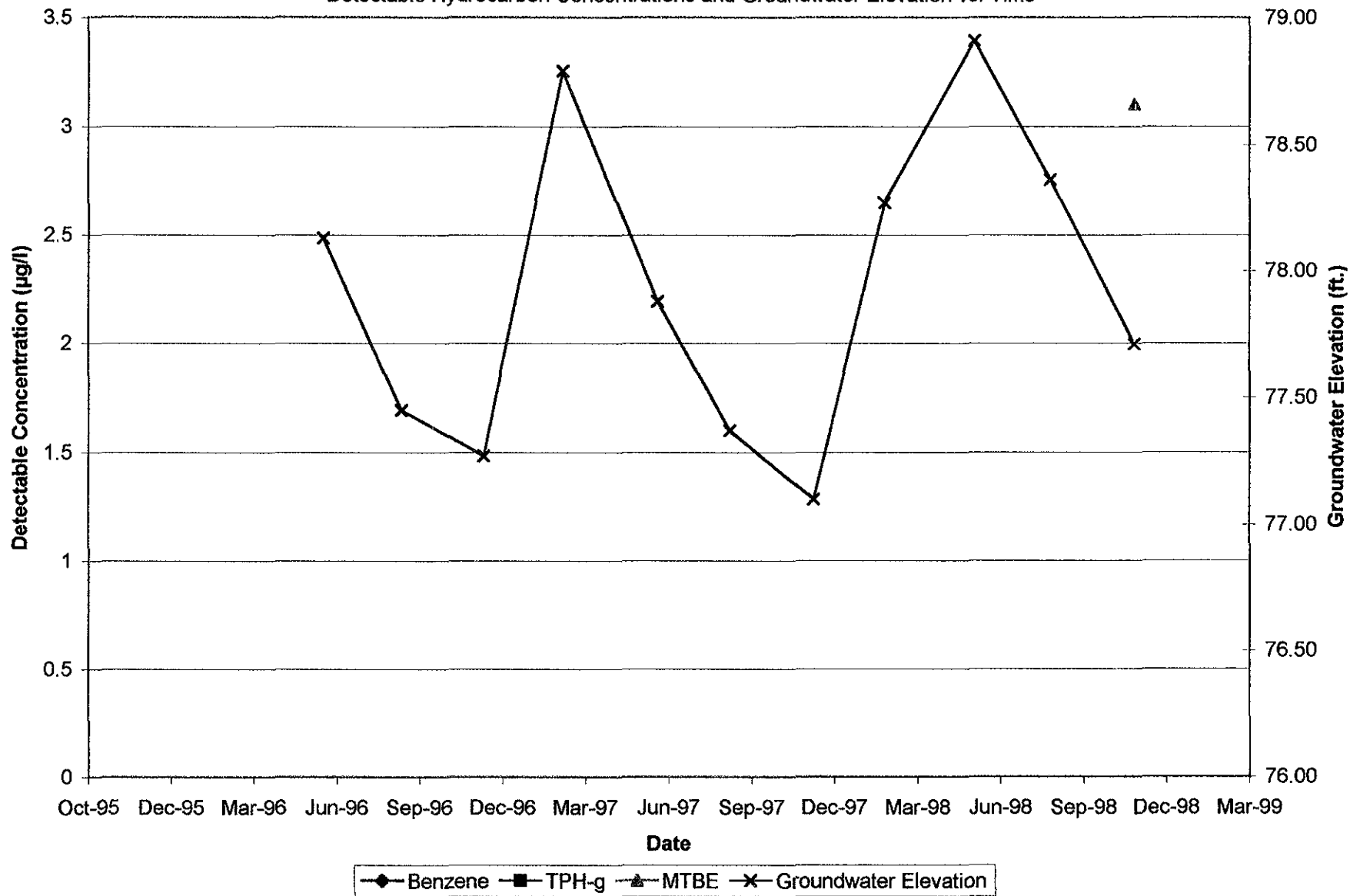
**Attachment 4**

**Graphs**



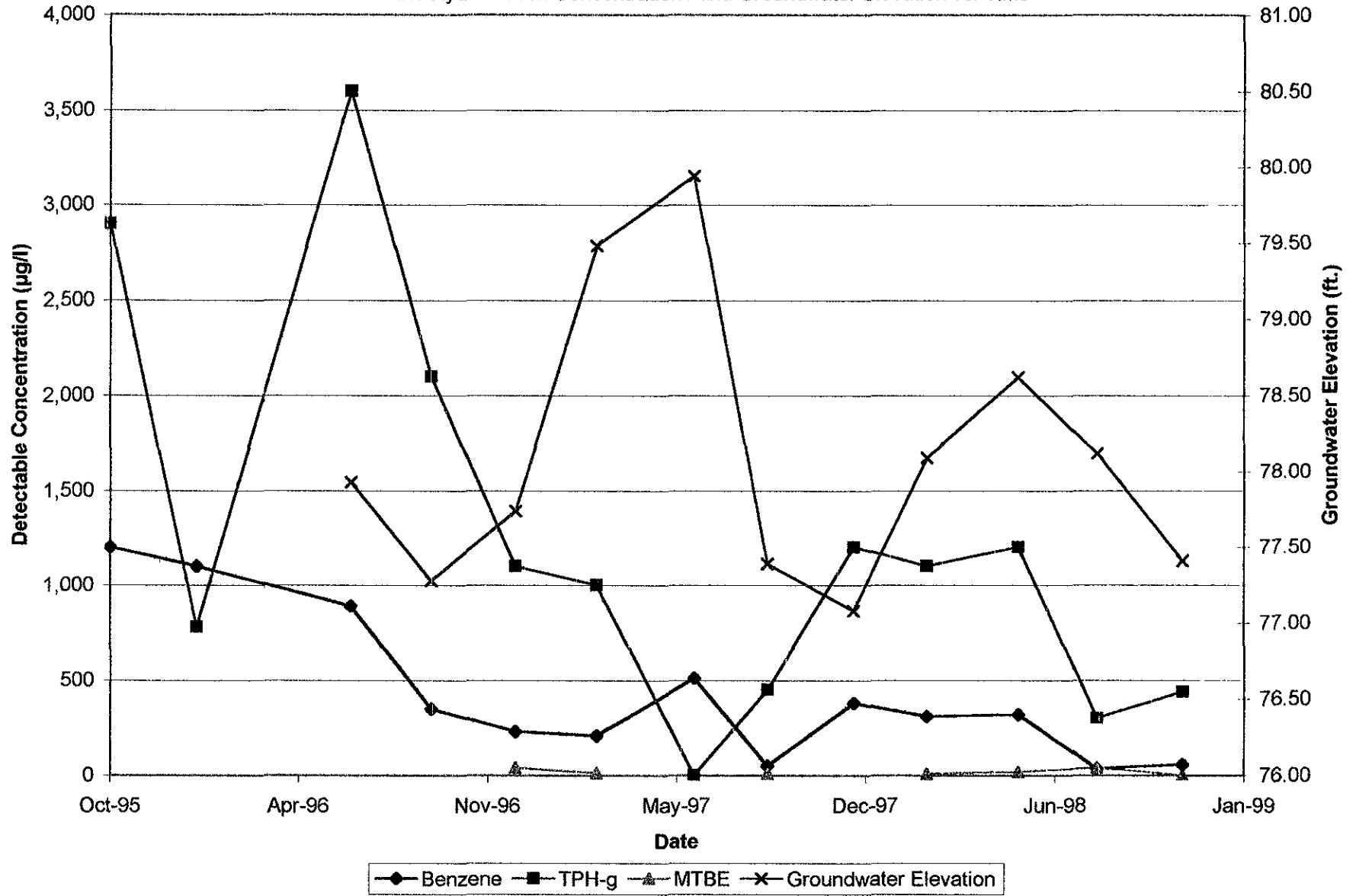
Graph 1, MW-1  
Sears Store No. 1039, 1911 Telegraph Avenue,  