

July 15, 1997

# 1630

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 Store 1039

1911 Telegraph Avenue, Oakland, California

Fluor Daniel GTI Project 020200282

Dear Mr. Klettke:

On behalf of Sears, Roebuck & Co., Fluor Daniel GTI, Inc. presents the quarterly groundwater monitoring and sampling data collected on June 10, 1997, 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, figure 1. A summary of monitoring data is presented in attachment 2, table 1.

After measuring depth to water, the 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 table 2. A distribution map of dissolved benzene and TPH-as-gasoline concentrations is presented in figure 2. Laboratory reports and chain-of-custody records are included in attachment 4.

0282QMSR.797

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

Sincerely,

Fluor Daniel GTI, Inc.

Eileen Brennan

West Zone Project Manager

Eile Brome

**Attachments** 

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

FLUOR DANIEL GTI

### **ATTACHMENT 1**

# **Figures**

- 1. Potentiometric Surface Map (6/10/97)
- 2. Concentrations of Benzene and TPH-as-Gasoline in Groundwater (6/10/97)

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FLUOR DANIEL GTI

### WILLIAMS STREET MW-05 → (76.09)\* MW-02 (79.94)\*<sup>+</sup> CANOPY--FORMER WASTE OIL TANK FORMER CHEVRON <sup>⊕</sup>P-07/ P-11 STATIO PARKING GARAGE MW-07 →MW-01 (77.88) <del>†</del> (76.36) FORMER GASOLINE TANK EXCAVATION ABOVEGROUND WASTE OIL TANK --SERVICE BAY SHOW EMPORIUM CAPWELL ROOM GOODYEAR TIRE CENTER

19th STREET

MW-03 (77.55)∳



SAN PABLO ANEMUE

→ MONITORING WELL

→ SOIL PROBE

( ) POTENTIOMETRIC SURFACE ELEVATION (RELATIVE)

POTENTIOMETRIC SURFACE CONTOUR

GROUNDWATER FLOW DIRECTION

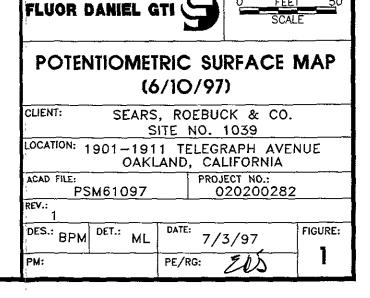
\* ANOMALOUS DATA

OTES:

CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE SEA LEVEL.



USED TIRE STORAGE AREA

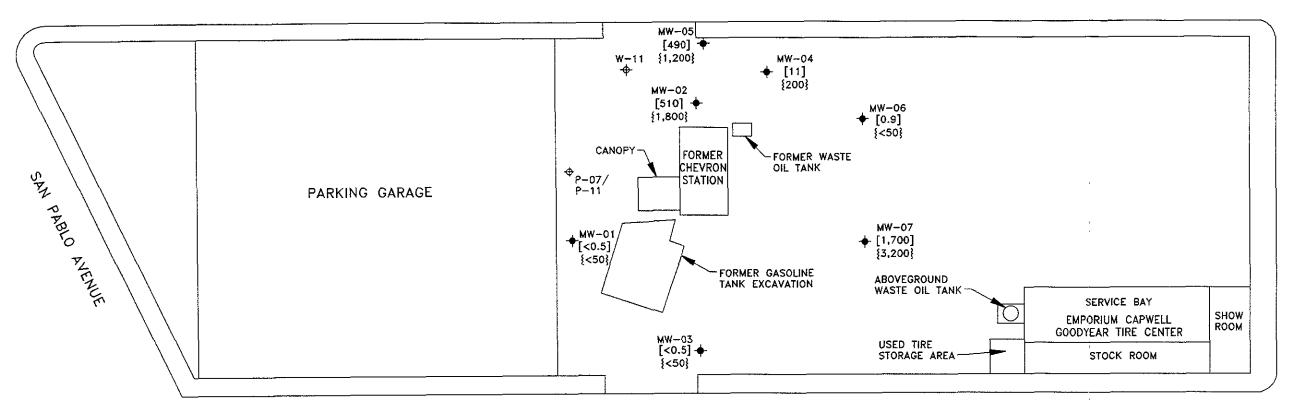


STOCK ROOM

AVENUE

TELEGRAPH

### WILLIAMS STREET

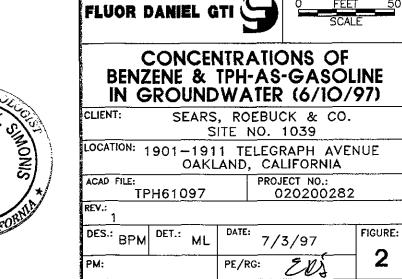


19th STREET



- → MONITORING WELL
- → SOIL PROBE
- [ ] BENZENE CONCENTRATION [ug/I]
- } TPH-AS-GASOLINE CONCENTRATIONS (ug/I)





