



**FLUOR DANIEL GTI**

April 14, 1998

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

Subject: Quarterly Groundwater Monitoring and Sampling Report  
Sears 1039; 1911 Telegraph Avenue, Oakland, California  
Fluor Daniel GTI Project 103231

Dear Mr. Klettke:

On behalf of Sears, Roebuck and Co., Fluor Daniel GTI, Inc., presents the quarterly groundwater monitoring and sampling data collected on February 11, 1998 from the site referenced above. 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 presented in Attachment 1. A summary of monitoring data is presented in Attachment 2.

After measuring depth to water, all monitoring wells were purged and sampled. Groundwater monitoring and sample collection protocol, and field data sheets are presented in Attachment 3. The groundwater samples were analyzed for dissolved benzene, toluene, ethylbenzene and total xylenes (BTEX), methyl tert-butyl ether (MTBE), and total petroleum hydrocarbons (TPH) as gasoline by EPA Methods 8020/modified 8015, and chlorinated hydrocarbons by EPA Method 8010. Additionally, wells MW-4 and MW-6 were analyzed for total oil and grease (SM5520 C&F). A summary of the groundwater analytical results is presented in Attachment 2. A distribution map of dissolved benzene and TPH as gasoline concentrations is presented in Attachment 1. Laboratory reports and chain-of-custody records are included in Attachment 4.

A work plan is being developed to address the increasing concentrations documented in the groundwater in downgradient well MW-7.