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



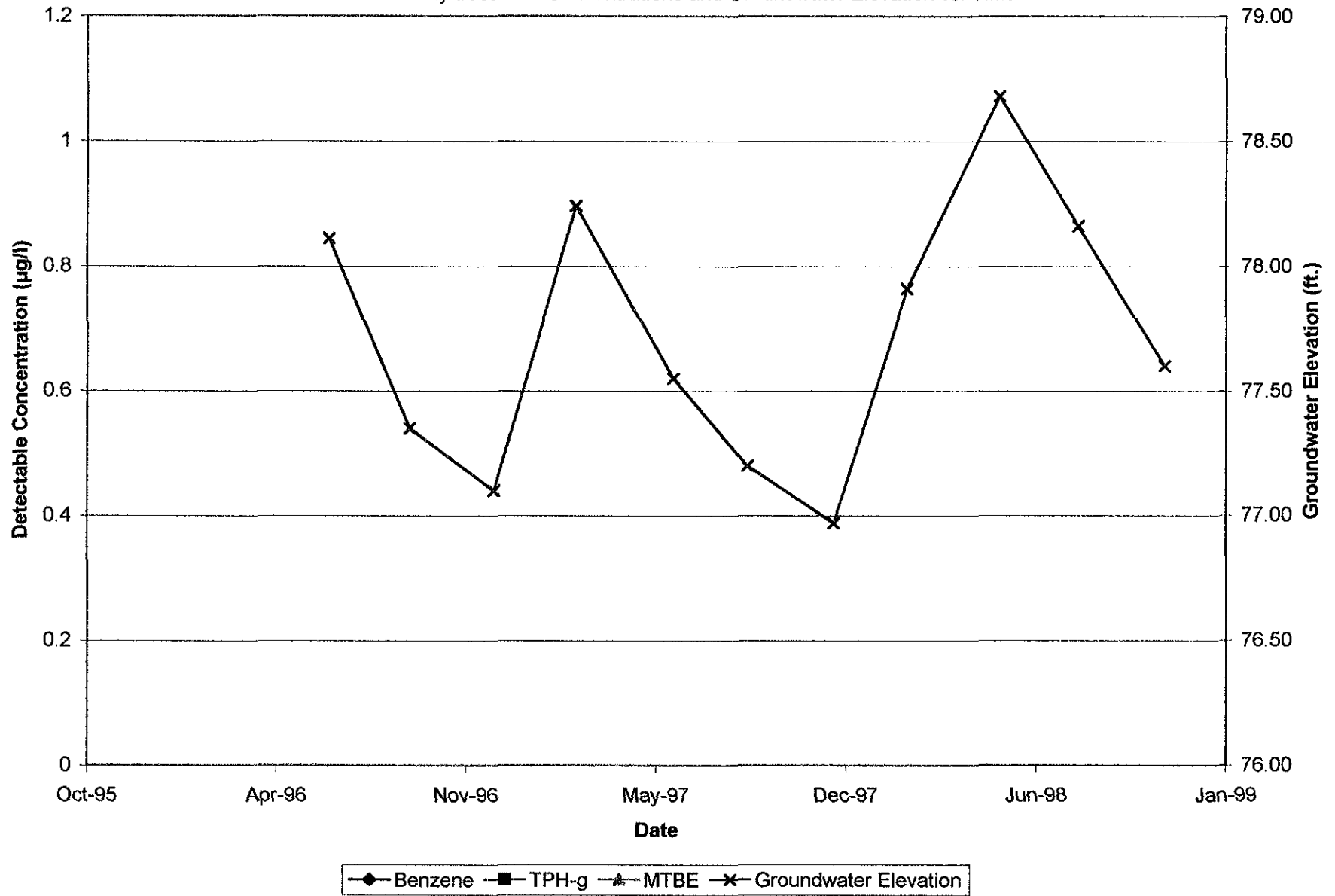
Graph 2, MW-2  
Sears Store No. 1039, 1911 Telegraph Avenue,  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