TELEGRAPH AVENUE

C C L L

### **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

		<u> </u>			I	
	Casing		Depth to	Depth to	Product	Groundwater
Well ID	Elev.	Date	Water	Product	Thickness	Elev.
MW-1	94.34	06/12/96	16.21		_	78.13
		09/05/96	16.89		_	77.45
1		12/03/96	17.07			77.27
]		02/27/97	15.55		_	78.79
<u> </u>	_	06/10/97	16.46		-	77.88
MW-2	93,94	06/12/96	16.01			77.93
10100-2	30,54	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
		00/10/0/	74.00			70.54
MW-3	95.67	06/12/96	17.56		<u>-</u>	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
MW-4	91.99	06/12/96	14.21	_		77.78
l i		09/05/96	14.83	_		77.16
i i		12/03/96	13.99		-	78.00
		02/27/97	12.44		_	79.55
		06/10/97	14.20			77.79
MW-5	92.09	06/12/96	14.13			77.96
"""	32.03	09/05/96	14.77	_	_	77.32
		12/03/96	13.99	_		77.32 78.10
!		02/27/97	12.08			80.01
		06/10/97	16.00		_	76.09
·						
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
		<b>0</b> 6/10/97	15.30	-		76.85
MW-7	93.36	06/12/96	16.56		_	76.80
		09/05/96	17.10	_	<b></b>	76.26
[	į	12/03/96	17.12	-		76.24
l		02/27/97	16.20	-		77.16
	İ	06/10/97	17.00	_	-	76.36

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	МТВЕ	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 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97	  <5.0 <5.0 <5.0 <5.0	ND ND <0.5 <0.5 <0.5 <0.5 <0.5	ND ND 1.4 <0.5 <0.5 <0.5	ND ND <0.5 <0.5 <0.5 <0.5	ND NO V V V V V V V	<50 <50 <50 <50 <50 <50 <50	ND 14 V0.5 V0.5 V0.5 1.3 V0.5	ND ND <0.5 <0.5 <0.5 <0.5 <0.5	     -0.5 -0.5 -0.5	   <0.5 <0.5 <0.5		9.9 9.9 12 12 <0.5 31 19
MW-2	10/95 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97	  <5.0 40 12 <30	1200 1100 890 350 230 210 510	5.4 11 7 3.0 2.4 2.2 3	41 100 56 17 7.8 6.0 6.0	5.9 6.9 10 10 7 3 <10	2900 780 3600 2100 1100 1000	40 38 40 29 20 25 19	280 270 160 55 86 43 47	 1.9 7 <0.5 4.9	  55 <0.5 <0.5 <0.5	 	ND ND <3 <0.5 <0.5 0.8 1.0
MW-3	10/95 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97	  -5.0 <5.0 <5.0 <5.0	ND ND V0.5 V0.5 V0.5 V0.5	ND ND V0.5 V0.5 V0.5 V0.5 V0.5	ND ND V0.5 V0.5 V0.5 V0.5	ND ND <2 <2 <2 <2 <2	<50 ND <50 <50 <50 <50 <50	DD 5.5.5.5 V V V V V	DD 55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	   <0.5 <0.5 <0.5	   <0.5 <0.5 <0.5	 <0.5 <0.5  	ND ND <0.5 <0.5 2.3 6.3 5.9
MW-4	10/95 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97	   15 <5.0 <5.0	4.1 5.8 11 5.6 11 3.1	ND V0.5 <0.5 <0.5 <0.5 <0.5	ND 20.5 V 0.5 V 0.5 V 0.5 V 0.5 V 0.5	ND ND V2 V2 V2 V2 V2 V2 V2 V2 V2 V2 V2 V2 V2	<50 <50 320 70 270 190 200	ND 0.5 V0.5 V0.5 V0.5 V0.5 V0.5	ND ND <0.5 <0.5 0.9 <0.5 <0.5	     	  <0.5 <0.5 <0.5 <0.5	 <0.5 <0.5 <0.5 <500	ND ND V0.5 V0.5 V0.5 V0.5 V0.5
MW-5	10/95 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97	  <5.0 6 <5 <30	86 160 54 22 18 74 490	ND 3.6 1.1 1.0 0.6 2.0 19	ND ND V0.5 V0.5 V0.5 V0.5 V3.0	ND ND V2 V2 V2 V2 V2 V10	260 180 260 160 170 230 1200	ND ND V0.5 V0.5 V0.5 V0.5 V0.5	DD 5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	   <0.5 <0.5 <0.5	       		ND ND <0.5 <0.5 <0.5 <0.5 <0.5