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

Sincerely,  
**Fluor Daniel GTI, Inc.**

Eileen Brennan  
West Zone Project Manager

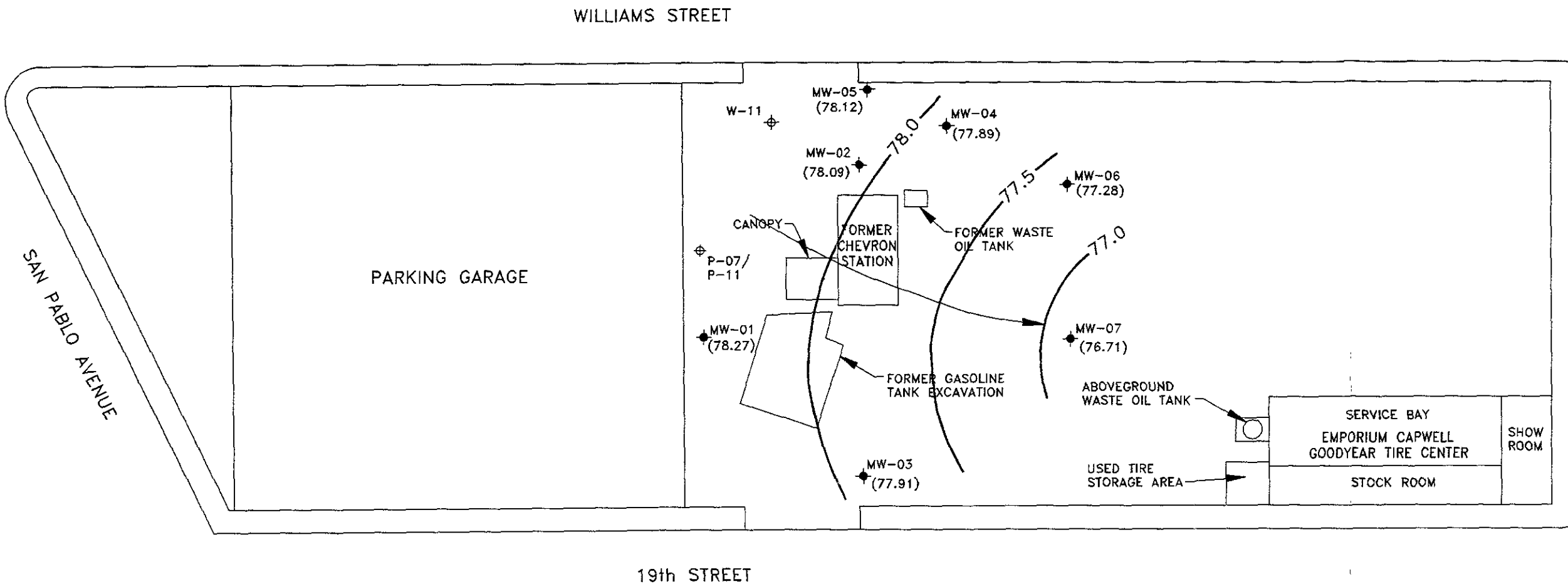
Attachments

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

## **ATTACHMENT 1**

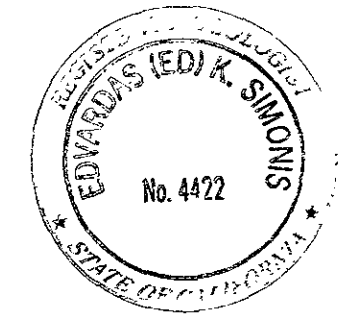
### **Figures**


1. Potentiometric Surface Map (2/11/98)
2. Concentrations of Benzene and TPH as Gasoline in Groundwater (2/11/98)

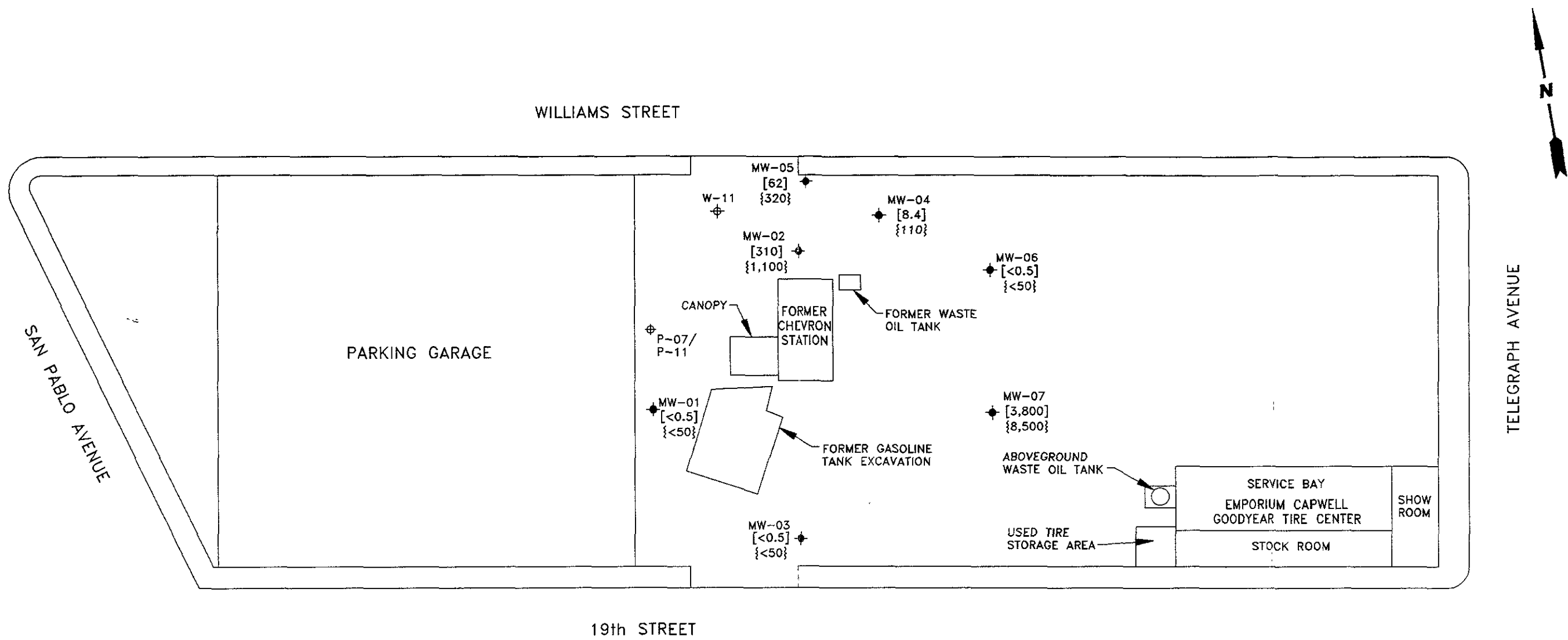


- LEGEND**
- ◆ MONITORING WELL
  - ⊕ SOIL PROBE
  - ( ) POTENTIOMETRIC SURFACE ELEVATION (RELATIVE)
  - POTENTIOMETRIC SURFACE CONTOUR
  - ← GROUNDWATER FLOW DIRECTION

**NOTES:**  
 CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE SEA LEVEL.

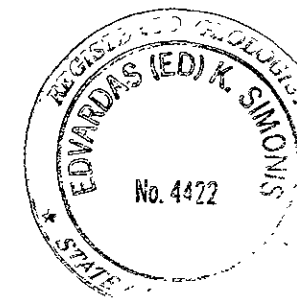



<b>FLUOR DANIEL GTI</b> 		0 FEET 50 SCALE	
<b>POTENTIOMETRIC SURFACE MAP (2/11/98)</b>			
CLIENT:		SEARS, ROEBUCK & CO. SITE NO. 1039	
LOCATION: 1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA			
ACAD FILE:	PSM21198	PROJECT NO.:	103231
REV.:	1		
DES.:	BP	DET.:	VR
DATE:	4/3/98		FIGURE:
PM:	PE/RG: <i>EB</i>		<b>1</b>



**LEGEND**

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



<b>FLUOR DANIEL GTI</b> 		0 FEET 50 SCALE	
<b>CONCENTRATIONS OF BENZENE &amp; TPH-AS-GASOLINE IN GROUNDWATER (2/11/98)</b>			
CLIENT:		SEARS, ROEBUCK & CO. SITE NO. 1039	
LOCATION:		1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA	
ACAD FILE:	TPH21198	PROJECT NO.:	103231
REV.:	1		
DES.:	BP	DET.:	ML
		DATE:	3/26/98
PM:		PE/RG:	<i>Edj</i>
			<b>2</b>

## **ATTACHMENT 2**

### **Tables**

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

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

Sears Store 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
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
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
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
		02/11/98	14.10	--	--	77.89
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

**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-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
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

*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	Toluene	Ethyl- benzene	Total Xylenes	TPH as Gasoline	TCE	1,2- DCA	cis 1,2 DCE	1,1 DCE	OIL/ GREASE	PCE
MW-1	10/95	--	ND	ND	ND	ND	<50	ND	ND	--	--	--	9.9
	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	<2	<50	<0.5	<0.5	<0.5	<0.5	--	20	
MW-2	10/95	--	1,200	5.4	41	5.9	2,900	40	280	--	--	--	ND
	01/96	--	1,100	11	100	6.9	780	38	270	--	--	--	ND
	06/12/96	--	890	7	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	6.0	3	1,000	25	43	<0.5	<0.5	--	0.8
	06/10/97	<30	510	3	6.0	<10	1,800	19	47	4.9	<0.5	--	1.0
	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	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	
MW-3	10/95	--	ND	ND	ND	ND	<50	ND	ND	--	--	--	ND
	01/96	--	ND	ND	ND	ND	<50	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	



**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	Toluene	Ethyl- benzene	Total Xylenes	TPH as Gasoline	TCE	1,2- DCA	cis 1,2 DCE	1,1 DCE	OIL/ GREASE	PCE
MW-4	10/95	--	4.1	ND	ND	ND	<50	ND	ND	--	--	--	ND
	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	
MW-5	10/95	--	86	ND	ND	ND	260	ND	ND	--	--	--	ND
	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	<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	
MW-6	10/95	--	ND	ND	ND	ND	<50	11	33	--	--	--	6.2
	01/96	--	ND	ND	ND	ND	<50	12	5.3	--	--	--	7.2
	06/12/96	--	<0.5	<0.5	<0.5	<2	<50	5.0	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	--	1.0
	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	

**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	Toluene	Ethyl-benzene	Total Xylenes	TPH as Gasoline	TCE	1,2-DCA	cis 1,2 DCE	1,1 DCE	OIL/GREASE	PCE
MW-7	10/95	--	ND	ND	ND	ND	<50	3.5	8.3	--	--	--	5.3
	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	4.0	75	<3	<3	<0.5	4
	02/27/97	<30	1500	3	23	<10	2,500	4.0	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	200	40	3,900	5.0	93	<3	<3	--	<3
	11/26/97	90	3,100	15	190	30	5,600	5.9	120	1.0	<0.5	--	2.9
	02/11/98	90	3,800	25	250	80	8,500	8.9	93	1.2	<0.5	--	4.0

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 is 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-DCE = CIS-1,2-Dichloroethene
- 1,1-DCE = 1,1 Dichloroethene

**ATTACHMENT 3**

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

# GROUNDWATER TECHNOLOGY GROUNDWATER MONITORING AND SAMPLE COLLECTION PROTOCOL

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## Groundwater Monitoring

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

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

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

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

## Groundwater Sampling

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

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

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

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

2/11

SITE VISIT FORM

Fluor Daniel GTI - Martinez, California

Project: 103231.00  
Site: SEARS/1039/Oakland, CA  
Project Mgr: Eileen Brennan

Technician: *A. Medina*  
Scheduled: 2/09/98  
Site Mgr:

PREPARATORY COMMENTS

Visit Date: 2/11/98 Arrival Time: 9:00 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]

NOTIFY: Jennie Pinocci 48 hrs. in advance (510) 444-7662. (She will insure that wells are not covered). *2/10/98 @ 9:35 am jpc*

Notify Tom Peacock 72 hrs. in advance (510) 567-6782. DONE: *2/9/98 @ 1:20 p.m. Left message with Eric.*

SITE ADDRESS: 1911 Telegraph Avenue, Oakland, CA

cc: Eileen Brennan, Brian Pierskalla

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-1, MW-3, MW-7, MW-6, MW-4, MW-5 and MW-2. 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 (AEN) for no cost.
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 - Martinez, California**

Project: 103231.00  
 Site: SEARS/1039/Oakland, CA  
 Project Mgr: Eileen Brennan

Technician:  
 Scheduled: 2/09/98  
 Site Mgr:

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

Haz).