Graph 3, MW-3  
Sears Store No. 1039, 1911 Telegraph Avenue,  
Oakland, California

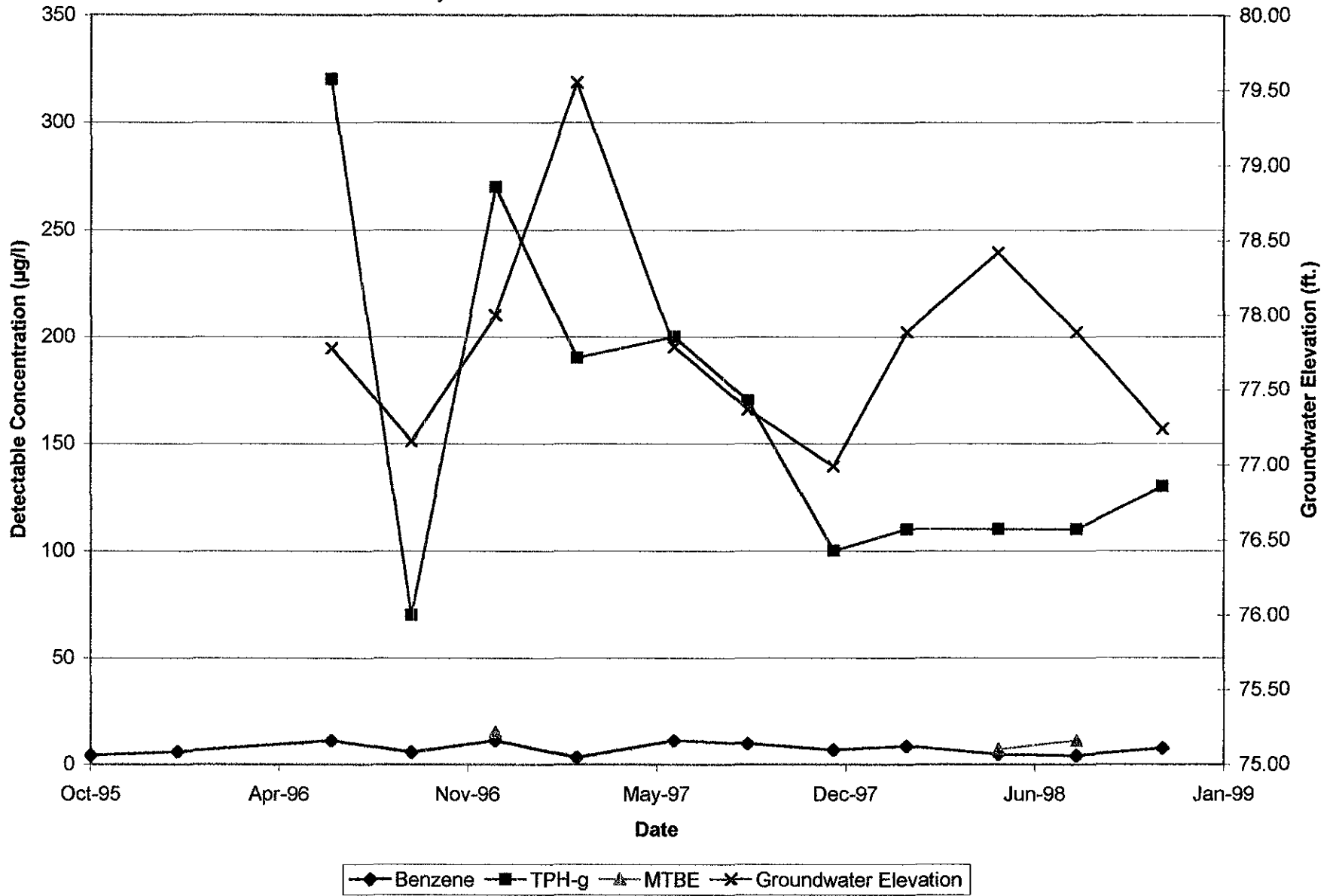
Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