#### 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	Toluene	Ethyl- benzene	Total Xylenes	TPH as Gasoline	TCE	1,2- DCA	CIS 1,2 DCE	1,1 DCE	OIL/ GREASE	PCE
MW-6	10/95 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97		ND ND <0.5 0.8 <0.5 <0.5	ND ND <0.5 <0.5 <0.5 <0.5 <0.5	ND ND V0.5 V0.5 V0.5 V0.5 V0.5	ND ND VV VV VV VV	<50 <50 <50 <50 <50 <50 <50	11 12 5.0 5.2 0.6 0.5 <0.5	33 5.3 7.9 7.5 0.5 <0.5 <0.5	            	   <0.5 <0.5 <0.5	- <0.5 <0.5 <0.5 <500	6.2 7.2 3.6 5.4 0.9 1.3
rns org	10/95 01/96 06/12/96 09/05/96 12/03/96 02/27/97 06/10/97	  -5 -5 -5 -50 -50	ND ND 0.6 1.2 850 1500 1700	ND ND <0.5 <0.5 <5 3 <5.0	ND ND V0.5 V0.5 V5 23 59	ND ND <2 <2 <30 <10 <20.0	<50 <50 <50 <50 120 2500 3200	3.5 4.8 3.4 4.2 4.0 4.0 4.2	8.3 5.7 2.9 5.9 75 65	  -3 <0.5 <0.5	   <3 <0.5 <0.5	   <0.5	5.3 9.3 6.1 8.3 4 2.2 2.2

Source: AEN Environmental Laboratory for results dated 9/20/96

Notes: "--" indicates no datum for the cell, including "not analyzed for this constituent".

Values beginning with "<" indicate the compound was not detected above the laboratory reporting limits.

Historical data before June 1996 as reported by previous consultants

 $\mu$ g/L = Micrograms per liter

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 = Tricloroethene
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

### **Groundwater Monitoring**

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

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

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

Groundwater monitoring wells are monitored in order of wells with lowest concentrations of volatile organic compounds to wells with the highest concentrations, based upon historical concentrations. If separate-phase hydrocarbons are encountered in a well, the product is visually inspected to confirm and note color, amount, and viscosity. Monitoring equipment is washed with laboratory grade detergent and rinsed with distilled or delonized 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) baller fitted with a check valve or with a stainless steel submersible Grundfos pump. The purge equipment is decontaminated before use in each well by washing with laboratory grade detergent and tripled rinsing with delonized 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 Tefion® 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: 20200282:00

Site: SEARS/1039/Oakland, CA

Project Mgr: Eileen Brennan

Technician Hector Mer wo

Scheduled: 6/23/97

Site Mgr: M. Chamberlain

(alda) PREPARATORY COMMENTS
Visit Date: Who Arrival Time: 9',30 Departure Time: 14:06
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?
Job # and task #

# GROUNDWATER SAMPLING - Task Nr: 030543 [Quarterly]

NOTIFY: Richard Cole 48 hrs. in advance (510) 444-7662. (He will insure that wells are not covered). Call 6-6-97 @ 8:51 pilling.

Notify Dale Klettke 72 hrs. in advance (510) 567-6880. DONE: ADDRESS: 1911 Telegraph Avenue, Oakland, CA

cc: Elieen Brennan, Mike Chamberlain

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 permeter 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.