5. Submit samples to AEN lab in Pleasant Hill. ph. # (510) 930-9090, 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? YES. IF NO, EXPLAIN \_\_\_\_\_

Hours Estimated	5.00	Hours Used	
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**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

**TECHNICIAN'S COMMENTS**

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

SITE VISIT FORM  
FLUOR DANIEL GTI

Project: Sears/1039/Oakland  
Store #: 1039, 1911 Telegraph Ave.  
Project Manager: Eileen Brennan

Technician: J. Meano  
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>16.07</u>	SAT. THICK ___	#GAL. BAILED ___
MW-2:	DTB_24.10	DTW <u>15.85</u>	SAT. THICK ___	#GAL. BAILED ___
MW-3:	DTB_27.75	DTW <u>17.76</u>	SAT. THICK ___	#GAL. BAILED ___
MW-4:	DTB_23.55	DTW <u>14.10</u>	SAT. THICK ___	#GAL. BAILED ___
MW-5:	DTB_25.10	DTW <u>13.97</u>	SAT. THICK ___	#GAL. BAILED ___
MW-6:	DTB_26.75	DTW <u>14.87</u>	SAT. THICK ___	#GAL. BAILED ___
MW-7:	DTB_26.20	DTW <u>16.65</u>	SAT. THICK ___	#GAL. BAILED ___

NOTES:

Monitored and Sampled all UB15  
Hand bailed 6 wells, Generator went down.

HOURS ESTIMATED:

HOURS USED:

FINAL CHECKS

Are Wells Locked?  YES NO Why Not?

Are Manholes Bolted Down?  YES NO Why Not?





Project Name: Sears/1039/Oakland  
 Site Address: 1911 Telegraph Ave., Oakland  
 Project Number: 103231.030543

Date: 2/11/98  
 Page 2 of 7  
 Project Manager: Eileen Brennan

Well ID: MW-3  
 Well Diameter: 4

DTW Measurements:  
 Initial: 17.76 Calc Well Volume: 3.7 gal  
 Recharge: \_\_\_\_\_ Well Volume: X3 113 gal  
 DTB: 23.55

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

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

Time	Temp <u>X</u> C _____ F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
10:38	20.0	0.48	6.72	2	cloudy	
10:41	21.0	0.49	6.70	4	↓	
10:43	21.2	0.48	6.63	6		
10:45	21.4	0.47	6.57	8		
10:47	21.5	0.47	6.54	10		

Project Name: Sears/1039/Oakland  
 Site Address: 1911 Telegraph Ave., Oakland  
 Project Number: 103231.030543

Date: 2/11/98  
 Page 3 of 7  
 Project Manager: Eileen Brennan

Well ID: MW-7  
 Well Diameter: 2

DTW Measurements:  
 Initial: 11.65 Calc Well Volume: 1.5 gal  
 Recharge: \_\_\_\_\_ Well Volume: 23.416 gal  
 DTB: 26.20

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

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

Time	Temp <input checked="" type="checkbox"/> C _____ F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
10:50	21.2	0.60	6.50	1	↓	Cloudy Brown
10:52	21.3	0.60	6.51	2		
10:53	21.1	0.60	6.51	3		
10:54	21.1	0.61	6.50	4		
10:55	21.2	0.60	6.52	5		

Project Name: Sears/1039/Oakland  
 Site Address: 1911 Telegraph Ave., Oakland  
 Project Number: 103231.030543

Date: 2/11/98  
 Page 4 of 7  
 Project Manager: Eileen Brennan

Well ID: MW-6  
 Well Diameter: 2

DTW Measurements:  
 Initial: 14.87 Calc Well Volume: 1.9 gal  
 Recharge: \_\_\_\_\_ Well Volume: x3 5.8 gal  
 DTB: 2675

Purge Method  
 Peristaltic \_\_\_\_\_  
 Gear Drive \_\_\_\_\_  
~~Submersible~~ Hand Bailed

Pump Depth \_\_\_\_\_ ft.  
 Hand Bailed X  
 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
11:10	21.0	0.72	6.71	1		cloudy Brown
11:12	21.1	0.70	6.70	2		
11:13	21.3	0.71	6.71	3		
11:14	21.0	0.72	6.70	4		
11:15	21.2	0.72	6.71	5		

Project Name: Sears/1039/Oakland  
 Site Address: 1911 Telegraph Ave., Oakland  
 Project Number: 103231.030543

Date: 2/11/98  
 Page 5 of 7  
 Project Manager: Eileen Brennan

Well ID: MW-4  
 Well Diameter: 2

DTW Measurements:  
 Initial: 14.10 Calc Well Volume: 6.5 gal  
 Recharge: \_\_\_\_\_ Well Volume: X 3 18.15 gal  
 DTB: 23.55

Purge Method \_\_\_\_\_ Pump Depth \_\_\_\_\_ ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed X  
 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
11:30	19.6	0.79	6.85	5	cloudy	Brown
11:33	19.5	0.80	6.82	10	↓	
11:32	19.6	0.81	6.83	15		Day @ 15 Gallons
				20		

Project Name: Sears/1039/Oakland  
 Site Address: 1911 Telegraph Ave., Oakland  
 Project Number: 103231.030543

Date: 2/11/98  
 Page 6 of 7  
 Project Manager: Eileen Brennan

Well ID: MW-5  
 Well Diameter: 2

DTW Measurements:  
 Initial: 13.97 Calc Well Volume: 1.8 gal  
 Recharge: \_\_\_\_\_ Well Volume: X3 5.4 gal  
 DTB: 25.10

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

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

Time	Temp °C °F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:45	20.4	1.00	6.94	1		Cloudy-Grey
11:46	20.6	1.10	6.99	2		
11:47	21.5	1.11	6.95	3		
11:48	20.9	1.12	6.96	4		
11:49	21.3	1.10	6.95	5		



SEARS DRUM INVENTORY FORM

Completion Date: 2/11/98

Sears Store Number 1037 City/State OAKLAND CA

Accumulation Start Date 2/11/98

FDGTI Representative J. Meind

Drum Storage Location \_\_\_\_\_

CONTENTS	# OF DRUMS	*DRUM ID (A,B,C...)	LID TYPE (OPEN OR BUNG)	**LABEL TYPE: HAZARD NON-HAZ UNCLASS	DRUM DESCRIPTION: COLOR CONDITION MARKINGS
FLUIDS					
WASHWATER RINSATE (GAS)	4	A, B, C, D	BOTH	NONCLASS	Black / White / DP
WASHWATER RINSATE (OIL)					
MOTOR OIL/WATER MIXTURES					
MOTOR OIL					
USED OIL/WATER MIXTURES					
USED OIL					
HEATING OIL/DIESEL FUEL AND WATER MIXTURES					
HEATING OIL/DIESEL FUEL					
GASOLINE/WATER MIXTURES					
GASOLINE					
HYDRAULIC OIL/WATER MIXTURES					
HYDRAULIC OIL					
SLUDGES					
MOTOR OIL SLUDGE/TANK BOTTOMS					
USED OIL SLUDGE/TANK BOTTOMS					
HEATING OIL/DIESEL FUEL SLUDGE/TANK BOTTOMS					
GASOLINE SLUDGE/TANK BOTTOMS					
HYDRAULIC OIL SLUDGE/TANK BOTTOMS					
OTHER—if soil, complete Page 2 of 3					
DESCRIPTION (NO SORBENT PADS or PPE IN DRUMS):					

\*EACH DRUM MUST HAVE A UNIQUE LETTER SPRAY-PAINTED ON THE BODY OF THE DRUM. Letter must be at least 10 inches tall. No two drums can have same letter at the same time.

\*\*All labels should be "Unclassified" unless specifically directed otherwise by Project Manager.