NOTE:  
No detectable Benzene, TPH-g, or MTBE

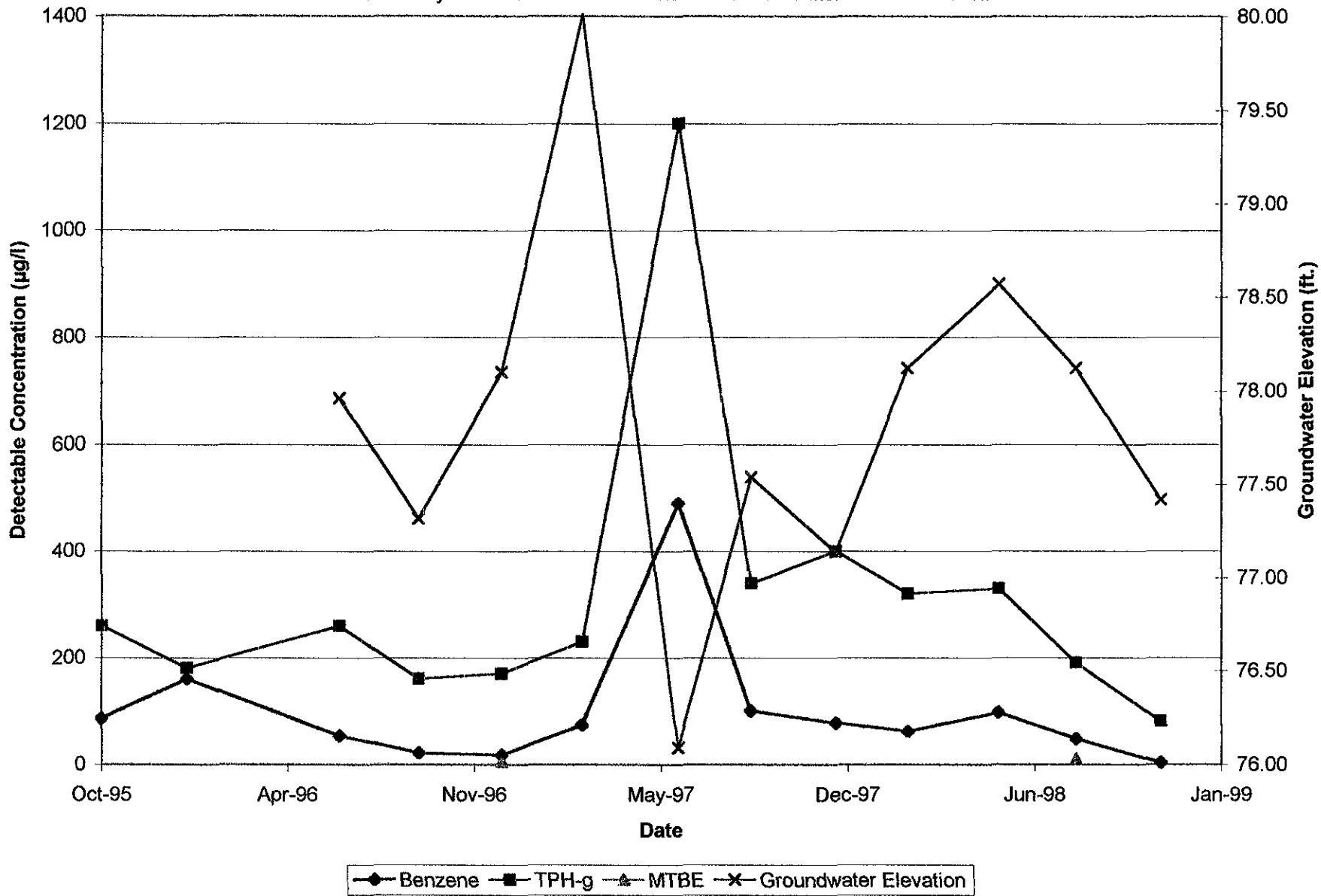
Graph 4, MW-4  
Sears Store No. 1039, 1911 Telegraph Avenue,  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



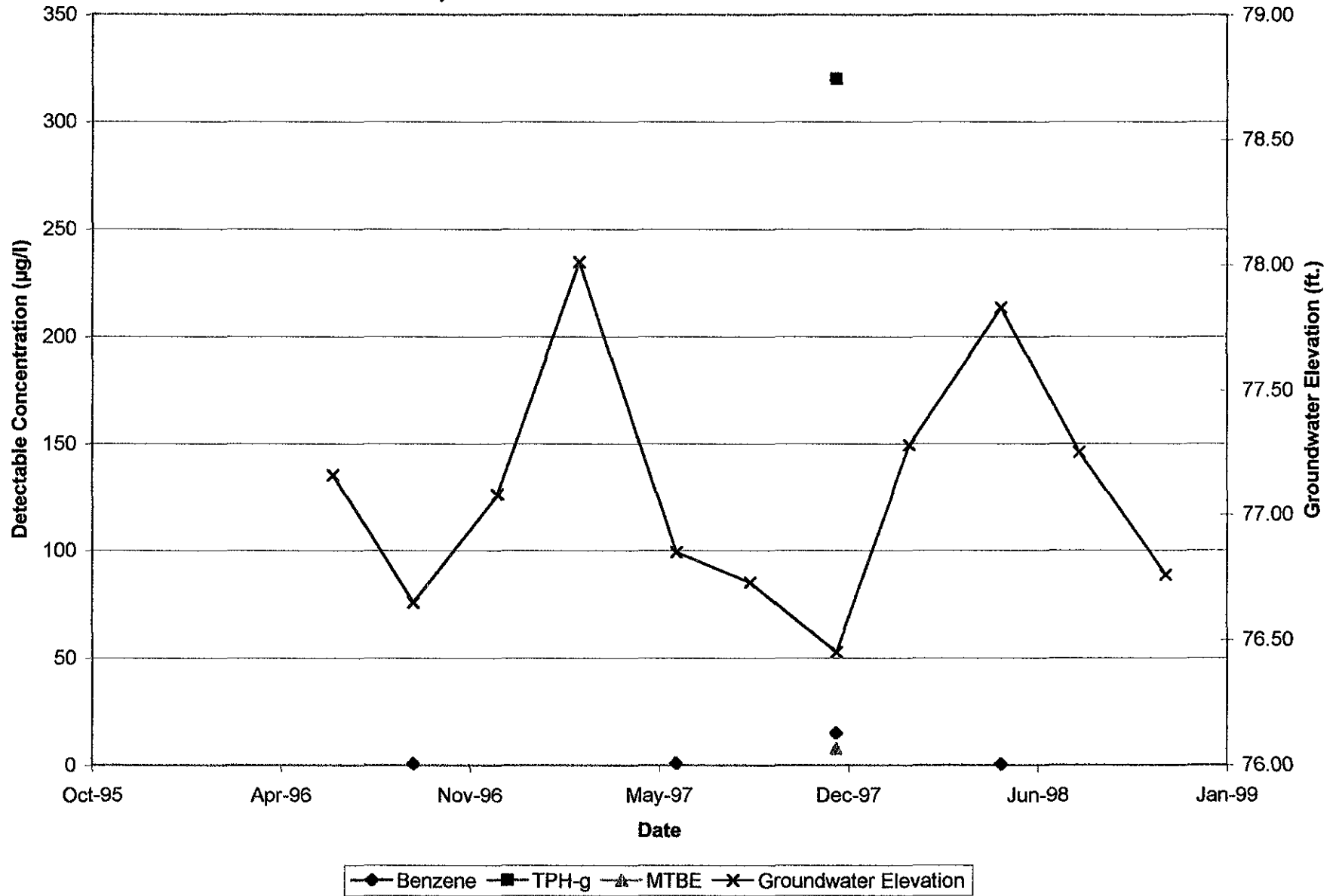
Graph 5, MW-5  
Sears Store No. 1039, 1911 Telegraph Avenue,  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