# SITE VISIT FORM

Fluor Daniel GTI - Martinez, California Project: 20200282.00 Technician: Site: SEARS/1039/Oakland, CA Scheduled: 6/23/97 Project Mgr: Eileen Brennan Site Mgr: M. Chamberlain GROUNDWATER SAMPLING (Continued) - Task Nr: 030543 [Quarterly] 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? EXPLAIN 8.00 Hours Used Hours Estimated 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: 6/10/97 Label Type: NOA() ASS SOIL pile? Y/N size: 🔪 cu.yds. SITE LEFT CLEAN? TECHNICIAN'S COMMENTS MONHORED AND SAMPLED ANWELLS JENERADED TWO DRUMS, WATED IN CHARACTE. OLD COODYERR C-ARAGE WAS FERCED OFF OSSIBLE FUTURE WORK TO BEDONE, SEE MAD 8.00 Total Hours Used Total Hours Estimated

Travel Time Estimated

Travel Time Used

1.00

# SITE VISIT FORM GROUNDWATER TECHNOLOGY, INC.

				-				
S	Project: Sears/103 Store #: 1039, 191 Project Manager: E	1 Telegraph Ave.	Technician: HECTOR MURING Schedule: Job No. 020200282.030543					
	WELL WATER SAMPLING - TASK Nr: 030504 [QUARTERLY] Gauge wells for volume of water & bail 3 well Vol,s. DECON all equipment & change gloves, string, etc. between each well.							
Well ID	ŕ							
MW-1:	DTB_24.25	4 4		#GAL. BAILED				
MW-2:	DTB_24.10	DTW 14.00	<del></del>	#GAL. BAILED				
MW-3:	DTB_27.75	ртм. <u>18′19</u>	SAT. THICK	#GAL. BAILED				
MW-4:	DTB_23.55			#GAL. BAILED				
MW-5:	DTB_25.10			#GAL. BAILED				
MW-6:	DTB_26.75	DTW 15,30	SAT. THICK	#GAL. BAILED				
MW-7:	DTB_26.20	DTW 17,00	SAT. THICK	#GAL. BAILED				
NOTES:								
		HOURS ESTIMA	TED:	HOURS USED:	<del></del> _			
		FIN	NAL CHECKS					
Are Wells	s Locked? YES	NO Why Not?						
Are Mani	holes Bolted Dowl	n? YES NO Why	Not?					

· 3

Site Address:	roject Name: Sears/1039/Oakland ite Address: 1911 Telegraph Ave., Oakland roject Number:020200282,030543  Date:									
Well ID:  DTW Measurements:  Initial: 1646 Calc Well Volume: 12 gal  Recharge: Well Volumex 3 3 8 gal  DTB: 24.35										
Purge Method Pump Depthft. Instruments Used   Peristaltic Hand Bailed YSI: \( \sigma_{\subseteq} \) Other:   Gear Drive Air Lift Hydac: \( \subseteq_{\subseteq} \) Other   Submersible Other \( \subseteq_{\subseteq} \) Omega:										
Time	Temp C F	Conductivity (mmhos/cm)	pН	Purge Volume Gallons	Turbidity	Comments				
10:18	1816	0.47	6,51		douby	Brown				
10:19	19.5	0.42	6.19	3						
10:20	19.8	0.48	6:15	3						
10:21	19.8	0.48	(0.14	4						

Project Name: Sears/1039/Oakland Site Address: 1911 Telegraph Ave., Oakland Project Number:020200282,030543  Project Manager: Eileen Brennan										
Well ID:  DTW Measurements:  Initial: 18.12 Calc Well Volume: 42 gal  Recharge: Well Volume: γ3 \ 9 gal  DTB: 27.75										
Purge Method Pump Depthft. Instruments Used Peristaltic Hand Bailed YSI: Other: Gear Drive Air Lift Hydac: Submersible Other Omega:										
Time	Temp	Conductivity (mmhos/cm)	рН	Purge Volume Gallons	Turbidity	Comments				
10:30	20,3	0.55	6.08	5	CLOUDY					
10.33	20.5	0.57	6.10	10	CLEAR					
10:36	20.6	0.57	(0.09	15						
10:40	20.7	0.60	6.12	20						