COMPLETE PAGE 3 OF 3 WHEN EVER DRUMS ARE PRESENT OR GENERATED.

SEARS SOIL INVENTORY FORM

Completion Date: 2/16/98

Store Number 1039 City/State CA OAKLAND CA

Accumulation Start Date 2/16/98

FDGTI Representative D. Merino

Soil Storage Location Ø

SOIL CONTAMINANTS	# OF DRUMS*	CUBIC YARDS	DIMENSIONS OF PILE
VIRGIN PETROLEUM OIL (motor, heating, diesel)	Ø		
HYDRAULIC OIL			
USED OIL			
GASOLINE			

\* IF DRUMS ARE GENERATED, COMPLETE PAGE 3 OF 3



## SEARS DRUM INVENTORY FORM

Completion Date: 2/11/98Store Number 1039City/State Oakland, CA  
~~Santa Clara, CA~~FDGTI Representative J. Moreno

THERE SHOULD NEVER BE 2 DRUMS WITH THE SAME DRUM ID PRESENT AT A SEARS STORE 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	1/26/97	PURGE H <sub>2</sub> O	GW WELLS	NO	50
B	1/26/97	PURGE H <sub>2</sub> O	GW WELLS	NO	50
C	2/11/98	<del>GW</del> PURGE H <sub>2</sub> O	GW WELLS	NO	20
D	2/11/98	PURGE H <sub>2</sub> O	GW WELLS	NO	50
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					
O					
P					
Q					
R					
S					
T					
U					
V					
W					
X					
Y					
Z					

## EXAMPLE

A	5/19/97	well purge water	MW-1 thru MW-5	no	50
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Reporting Information:

1. Client: FLUOR DANIEL GT  
 Address: 257 ARNOLD DR. SUITE 10  
MARTINEZ CA  
 Contact: EILEEN BREMEN  
 Alt. Contact: \_\_\_\_\_

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

**AEN**

**REQUEST FOR ANALYSIS / CHAIN OF CUSTODY**

Lab Job Number: \_\_\_\_\_  
 Lab Destination: \_\_\_\_\_  
 Date Samples Shipped: \_\_\_\_\_  
 Lab Contact: \_\_\_\_\_  
 Date Results Required: \_\_\_\_\_  
 Date Report Required: \_\_\_\_\_  
 Client Phone No.: (510) 370-3990  
 Client FAX No.: (510) 370-3991

Address Report To:

2. SAME AS #1

Send Invoice To:

3. 1/2

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: \_\_\_\_\_ Client Project I.D. No.: SEARS / #1039 TELEGRAPH  
103231010543

Sample Team Member (s) J. Meind

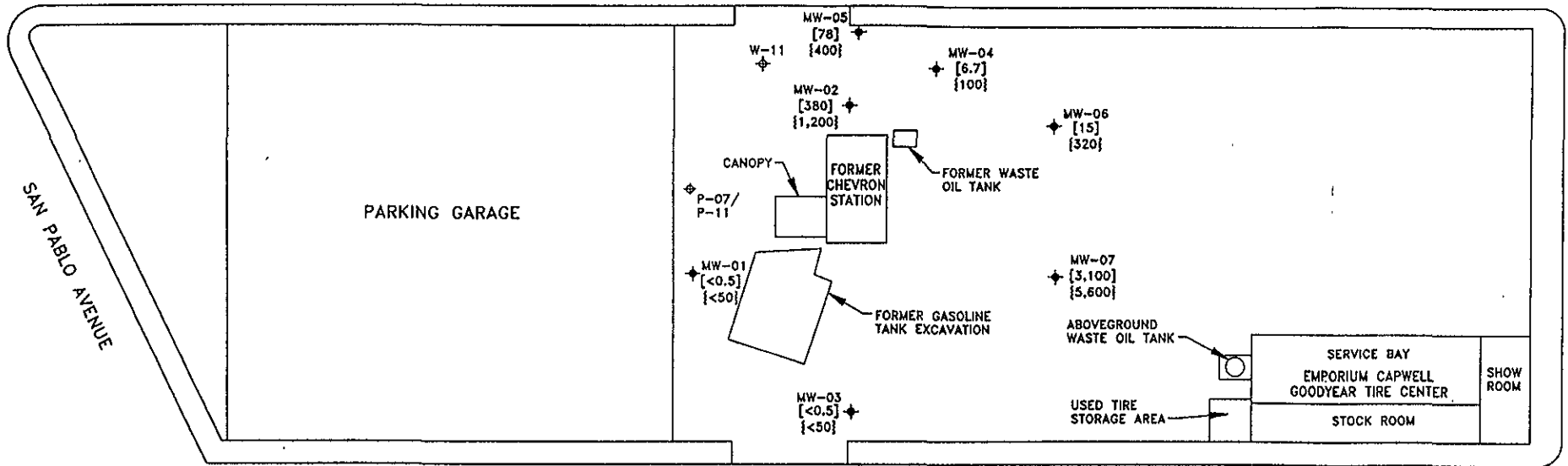
Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS				Comments / Hazards	
	MW-1		2/7	GW		12.25	40ML	X	X				
	MW3		2/7			12.33	40ML	X	X				
	MW7		2/7			12.39	40ML	X	X				
	MW6		2/8			12.54	40ML	X	X	X			
	MW-4		2/8			13.01	40ML	X	X	X			
	MW5		2/7			13.19	40ML	X	X				
	MW2		2/7			13.30	40ML	X	X				
	DUP MW-2		98			13.35	40ML	X	X				
	TBLB					11.2	40ML		X				

BTEX / TPH-G  
 Chlorinated Hydrocarbons  
 OIL GREASE  
 BTEX 2000

Relinquished by (Signature): <u>[Signature]</u>	DATE: <u>2/12/98</u>	TIME: <u>10:00</u>	Received by (Signature): <u>[Signature]</u>	DATE: <u>2/12/98</u>	TIME: <u>10:20</u>
Relinquished by (Signature): _____	DATE: _____	TIME: _____	Received by (Signature): _____	DATE: _____	TIME: _____
Relinquished by (Signature): _____	DATE: _____	TIME: _____	Received by (Signature): _____	DATE: _____	TIME: _____
Method of Shipment: _____	Lab Comments: _____				

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

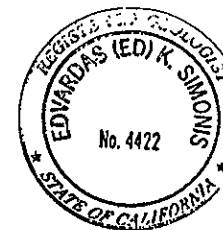
WILLIAMS STREET




19th STREET

LEGEND

- ◆ MONITORING WELL
- ◆ SOIL PROBE
- [ ] BENZENE CONCENTRATION [ug/l]
- { } TPH-AS-GASOLINE CONCENTRATIONS (ug/l)



FLUOR DANIEL GTI			
<b>CONCENTRATIONS OF BENZENE &amp; TPH-AS-GASOLINE IN GROUNDWATER (11/26)</b>			
CLIENT:		SEARS, ROEBUCK & CO	
		SITE NO. 1039	
LOCATION: 1901-1911 TELEGRAPH AV OAKLAND, CALIFORNIA			
ACAD FILE:		PROJECT NO.:	
TPHN2697		02020021	
REV.: 1			
DES.:	ES	DET.:	ML
		DATE:	1/6/98
PW:		PE/RG: EDO/1/98	

**ATTACHMENT 4**

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

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

FLUOR DANIEL GTI  
757 ARNOLD DRIVE, STE. D  
MARTINEZ, CA 94553

REPORT DATE: 03/02/98

DATE(S) SAMPLED: 02/11/98

DATE RECEIVED: 02/12/98

ATTN: EILEEN BRENNEN  
CLIENT PROJ. ID: 103231 07054  
CLIENT PROJ. NAME: SEARS # 1039

AEN WORK ORDER: 9802172

P.O. NUMBER: 043633

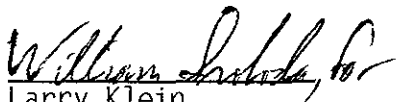
### PROJECT SUMMARY:

On February 12, 1998, this laboratory received 4 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.