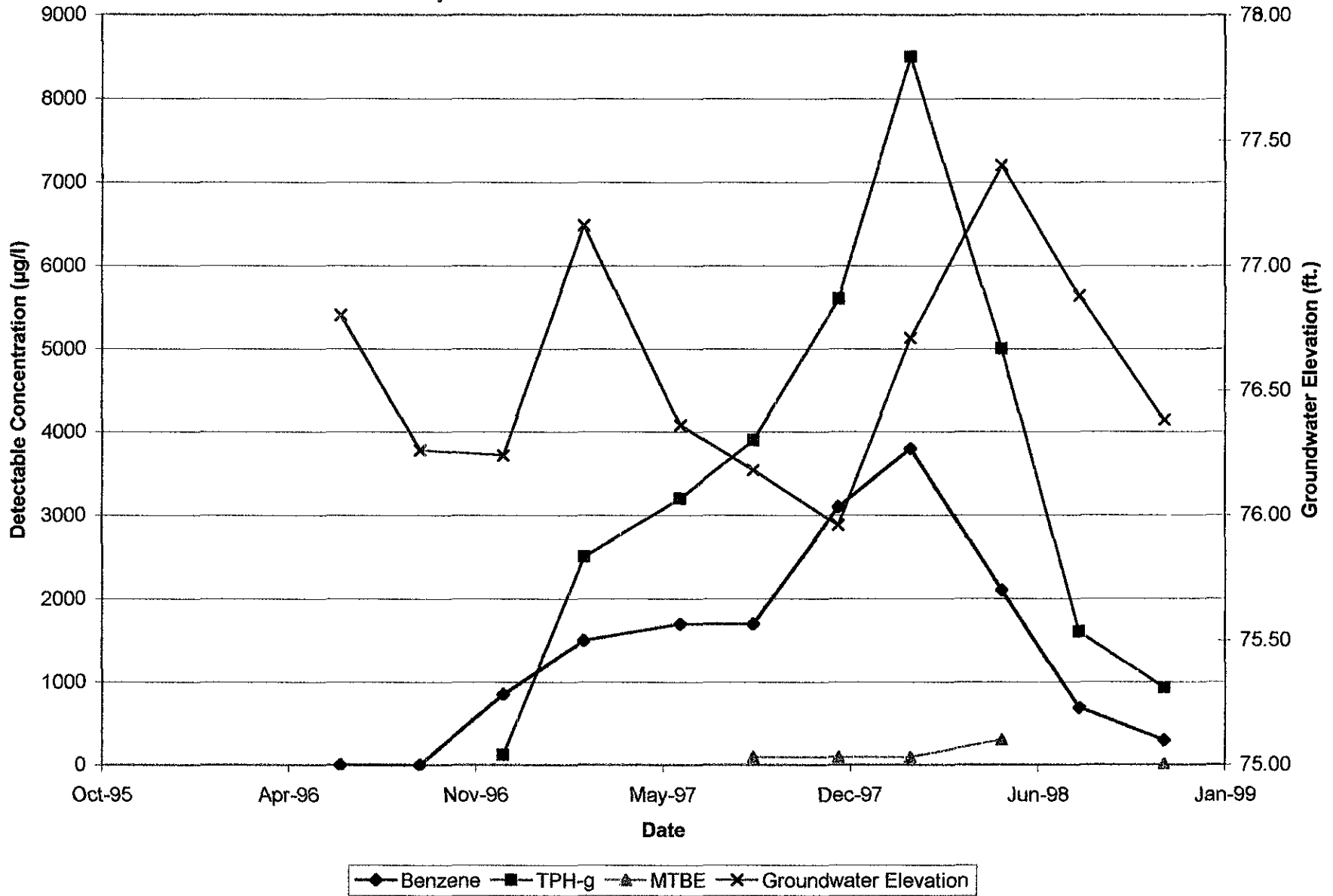
Graph 6, MW-6  
Sears Store No. 1039, 1911 Telegraph Avenue,  
Oakland, California

Detectable Hydrocarbon Concentrations and Groundwater Elevation vs. Time



Graph 7, MW-7  
Sears Store No. 1039, 1911 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

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FAX (707) 792-0342

Fluor Daniel GTI 57 Arnold Dr., Suite D Martinez, CA 94553 Attention: Melissa Gossell	Client Proj. ID: Sears/1039/Oakland Lab Proj. ID: 9811639	Received: 11/10/98 Reported: 11/24/98
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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 24 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/1039/Oakland  
Sample Descript: MW-3  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9811639-01

Sampled: 11/09/98  
Received: 11/10/98  
Analyzed: 11/18/98  
Reported: 11/24/98

Attention: Melissa Gossell

Batch Number: GC111898OVOA29A  
Instrument ID: GCHP29

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	0.50	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	0.50	N.D.
Chloroform	1.0	N.D.
Chloromethane	0.50	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Dichloroethylene	0.50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	5.5
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	0.50	N.D.
Neon 113	1.0	N.D.
	1.0	N.D.