Project Name: Site Address: Project Number	1911 Telegra	ph Ave Oaklar	<u>ıd</u>	Da Paç Pro	te:of_ geof_ pject Manager:	6/97 Eileen Brennan				
Well ID:  DTW Measurements:  Initial: 17,00 Calc Well Volume: 14 gal  Recharge: Well Volume; 3 4,4 gal  DTB: 26,20										
Purge Method Pump Depthft. Instruments Used   Peristaltic Hand Bailed YSI: \( \sum_{\text{o}} \) Other:   Gear Drive Air Lift Hydac: \( \sum_{\text{o}} \) Other   Submersible Other \( \sum_{\text{o}} \) Omega:										
Time	Temp  C F	Conductivity (mmhos/cm)	рН	Purge Volume Gallons	Turbidity	Comments				
10.56	20.7	1.04	6.37		Cloudy	BROWN				
10,57	20.6	0,98	6.48	2						
10.58	20.5	0.99	6.48	3						
10,59	20.6	0.98	6.49	4						
11:00	205	0,97	6.50	5		Dey @ 5 gallons				

Site Address:	roject Name: Sears/1039/Oakland   Date: 6/0/97   ite Address: 1911 Telegraph Ave., Oakland   Page 4 of   roject Number: 020200282,030543   Project Manager: Eileen Brennan									
Well ID: MW-6 DTW Measurements:   Initial: 15,30 Calc Well Volume: Calc Well Volume: Gall Calc Well Volume:   Well Diameter: Well Volume: DTB: 20,75										
Gear Drive	Peristattic Hand Bailed YSI: Other:  Gear Drive Air Lift Hydac:  Submersible Other Omega:									
Time	Temp  C F	Conductivity (mmhos/cm)	рН	Purge Volume Gallons	Turbidity	Comments				
11'.12	20,3	0.96	6.59		Cloudy					
11'13	20.4	0.97	6.60	2						
11:14	20.5	0.98	658	3						
11:15	20.5	0,93	661	4						
11/1/0	20.4	0.99	6.59	5	9					
	Ţ	_		_						

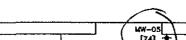
Project Name: Site Address: Project Number	1911 Telegra	<u>ph Ave Oaklar</u>	Da Pa Pro	te:(( geSof_ oject Manager:	Eileen Brennan					
Well ID: Well Diameter:	Well ID:  DTW Measurements:  Initial: 14.20 Calc Well Volume: 518 gal  Recharge: Well Volume: X3 17 gal  DTB: 23 (55									
Purge Method Pump Depthft. Instruments Used   Peristaltic Hand Bailed YSI: ×// Other:   Gear Drive Air Lift Submersible//>										
Time	Temp  OC  E	Conductivity (mmhos/cm)	рН	Purge Volume Gallons	Turbidity	Comments				
111,29	20.7	0.80	6.56	5	CLEAR	ODOR				
11.33	210	0.83	652	10						
11.37	209	0.85	6.55	15		15 0ANNS				
						,				

Project Name: Site Address: Project Number	1911 Telegra	<u>ph Ave Oaklar</u>	Pa	Date: 6 6 97 Page 6 of Fileen Brennan					
Well ID: Well Diameter:	0	1.5	DTW Measu Initia Recharge: DTB:2	irements: 160 al: 160	O Calc Well	Volume: 1.4 gal S gal			
Purge Method Pump Depthft. Instruments Used   Peristaltic Hand Bailed YSI: YSI: Other:   Gear Drive Air Lift Other Other Hydac: Omega:									
Time	Temp C F	Conductivity (mmhos/cm)	рН	Purge Volume Gallons	Turbidity	Comments			
11:50	20.9	1,49	6.79		CLOUD	(PREY			
1651	20.7	1,51	6.8	2					
11:52	20.9	1.53	6.82	3	0	DEX CONS			
\				4					
		<u></u>		5					