Larry Klein  
Laboratory Director

## FLUOR DANIEL GTI

SAMPLE ID: MW-1  
 AEN LAB NO: 9802172-01  
 AEN WORK ORDER: 9802172  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>	<b>EPA 8020</b>				
Benzene	71-43-2	ND	0.5	ug/L	02/19/98
Toluene	108-88-3	ND	0.5	ug/L	02/19/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	02/19/98
Xylenes, Total	1330-20-7	ND	2	ug/L	02/19/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	02/19/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	02/19/98
<b>EPA 8010 - Water matrix</b>	<b>EPA 8010</b>				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	02/25/98
Bromoform	75-25-2	ND	0.5	ug/L	02/25/98
Bromomethane	74-83-9	ND	2	ug/L	02/25/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	02/25/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	02/25/98
Chloroethane	75-00-3	ND	2	ug/L	02/25/98
Chloroform	67-66-3	ND	0.5	ug/L	02/25/98
Chloromethane	74-87-3	ND	2	ug/L	02/25/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	02/25/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	02/25/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	02/25/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	02/25/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	02/25/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	02/25/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	02/25/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	02/25/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	02/25/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	02/25/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	02/25/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	02/25/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	02/25/98
Methylene Chloride	75-09-2	ND	2	ug/L	02/25/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	02/25/98
Tetrachloroethene	127-18-4	20 *	0.5	ug/L	02/25/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	02/25/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	02/25/98
Trichloroethene	79-01-6	ND	0.5	ug/L	02/25/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	02/25/98
1,1,2-Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	02/25/98
Vinyl Chloride	75-01-4	ND	2	ug/L	02/25/98

FLUOR DANIEL GTI

SAMPLE ID: MW-1  
AEN LAB NO: 9802172-01  
AEN WORK ORDER: 9802172  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
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ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

## FLUOR DANIEL GTI

SAMPLE ID: MW-3  
 AEN LAB NO: 9802172-02  
 AEN WORK ORDER: 9802172  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>					
	<b>EPA 8020</b>				
Benzene	71-43-2	ND	0.5	ug/L	02/19/98
Toluene	108-88-3	ND	0.5	ug/L	02/19/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	02/19/98
Xylenes, Total	1330-20-7	ND	2	ug/L	02/19/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	02/19/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	02/19/98
<b>EPA 8010 - Water matrix</b>					
	<b>EPA 8010</b>				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	02/25/98
Bromoform	75-25-2	ND	0.5	ug/L	02/25/98
Bromomethane	74-83-9	ND	2	ug/L	02/25/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	02/25/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	02/25/98
Chloroethane	75-00-3	ND	2	ug/L	02/25/98
Chloroform	67-66-3	ND	0.5	ug/L	02/25/98
Chloromethane	74-87-3	ND	2	ug/L	02/25/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	02/25/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	02/25/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	02/25/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	02/25/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	02/25/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	02/25/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	02/25/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	02/25/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	02/25/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	02/25/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	02/25/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	02/25/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	02/25/98
Methylene Chloride	75-09-2	ND	2	ug/L	02/25/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	02/25/98
Tetrachloroethene	127-18-4	7.9 *	0.5	ug/L	02/25/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	02/25/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	02/25/98
Trichloroethene	79-01-6	ND	0.5	ug/L	02/25/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	02/25/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	02/25/98
Vinyl Chloride	75-01-4	ND	2	ug/L	02/25/98



FLUOR DANIEL GTI

SAMPLE ID: MW-3  
AEN LAB NO: 9802172-02  
AEN WORK ORDER: 9802172  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
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ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

## FLUOR DANIEL GTI

SAMPLE ID: MW-7  
 AEN LAB NO: 9802172-03  
 AEN WORK ORDER: 9802172  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>					
	<b>EPA 8020</b>				
Benzene	71-43-2	3,800 *	5	ug/L	02/20/98
Toluene	108-88-3	25 *	5	ug/L	02/20/98
Ethylbenzene	100-41-4	250 *	5	ug/L	02/20/98
Xylenes, Total	1330-20-7	80 *	20	ug/L	02/20/98
Purgeable HCs as Gasoline	5030/GCFID	8.5 *	0.5	mg/L	02/20/98
Methyl t-Butyl Ether	1634-04-4	90 *	50	ug/L	02/20/98
<b>EPA 8010 - Water matrix</b>					
	<b>EPA 8010</b>				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	02/25/98
Bromoform	75-25-2	ND	0.5	ug/L	02/25/98
Bromomethane	74-83-9	ND	2	ug/L	02/25/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	02/25/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	02/25/98
Chloroethane	75-00-3	ND	2	ug/L	02/25/98
Chloroform	67-66-3	ND	0.5	ug/L	02/25/98
Chloromethane	74-87-3	ND	2	ug/L	02/25/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	02/25/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	02/25/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	02/25/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	02/25/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	02/25/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	02/25/98
1,2-Dichloroethane	107-06-2	93 *	0.5	ug/L	02/25/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	02/25/98
cis-1,2-Dichloroethene	156-59-2	1.2 *	0.5	ug/L	02/25/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	02/25/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	02/25/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	02/25/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	02/25/98
Methylene Chloride	75-09-2	ND	2	ug/L	02/25/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	02/25/98
Tetrachloroethene	127-18-4	4.0 *	0.5	ug/L	02/25/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	02/25/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	02/25/98
Trichloroethene	79-01-6	8.9 *	0.5	ug/L	02/25/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	02/25/98
1,1,2-Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	02/25/98
Vinyl Chloride	75-01-4	ND	2	ug/L	02/25/98

FLUOR DANIEL GTI

SAMPLE ID: MW-7  
AEN LAB NO: 9802172-03  
AEN WORK ORDER: 9802172  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
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ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

## FLUOR DANIEL GTI

SAMPLE ID: MW-6  
 AEN LAB NO: 9802172-04  
 AEN WORK ORDER: 9802172  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>					
	<b>EPA 8020</b>				
Benzene	71-43-2	ND	0.5	ug/L	02/20/98
Toluene	108-88-3	ND	0.5	ug/L	02/20/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	02/20/98
Xylenes, Total	1330-20-7	ND	2	ug/L	02/20/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	02/20/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	02/20/98
<b>#Water Extrn for HCs</b>		-		Extrn Date	02/20/98
<b>Hydrocarbons (IR)</b>	<b>EPA 418.1</b>	ND	0.5	mg/L	02/23/98
<b>EPA 8010 - Water matrix</b>					
	<b>EPA 8010</b>				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	02/25/98
Bromoform	75-25-2	ND	0.5	ug/L	02/25/98
Bromomethane	74-83-9	ND	2	ug/L	02/25/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	02/25/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	02/25/98
Chloroethane	75-00-3	ND	2	ug/L	02/25/98
Chloroform	67-66-3	ND	0.5	ug/L	02/25/98
Chloromethane	74-87-3	ND	2	ug/L	02/25/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	02/25/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	02/25/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	02/25/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	02/25/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	02/25/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	02/25/98
1,2-Dichloroethane	107-06-2	0.5 *	0.5	ug/L	02/25/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	02/25/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	02/25/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	02/25/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	02/25/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	02/25/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	02/25/98
Methylene Chloride	75-09-2	ND	2	ug/L	02/25/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	02/25/98
Tetrachloroethene	127-18-4	0.7 *	0.5	ug/L	02/25/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	02/25/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	02/25/98
Trichloroethene	79-01-6	ND	0.5	ug/L	02/25/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	02/25/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	02/25/98