Surrogates

1-Chloro-3-fluorobenzene

Control Limits %      % Recovery  
70                              130                              102

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

SEQUOIA ANALYTICAL - ELAP #1210

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





Daniel GTI 57 Arnold Dr., Suite D Martinez, CA 94553 Attention: Melissa Gossell Batch Number: 8110237	Client Proj. ID: Sears/1039/Oakland Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811639-01	Sampled: 11/09/98 Received: 11/10/98 Extracted: 11/14/98 Analyzed: 11/14/98 Reported: 11/24/98
-------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------

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

Analyte	Detection Limit ug/L	Sample Results ug/L
PPH 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:		N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

*David A. Pichette*

David A. Pichette  
Project Manager





Client: Daniel GTI
57 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossell
Client Proj. ID: Sears/1039/Oakland
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9811639-02
Sampled: 11/09/98
Received: 11/10/98
Analyzed: 11/18/98
Reported: 11/24/98

GC Batch Number: GC111898OVOA29A
Instrument ID: GCHP29

Halogenated Volatile Organics (EPA 8010)

Table with 3 columns: Analyte, Detection Limit ug/L, Sample Results ug/L. Lists various organic compounds and their detection limits, with results mostly marked as N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Handwritten signature of David A. Pichette

David A. Pichette
Project Manager





Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: Sears/1039/Oakland Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811639-02	Sampled: 11/09/98 Received: 11/10/98 Extracted: 11/14/98 Analyzed: 11/14/98 Reported: 11/24/98
Attention: Melissa Gossell		
C Batch Number: 8110237		

**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	3.1
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.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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/1039/Oakland Sample Descript: MW-6 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9811639-03	Sampled: 11/09/98 Received: 11/10/98  Analyzed: 11/18/98 Reported: 11/24/98
GC Batch Number: GC111898OVOA29A Instrument ID: GCHP29		

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	1.7
trans-1,2-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	0.50	N.D.
1,1,1,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	1.2
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	0.92
Vinyl chloride	0.50	N.D.
Perfluorobenzene	1.0	N.D.
Perfluorobenzene	1.0	N.D.
Surrogates	Control Limits %	% Recovery
Chloro-3-fluorobenzene	70 130	98

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/1039/Oakland  
Sample Descript: MW-6  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9811639-03

Sampled: 11/09/98  
Received: 11/10/98  
Extracted: 11/14/98  
Analyzed: 11/14/98  
Reported: 11/24/98

Attention: Melissa Gossell

C Batch Number: 8110237

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:		N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	104

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 Client Proj. ID: Sears/1039/Oakland Sampled: 11/09/98
757 Arnold Dr., Suite D Received: 11/10/98
Martinez, CA 94553 Matrix: LIQUID
Attention: Melissa Gossell Analysis Method: EPA 8010 Analyzed: 11/18/98
Lab Number: 9811639-04 Reported: 11/24/98
C Batch Number: GC111898OVOA29A
Instrument ID: GCHP29

Halogenated Volatile Organics (EPA 8010)

Table with 3 columns: Analyte, Detection Limit ug/L, Sample Results ug/L. Lists various organic compounds and their detection limits, with most results being N.D. (Not Detected).

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

SEQUOIA ANALYTICAL - ELAP #1210

Signature of David A. Pichette
David A. Pichette
Project Manager







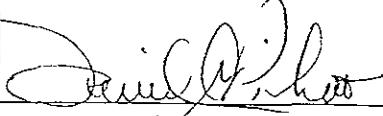
Fluor Daniel GTI 57 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: Sears/1039/Oakland Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811639-04	Sampled: 11/09/98 Received: 11/10/98 Extracted: 11/14/98 Analyzed: 11/14/98 Reported: 11/24/98
Attention: Melissa Gossell		
GC Batch Number: 8110237		

Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	130
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	7.5
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	105

All 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/1039/Oakland  
Sample Descript: MW-5  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9811639-05

Sampled: 11/09/98  
Received: 11/10/98  
Analyzed: 11/18/98  
Reported: 11/24/98

Attention: Melissa Gossell

GC Batch Number: GC111898OVOA29A  
Instrument ID: GCHP29

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-3-fluorobenzene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210

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





Client Proj. ID: Sears/1039/Oakland
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9811639-05
Attention: Melissa Gossell
Batch Number: 8110237
Sampled: 11/09/98
Received: 11/10/98
Extracted: 11/14/98
Analyzed: 11/14/98
Reported: 11/24/98

Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE

Table with columns: Analyte, Detection Limit ug/L, Sample Results ug/L. Rows include: PPH as Gas (50), Methyl t-Butyl Ether (2.5), Benzene (0.50), Toluene (0.50), Ethyl Benzene (0.50), Xylenes (Total) (0.50), Chromatogram Pattern: GASOLINE, Surrogates (Control Limits %: 70, 130; % Recovery: 103).