FLUOR DANIEL GTI

SAMPLE ID: MW-6  
AEN LAB NO: 9802172-04  
AEN WORK ORDER: 9802172  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Vinyl Chloride	75-01-4	ND	2 ug/L		02/25/98

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

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9802172  
CLIENT PROJECT ID: 103231\_07054

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spikes(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analyses.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behaviour, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrument performance.

D: Surrogates diluted out.

I: Interference.

!: Indicates result outside of established laboratory QC limits.

WORK ORDER: 9802172

QUALITY CONTROL REPORT

PAGE QR-2

ANALYSIS: Oil & Grease (IR)

MATRIX: Water

METHOD BLANK SAMPLES

SAMPLE TYPE: Blank-Method/Media blank		LAB ID: BLNK-0220-1		INSTR RUN: IR\980220000000/1/				
INSTRUMENT: IR Spectrophotometer		PREPARED: 02/20/98		BATCH ID: IRW022098-1				
UNITS: mg/L		ANALYZED: 02/23/98		DILUTION: 1.000000				
METHOD:								
ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%)		RPD LIMIT (%)
Oil & Grease (IR)	ND		0.5			LOW	HIGH	RPD (%)

LABORATORY CONTROL SAMPLES

SAMPLE TYPE: Laboratory Control Spike		LAB ID: LCDW-0220-1		INSTR RUN: IR\980220000000/3/1				
INSTRUMENT: IR Spectrophotometer		PREPARED: 02/20/98		BATCH ID: IRW022098-1				
UNITS: mg/L		ANALYZED: 02/23/98		DILUTION: 1.000000				
METHOD:								
ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%)		RPD LIMIT (%)
Oil & Grease (IR)	8.41	ND	0.5	7.50	112	LOW	HIGH	RPD (%)

SAMPLE TYPE: Laboratory Control Spike		LAB ID: LCSW-0220-1		INSTR RUN: IR\980220000000/2/1				
INSTRUMENT: IR Spectrophotometer		PREPARED: 02/20/98		BATCH ID: IRW022098-1				
UNITS: mg/L		ANALYZED: 02/23/98		DILUTION: 1.000000				
METHOD:								
ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%)		RPD LIMIT (%)
Oil & Grease (IR)	6.97	ND	0.5	7.50	92.9	LOW	HIGH	RPD (%)

## QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9802172

INSTRUMENT: G

MATRIX: WATER

## Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Bromochloro-methane	1-Bromo-3-chloro-propane
02/25/98	MW-1	01	98	107
02/25/98	MW-3	02	95	105
02/25/98	MW-7	03	100	110
02/25/98	MW-6	04	90	104
QC Limits:			70-130	70-130

DATE ANALYZED: 02/25/98

SAMPLE SPIKED: LCS

INSTRUMENT: G

## Laboratory Control Sample Recovery

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
1,1-Dichloroethene	25	108	11	70-130	20
Trichloroethene	25	121	3	70-130	20
Chlorobenzene	25	110	9	70-130	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.



## QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9802172  
 INSTRUMENT: F  
 MATRIX: WATER

## Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Fluorobenzene	
02/19/98	MW-1	01	94	
02/19/98	MW-3	02	95	
02/20/98	MW-7	03	83	
02/20/98	MW-6	04	93	
QC Limits:			70-130	

DATE ANALYZED: 02/20/98  
 SAMPLE SPIKED: 9802172-04  
 INSTRUMENT: F

## Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	200	96	5	70-130	20
Toluene	200	97	5	70-130	20
Ethylbenzene	200	98	5	70-130	20
Total Xylenes	600	103	3	70-130	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

\*\*\* END OF REPORT \*\*\*

Reporting Information:

1. Client: FLUOR DANIEL GT  
 Address: 257 ARNOLD DR. SUITE 1  
D MARTINEZ CA.  
 Contact: EILEEN BREMEN  
 Alt. Contact: \_\_\_\_\_

American Environmental Network

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

AEN

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number: 9802172  
 Lab Destination: \_\_\_\_\_  
 Date Samples Shipped: \_\_\_\_\_  
 Lab Contact: \_\_\_\_\_  
 Date Results Required: \_\_\_\_\_  
 Date Report Required: \_\_\_\_\_  
 Client Phone No.: (510) 370-3990  
 Client FAX No.: (510) 370-3991

Address Report To:

Send Invoice To:

2. SAME AS #1

3. 1/2

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: \_\_\_\_\_

Client Project I.D. No.:

SEARS / #1039 TELEGRAPH  
1032 31.070543

Sample Team Member (s)

[Signature]

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS				Comments / Hazards		
1A-6	MW-1		2/7	GW		12:25	40ML	X	X					
2A-6	MW3		2/7			12:33	40ML	X	X					
3A-6	MW7		2/7			12:39	40ML	X	X					
4A-I	MW6		2/8			12:54	40ML	X	X	X				
	MW-4		2/8			13:02	40ML	X	X	X				
	MW5		2/7			13:14	40ML	X	X					
	MW2		2/7			13:30	40ML	X	X					
	DUP MW-2		98			3:35	40ML			X				
	TBLB						40ML			X				
Relinquished by: <u>[Signature]</u>				DATE: <u>2/12/98</u>	TIME: <u>1020</u>	Received by: <u>[Signature]</u>				DATE: <u>2/12/98</u>	TIME: <u>1020</u>			
Relinquished by: <u>[Signature]</u>				DATE: <u>2/12/98</u>	TIME: <u>1750</u>	Received by: <u>[Signature]</u>				DATE: <u>2/12/98</u>	TIME: <u>1750</u>			
Relinquished by: (Signature)				DATE	TIME	Received by: (Signature)				DATE	TIME			
Method of Shipment						Lab Comments								

BTEX / TPH / G  
 CHLORINATED HYDROCARBONS  
 OIL / GREASE  
 BTEX SOLO

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

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

FLUOR DANIEL GTI  
757 ARNOLD DRIVE, STE. D  
MARTINEZ, CA 94553

REPORT DATE: 03/02/98

DATE(S) SAMPLED: 02/11/98

DATE RECEIVED: 02/12/98

ATTN: EILEEN BRENNEN  
CLIENT PROJ. ID: 103231 07054  
CLIENT PROJ. NAME: SEARS # 1039

AEN WORK ORDER: 9802173

P.O. NUMBER: 043633

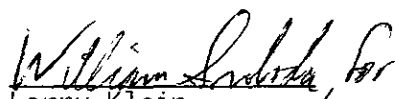
### PROJECT SUMMARY:

On February 12, 1998, this laboratory received 5 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

  
Larry Klein  
Laboratory Director

## FLUOR DANIEL GTI

SAMPLE ID: MW-4  
 AEN LAB NO: 9802173-01  
 AEN WORK ORDER: 9802173  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	8.4 *	0.5 ug/L		02/20/98
Toluene	108-88-3	ND	0.5 ug/L		02/20/98
Ethylbenzene	100-41-4	ND	0.5 ug/L		02/20/98
Xylenes, Total	1330-20-7	ND	2 ug/L		02/20/98
Purgeable HCs as Gasoline	5030/GCFID	0.11 *	0.05 mg/L		02/20/98
Methyl t-Butyl Ether	1634-04-4	ND	5 ug/L		02/20/98
#Water Extrn for HCs		-		Extrn Date	02/20/98
Hydrocarbons (IR)	EPA 418.1	ND	0.5 mg/L		02/23/98
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5 ug/L		02/21/98
Bromoform	75-25-2	ND	0.5 ug/L		02/21/98
Bromomethane	74-83-9	ND	2 ug/L		02/21/98
Carbon Tetrachloride	56-23-5	ND	0.5 ug/L		02/21/98
Chlorobenzene	108-90-7	ND	0.5 ug/L		02/21/98
Chloroethane	75-00-3	ND	2 ug/L		02/21/98
Chloroform	67-66-3	ND	0.5 ug/L		02/21/98
Chloromethane	74-87-3	ND	2 ug/L		02/21/98
Dibromochloromethane	124-48-1	ND	0.5 ug/L		02/21/98
1,2-Dichlorobenzene	95-50-1	ND	0.5 ug/L		02/21/98
1,3-Dichlorobenzene	541-73-1	ND	0.5 ug/L		02/21/98
1,4-Dichlorobenzene	106-46-7	ND	0.5 ug/L		02/21/98
Dichlorodifluoromethane	75-71-8	ND	2 ug/L		02/21/98
1,1-Dichloroethane	75-34-3	ND	0.5 ug/L		02/21/98
1,2-Dichloroethane	107-06-2	ND	0.5 ug/L		02/21/98
1,1-Dichloroethene	75-35-4	ND	0.5 ug/L		02/21/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5 ug/L		02/21/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5 ug/L		02/21/98
1,2-Dichloropropane	78-87-5	ND	0.5 ug/L		02/21/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5 ug/L		02/21/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5 ug/L		02/21/98
Methylene Chloride	75-09-2	ND	2 ug/L		02/21/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5 ug/L		02/21/98
Tetrachloroethene	127-18-4	ND	0.5 ug/L		02/21/98
1,1,1-Trichloroethane	71-55-6	ND	0.5 ug/L		02/21/98
1,1,2-Trichloroethane	79-00-5	ND	0.5 ug/L		02/21/98
Trichloroethene	79-01-6	ND	0.5 ug/L		02/21/98
Trichlorofluoromethane	75-69-4	ND	2 ug/L		02/21/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5 ug/L		02/21/98

## FLUOR DANIEL GTI

SAMPLE ID: MW-4  
AEN LAB NO: 9802173-01  
AEN WORK ORDER: 9802173  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Vinyl Chloride	75-01-4	ND	2 ug/L		02/21/98

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

## FLUOR DANIEL GTI

SAMPLE ID: MW-5  
 AEN LAB NO: 9802173-02  
 AEN WORK ORDER: 9802173  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>					
EPA 8020					
Benzene	71-43-2	62 *	0.5	ug/L	02/20/98
Toluene	108-88-3	2.9 *	0.5	ug/L	02/20/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	02/20/98
Xylenes, Total	1330-20-7	ND	2	ug/L	02/20/98
Purgeable HCs as Gasoline	5030/GCFID	0.32 *	0.05	mg/L	02/20/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	02/20/98
<b>EPA 8010 - Water matrix</b>					
EPA 8010					
Bromodichloromethane	75-27-4	ND	0.5	ug/L	02/25/98
Bromoform	75-25-2	ND	0.5	ug/L	02/25/98
Bromomethane	74-83-9	ND	2	ug/L	02/25/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	02/25/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	02/25/98
Chloroethane	75-00-3	ND	2	ug/L	02/25/98
Chloroform	67-66-3	ND	0.5	ug/L	02/25/98
Chloromethane	74-87-3	ND	2	ug/L	02/25/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	02/25/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	02/25/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	02/25/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	02/25/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	02/25/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	02/25/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	02/25/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	02/25/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	02/25/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	02/25/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	02/25/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	02/25/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	02/25/98
Methylene Chloride	75-09-2	ND	2	ug/L	02/25/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	02/25/98
Tetrachloroethene	127-18-4	ND	0.5	ug/L	02/25/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	02/25/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	02/25/98
Trichloroethene	79-01-6	ND	0.5	ug/L	02/25/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	02/25/98
1,1,2-Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	02/25/98
Vinyl Chloride	75-01-4	ND	2	ug/L	02/25/98

FLUOR DANIEL GTI

SAMPLE ID: MW-5  
AEN LAB NO: 9802173-02  
AEN WORK ORDER: 9802173  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
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ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

## FLUOR DANIEL GTI

SAMPLE ID: MW-2  
 AEN LAB NO: 9802173-03  
 AEN WORK ORDER: 9802173  
 CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
 DATE RECEIVED: 02/12/98  
 REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>					
<b>EPA 8020</b>					
Benzene	71-43-2	310 *	0.5	ug/L	02/20/98
Toluene	108-88-3	4.0 *	0.5	ug/L	02/20/98
Ethylbenzene	100-41-4	9.8 *	0.5	ug/L	02/20/98
Xylenes, Total	1330-20-7	9 *	2	ug/L	02/20/98
Purgeable HCs as Gasoline	5030/GCFID	1.1 *	0.05	mg/L	02/20/98
Methyl t-Butyl Ether	1634-04-4	8 *	5	ug/L	02/20/98
<b>EPA 8010 - Water matrix</b>					
<b>EPA 8010</b>					
Bromodichloromethane	75-27-4	ND	0.5	ug/L	02/25/98
Bromoform	75-25-2	ND	0.5	ug/L	02/25/98
Bromomethane	74-83-9	ND	2	ug/L	02/25/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	02/25/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	02/25/98
Chloroethane	75-00-3	ND	2	ug/L	02/25/98
Chloroform	67-66-3	ND	0.5	ug/L	02/25/98
Chloromethane	74-87-3	ND	2	ug/L	02/25/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	02/25/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	02/25/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	02/25/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	02/25/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	02/25/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	02/25/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	02/25/98
1,1-Dichloroethene	75-35-4	0.6 *	0.5	ug/L	02/25/98
cis-1,2-Dichloroethene	156-59-2	2.6 *	0.5	ug/L	02/25/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	02/25/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	02/25/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	02/25/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	02/25/98
Methylene Chloride	75-09-2	ND	2	ug/L	02/25/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	02/25/98
Tetrachloroethene	127-18-4	ND	0.5	ug/L	02/25/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	02/25/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	02/25/98
Trichloroethene	79-01-6	16 *	0.5	ug/L	02/25/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	02/25/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	02/25/98
Vinyl Chloride	75-01-4	ND	2	ug/L	02/25/98



## FLUOR DANIEL GTI

SAMPLE ID: MW-2  
AEN LAB NO: 9802173-03  
AEN WORK ORDER: 9802173  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
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ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