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

SEQUOIA ANALYTICAL - ELAP #1210

Signature of David A. Pichette
David A. Pichette
Project Manager





Fluor Daniel GTI 57 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: Sears/1039/Oakland Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9811639-06	Sampled: 11/09/98 Received: 11/10/98  Analyzed: 11/18/98 Reported: 11/24/98
Attention: Melissa Gossell		
GC Batch Number: GC111898OVOA29A		
Instrument ID: GCHP29		

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	25
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	2.3
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Ethylene chloride	0.50	N.D.
1,1,1,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	12
Vinyl chloride	1.0	N.D.
Peron 113	1.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Chloro-3-fluorobenzene	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





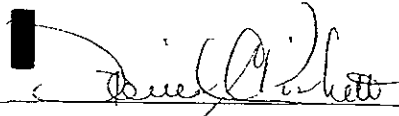
Fluor Daniel GTI 57 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: Sears/1039/Oakland Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811639-06	Sampled: 11/09/98 Received: 11/10/98 Extracted: 11/14/98 Analyzed: 11/14/98 Reported: 11/24/98
Attention: Melissa Gossell		
Batch Number: 8110237		

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

Analyte	Detection Limit ug/L	Sample Results ug/L
PPH as Gas	50	440
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	57
Toluene	0.50	N.D.
Methyl Benzene	0.50	1.7
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                      130	105

Analyses 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 Client Proj. ID: Sears/1039/Oakland Sampled: 11/09/98  
757 Arnold Dr., Suite D Sample Descript: MW-7 Received: 11/10/98  
Martinez, CA 94553 Matrix: LIQUID  
Attention: Melissa Gossell Analysis Method: EPA 8010 Analyzed: 11/19/98  
Lab Number: 9811639-07 Reported: 11/24/98

GC Batch Number: GC111998OVOA29A  
Instrument ID: GCHP29

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon Tetrachloride	2.5	N.D.
Chlorobenzene	2.5	N.D.
Chloroethane	5.0	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	2.5	N.D.
1,3-Dichlorobenzene	2.5	N.D.
1,4-Dichlorobenzene	2.5	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	110
1,1-Dichloroethene	2.5	N.D.
trans-1,2-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	25	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	2.5	4.2
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	2.5	6.5
Trichlorofluoromethane	2.5	N.D.
Vinyl chloride	5.0	N.D.
Perfluorobenzene	5.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2,4-Trichlorobenzene	70 130	85

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/1039/Oakland Sample Descript: MW-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811639-07	Sampled: 11/09/98 Received: 11/10/98 Extracted: 11/14/98 Analyzed: 11/14/98 Reported: 11/24/98
Attention: Melissa Gossell		
GC Batch Number: 8110237		

Purgeable Total Petroleum Hydrocarbons as Gasoline/BTEX/MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	930
Methyl t-Butyl Ether	2.5	8.7
Benzene	0.50	295
Toluene	0.50	5.5
Ethyl Benzene	0.50	4.3
Xylenes (Total)	0.50	1.5
Chromatogram Pattern:		GASOLINE
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	106

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 (916) 921-0100  
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Fluor Daniel GTI 757 Arnold Dr., Suite D Martinez, CA 94553	Client Proj. ID: Sears/1039/Oakland Sample Descript: DUP2 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9811639-08	Sampled: 11/09/98 Received: 11/10/98 Extracted: 11/16/98 Analyzed: 11/16/98 Reported: 11/24/98
Attention: Melissa Gossell		
QC Batch Number: 8110245		

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	59
Toluene	0.50	N.D.
Ethyl benzene	0.50	1.6
Xylenes (Total)	0.50	0.53
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
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







# Sequoia Analytical

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Fluor Daniel GTI  
757 Arnold Dr., Suite D  
Martinez, CA 94553  
  
Attention: Melissa Gossell  
  
QC Batch Number: 8110245

Client Proj. ID: Sears/1039/Oakland  
Sample Descript: TBLB  
Matrix: LIQUID  
Analysis Method: EPA 8020  
Lab Number: 9811639-09

Sampled: 11/09/98  
Received: 11/10/98  
Extracted: 11/16/98  
Analyzed: 11/16/98  
Reported: 11/24/98

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.
Surrogates	Control Limits %	% Recovery
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

Client Project ID: Sears/ 1039/ Oakland  
Matrix: LIQUID

Attention: Melissa Gossell

Work Order #: 9811639

Reported: Dec 1, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	8110237	8110237	8110237	8110237
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 #:	P811144-04	P811144-04	P811144-04	P811144-04
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/14/98	11/14/98	11/14/98	11/14/98
Analyzed Date:	11/14/98	11/14/98	11/14/98	11/14/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
Result:	96.7	95.1	93.8	285
MS % Recovery:	96.7	95.1	93.8	95
Dup. Result:	98.8	97.3	95.9	291
MSD % Recov.:	98.8	97.3	95.9	97
RPD:	2.15	2.29	2.21	2.08
RPD Limit:	0-5	0-6	0-4	0-5

LCS #:	LCS111498	LCS111498	LCS111498	LCS111498
Prepared Date:	11/14/98	11/14/98	11/14/98	11/14/98
Analyzed Date:	11/14/98	11/14/98	11/14/98	11/14/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
LCS Result:	96.3	95.1	93.9	286
LCS % Recov.:	96.3	95.1	93.9	95.3

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

**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.

SEQUOIA ANALYTICAL  
Elap #2245

David A. Pichette  
Project Manager

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

9811639.FFF <1>





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

Client Project ID: Sears/ 1039/ Oakland  
Matrix: LIQUID

Attention: Melissa Gosnell

Work Order #: 9811639

Reported: Dec 1, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	8110245	8110245	8110245	8110245
Analy. Method:	EPA 8020M	EPA 8020M	EPA 8020M	EPA 8020M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	-	-	-	-
MS/MSD #:	P811138-01	P811138-01	P811138-01	P811138-01
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/16/98	11/16/98	11/16/98	11/16/98
Analyzed Date:	11/16/98	11/16/98	11/16/98	11/16/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
Result:	98.1	96	96.9	298
MS % Recovery:	98.1	96	96.9	99.3
Dup. Result:	95	92.7	93.8	289
MSD % Recov.:	95	92.7	93.8	96.3
RPD:	3.21	3.5	3.25	3.07
RPD Limit:	0-5	0-6	0-4	0-5