## FLUOR DANIEL GTI

SAMPLE ID: DUP MW-2  
AEN LAB NO: 9802173-04  
AEN WORK ORDER: 9802173  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	340 *	0.5	ug/L	02/20/98
Toluene	108-88-3	4.8 *	0.5	ug/L	02/20/98
Ethylbenzene	100-41-4	10 *	0.5	ug/L	02/20/98
Xylenes, Total	1330-20-7	9 *	2	ug/L	02/20/98
Methyl t-Butyl Ether	1634-04-4	7 *	5	ug/L	02/20/98

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

## FLUOR DANIEL GTI

SAMPLE ID: TBLB  
AEN LAB NO: 9802173-05  
AEN WORK ORDER: 9802173  
CLIENT PROJ. ID: 103231\_07054

DATE SAMPLED: 02/11/98  
DATE RECEIVED: 02/12/98  
REPORT DATE: 03/02/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	02/23/98
Toluene	108-88-3	ND	0.5	ug/L	02/23/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	02/23/98
Xylenes, Total	1330-20-7	ND	2	ug/L	02/23/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	02/23/98

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9802173  
CLIENT PROJECT ID: 103231\_07054

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spikes(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analyses.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behaviour, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrument performance.

D: Surrogates diluted out.

I: Interference.

!: Indicates result outside of established laboratory QC limits.

WORK ORDER: 9802173

QUALITY CONTROL REPORT

ANALYSIS: Oil & Grease (IR)

MATRIX: Water

METHOD BLANK SAMPLES

SAMPLE TYPE: Blank-Method/Media blank			LAB ID: BLNK-0220-1			INSTR RUN: IR\980220000000/1/			
INSTRUMENT: IR Spectrophotometer			PREPARED: 02/20/98			BATCH ID: IRW022098-1			
UNITS: mg/L			ANALYZED: 02/23/98			DILUTION: 1.000000			
METHOD:									
ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%)		RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	ND		0.5			LOW	HIGH		

LABORATORY CONTROL SAMPLES

SAMPLE TYPE: Laboratory Control Spike			LAB ID: LCDW-0220-1			INSTR RUN: IR\980220000000/3/1			
INSTRUMENT: IR Spectrophotometer			PREPARED: 02/20/98			BATCH ID: IRW022098-1			
UNITS: mg/L			ANALYZED: 02/23/98			DILUTION: 1.000000			
METHOD:									
ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%)		RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	8.41	ND	0.5	7.50	112	LOW	HIGH		

SAMPLE TYPE: Laboratory Control Spike			LAB ID: LCSW-0220-1			INSTR RUN: IR\980220000000/2/1			
INSTRUMENT: IR Spectrophotometer			PREPARED: 02/20/98			BATCH ID: IRW022098-1			
UNITS: mg/L			ANALYZED: 02/23/98			DILUTION: 1.000000			
METHOD:									
ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%)		RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	6.97	ND	0.5	7.50	92.9	LOW	HIGH		

## QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9802173

INSTRUMENT: G

MATRIX: WATER

## Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Bromochloro-methane	1-Bromo-3-chloro-propane
02/21/98	MW-4	01	96	119
02/25/98	MW-5	02	89	102
02/25/98	MW-2	03	96	98
QC Limits:			70-130	70-130

DATE ANALYZED: 02/21/98

SAMPLE SPIKED: LCS

INSTRUMENT: G

## Laboratory Control Sample Recovery

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
1,1-Dichloroethene	25	87	5	70-130	20
Trichloroethene	25	110	1	70-130	20
Chlorobenzene	25	107	1	70-130	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

## QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GC/FID

AEN JOB NO: 9802173  
 INSTRUMENT: F  
 MATRIX: WATER

## Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Fluorobenzene	
02/20/98	MW-4	01	93	
02/20/98	MW-5	02	88	
02/20/98	MW-2	03	80	
02/20/98	DUPMW-2	04	82	
02/23/98	TBLB	05	92	
QC Limits:			70-130	

DATE ANALYZED: 02/20/98  
 SAMPLE SPIKED: LCS  
 INSTRUMENT: F

## Laboratory Control Sample Recovery Summary

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	200	88	2	70-130	20
Toluene	200	91	1	70-130	20
Ethylbenzene	200	97	6	70-130	20
Total Xylenes	600	100	4	70-130	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

\*\*\* END OF REPORT \*\*\*

1. Client: FLVORDANIELGT  
 Address: 257 ARNOLD DR. SUITE  
D. MARTINEZ CA.  
 Contact: EILEEN BRENNEN  
 Alt. Contact: \_\_\_\_\_

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

**AEIN**

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number: 9802172 9802173  
 Lab Destination: \_\_\_\_\_  
 Date Samples Shipped: \_\_\_\_\_  
 Lab Contact: \_\_\_\_\_  
 Date Results Required: \_\_\_\_\_  
 Date Report Required: \_\_\_\_\_  
 Client Phone No.: (510) 370-3990  
 Client FAX No.: (510) 370-3991

Address Report To:  
 2. SAME AS #1

Send Invoice To:  
 3. 1/2

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: \_\_\_\_\_ Client Project I.D. No.: 103231.070593

Sample Team Member (s) A. Meind

SEARS / #1039 TELEGRAPH

ANALYSIS  
 BTEX MIBCPH-G  
 CHLORINATED HYDROCARBONS  
 OIL/GREASE  
 BTEX SOLO  
 A&C  
 K&EFL

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS					Comments / Hazards		
<u>11-6</u>	<u>MW-1</u>		<u>2/7</u>	<u>GW</u>	<u>None</u>	<u>12:25</u>	<u>40ML</u>	X	X						
<u>21-6</u>	<u>MW3</u>		<u>7</u>			<u>12:33</u>	<u>40ML</u>	X	X						
<u>31-6</u>	<u>MW7</u>		<u>7</u>			<u>12:39</u>	<u>40ML</u>	X	X						
<u>41-6</u>	<u>MW6</u>		<u>7</u>			<u>12:54</u>	<u>40ML</u>	X	X	X					
<u>1A-6</u>	<u>MW-4</u>		<u>7</u>			<u>13:07</u>	<u>40ML</u>	X	X	X					
<u>2A-6</u>	<u>MW5</u>		<u>7</u>			<u>13:07</u>	<u>LITER</u>	X	X	X					
<u>3A-6</u>	<u>MW2</u>		<u>7</u>			<u>13:14</u>	<u>40ML</u>	X	X						
<u>4A-6</u>	<u>DUP MW-2</u>		<u>98</u>			<u>13:30</u>	<u>40ML</u>	X	X						
<u>5A</u>	<u>TBLB</u>					<u>13:35</u>	<u>40ML</u>			X					<u>No Ambys received</u>

Relinquished by: (Signature) <u>[Signature]</u>	DATE <u>2/12/98</u>	TIME <u>1020</u>	Received by: (Signature) <u>[Signature]</u>	DATE <u>2/12/98</u>	TIME <u>1020</u>
Relinquished by: (Signature) <u>[Signature]</u>	DATE <u>2/12/98</u>	TIME <u>1750</u>	Received by: (Signature) <u>[Signature]</u>	DATE <u>2/12/98</u>	TIME <u>1750</u>
Relinquished by: (Signature) _____	DATE _____	TIME _____	Received by: (Signature) _____	DATE _____	TIME _____
Method of Shipment _____			Lab Comments _____		

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