LCS #:	LCS111698	LCS111698	LCS111698	LCS111698
Prepared Date:	11/16/98	11/16/98	11/16/98	11/16/98
Analyzed Date:	11/16/98	11/16/98	11/16/98	11/16/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
LCS Result:	104	101	100	307
LCS % Recov.:	104	101	100	102

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*  
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

9811639.FFF <2>





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

Client Project ID: Sears/ 1039/ Oakland  
Matrix: LIQUID

Attention: Melissa Gossell

Work Order #: 9811639

Reported: Dec 1, 1998

**QUALITY CONTROL DATA REPORT**

**Analyte:** Total Oil & Grease

**QC Batch#:** SP1118985520EXA  
**Analy. Method:** SM 5520B  
**Prep. Method:** SM 5520B

**Analyst:** H. Olanan  
**BS/BSD #:** BLK111898  
**Sample Conc.:** N.D.  
**Prepared Date:** 11/18/98  
**Analyzed Date:** 11/19/98  
**Instrument I.D.#:** MANUAL  
**Conc. Spiked:** 20 mg/L

**Result:** 20  
**BS % Recovery:** 100

**Dup. Result:** 20  
**BSD % Recov.:** 100

**RPD:** 0.0  
**RPD Limit:** 0-30

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD** 60-140  
**LCS** 70-130  
**Control Limits**

**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.

SEQUOIA ANALYTICAL

David A. Pichette  
Project Manager

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

9811639.FFF <3>





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

Client Project ID: Sears/1039/Oakland

QC Sample Group: 9811639

Reported: Nov 24, 1998

**QUALITY CONTROL DATA REPORT**

Matrix: Liquid  
Method: EPA 8010/8020, 601/602  
Analyst: C. Medina

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
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QC Batch #: GC111898VOA29A

Sample No.: 9811872-03

Date Prepared:	11/17/98	11/17/98	11/17/98	11/17/98	11/17/98	11/17/98
Date Analyzed:	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29

Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	25	25	25	25	25	25
Matrix Spike, ug/L:	18	23	17	21	22	21
% Recovery:	72	92	68	84	88	84

Matrix Spike Duplicate, ug/L:	17	23	19	22	23	23
% Recovery:	68	92	76	88	92	92

Relative % Difference:	5.7	0.0	11	4.7	4.4	9.1
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RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50
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LCS Batch#: VWLCS111898A

Date Prepared:	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98
Date Analyzed:	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29

Conc. Spiked, ug/L:	25	25	25	25	25	25
Recovery, ug/L:	22	25	19	24	23	23
LCS % Recovery:	88	100	76	96	92	92

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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.

SEQUOIA ANALYTICAL

David A. Pichette  
Project Manager





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

Client Project ID: Sears/1039/Oakland

QC Sample Group: 9811639

Reported: Nov 24, 1998

**QUALITY CONTROL DATA REPORT**

Matrix: Liquid  
Method: EPA 8010/8020, 601/602  
Analyst: C. Medina

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
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QC Batch #: GC1119980VOA29A

Sample No.: 9811872-03

Date Prepared:	11/17/98	11/17/98	11/17/98	11/17/98	11/17/98	11/17/98
Date Analyzed:	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98	11/18/98
Instrument I.D.#:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	25	25	25	25	25	25
Matrix Spike, ug/L:	18	23	17	21	22	21
% Recovery:	72	92	68	84	88	84
Matrix Spike Duplicate, ug/L:	17	23	19	22	23	23
% Recovery:	68	92	76	88	92	92
Relative % Difference:	5.7	0.0	11	4.7	4.4	9.1
RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50

LCS Batch#: VWLCS111998A

Date Prepared:	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98
Date Analyzed:	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98
Instrument I.D.#:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29
Conc. Spiked, ug/L:	25	25	25	25	25	25
Recovery, ug/L:	27	28	22	25	24	24
LCS % Recovery:	108	112	88	100	96	96

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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.

SEQUOIA ANALYTICAL

David A. Pichette  
Project Manager





# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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

Company Name: FLUOR DANIEL GTI Project Name: SEARS/1039/OAKLAND  
 Address: 757 ARNOLD DR. SUITED Billing Address (if different):  
 City: MARTINEZ State: CA Zip Code: 94553 103231 + 030543  
 Telephone: (925) 370-3990 FAX # (925) 370-3991 P.O. #:  
 Report To: MELISSA GOSSEL Sampler: H MERINO QC Data:  Level D (Standard)  Level C  Level B  Level A

Turnaround  10 Working Days  3 Working Days  2 - 8 Hours  Drinking Water  
 Time:  7 Working Days  2 Working Days AS CONTRACTED  Waste Water  
 5 Working Days  24 Hours 9811639  Other

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested							Comments
						PHENOL	CHLORINATED HYDROCARBONS	OIL GREASE	BTEX (8220)				
X 1. NW-3	11/13:00	GW	6	40mL	01	X	X						
X 2. NW-1	11/13:10		6	↓	02	X	X						
X 3. NW-6	11/13:20		8	40mL 6LITER	03	X	X	X					
X 4. NW-4	11/13:30		8	↓	04	X	X	X					
X 5. NW-5	11/13:40		6	40mL	05	X	X						
X 6. NW-2	11/13:50		6		06	X	X						
X 7. NW-7	11/14:00		6		07	X	X						
X 8. DUP 2	98/13:52	↓	3		08			X					
X 9. TBLB	98	DI	1	↓	09			X					
10.													

Relinquished By: [Signature] Date: 11/10/98 Time: 3:30p Received By: [Signature] Date: 11/10/98 Time: 3:30p  
 Relinquished By: [Signature] Date: 11/10/98 Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By Lab: W Jones Date: 11/10/98 Time: 18:03

Pink - Client  
Yellow - Sequoia  
White - Sequoia