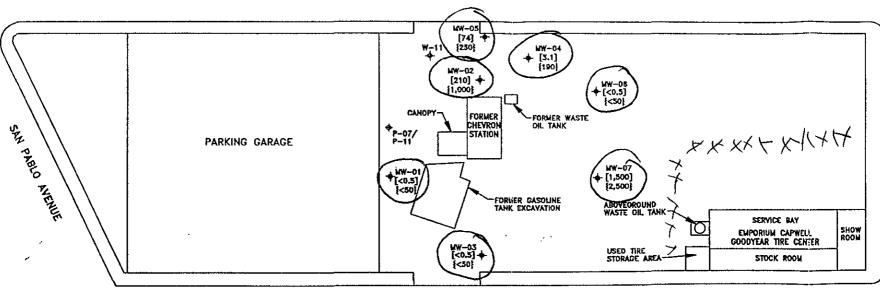
Project Name: Site Address: Project Numbe	1911 Telegra	ph Ave., Oaklar	Pa	Date: (a) (b) (97) Page a of a project Manager: Eileen Brennan					
Well ID:  DTW Measurements:  Initial: 4.00 Calc Well Volume: 6.5 gal  Well Diameter: Well VolumeX3 9.1 gal  DTB: 24.10									
Purge Method Pump Depthft. Instruments Used   Peristaltic Hand Bailed YSI: Other:   Gear Drive Air Lift Hydac: Hydac:   Submersible Other Omega:									
Time	Temp X) C F	Conductivity (mmhos/cm)	рН	Purge Volume Gallons	Turbidity	Comments			
121.09	20.5	127	6.49	5	CLOUDY				
2:12	20,5	1,20	6.46	10					
12:15	20.5	20.5 1.16 6.47 15 J Dere							
				20		,			

L

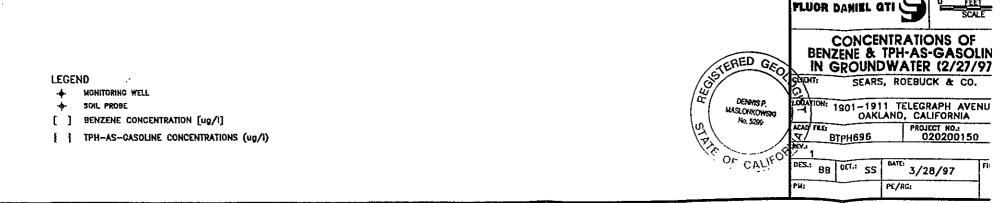




WILLIAMS STREET



19th STREET



# SEARS DRUM INVENTORY FORM

Completion Date: 6/10/97

ears Store Number // 39		City	/State	DAKIA	ND M.	
ccumulation Start Date , ()	2197	<u> </u>		<del></del>		
DGTI Representative	1 KE	RIND				
		<u> </u>			<u>.</u>	
rum Storage Location CZACAC	クヒ					
						_
CONTENTS	# OF DRUMS	*DRUM ID (A,B,C)	LID	**LABEL TYPE:	DRUM DESCRIPTION:	
	Ditomo	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TYPE: (OPEN OR BUNG)	HAZARD NON-HAZ UNCLASS	COLOR CONDITION MARKINGS	
		FLUDE		1		
	1	A.B.C.D	OENI	1 hvelve	what, Lib Black Deum, good Cono	
WASHWATER RINSATE (GAS)	7	D'D'CID	CIEIV	MI WISS	Cons	77100/
WASHWATER RINSATE (OIL)						
MOTOR OIL/WATER MIXTURES		<u> </u>			<u></u>	╢
MOTOR OIL				-		
USED OIL/WATER MIXTURES						
USED OIL						1
HEATING OIL/DIESEL FUEL AND WATER MIXTURES						
HEATING OIL/DIESEL FUEL						
GASOLINE/WATER MIXTURES						
GASOLINE						
HYDRAULIC OIL/WATER MIXTURES						4
HYDRAULIC OIL	<u> </u>				}	
	·	SLUDGES		- <del></del>		
MOTOR OIL SLUDGE/TANK BOTTOMS						
USED OIL SLUDGE/TANK BOTTOMS			1			1
HEATING OIL/DIESEL FUEL SLUDGE/TANK BOTTOMS						
GASOLINE SLUDGE/TANK BOTTOMS						4
HYDRAULIC OIL SLUDGE/TANK BOTTOMS						
	OTHERif	soil, complete F	Page 2 of 3		T	4
DESCRIPTION (NO SORBENT PADS or PPE IN DRUMS):						

<sup>\*</sup>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: 611079

Store Number		City/State <u>OA</u>	Kland OA.			
Accumulation Start Date 60110	<u> </u>					
DGTI Representative	& Merino					
Soil Storage Location						
SOIL CONTAMINANTS	# OF DRUMS*	CUBIC YARDS	DIMENSIONS OF PILE			
SOIL CONTAMINANTS  VIRGIN PETROLEUM OIL (motor, heating, diesel)	# OF DRUMS*	CUBIC YARDS	DIMENSIONS OF PILE			
	# OF DRUMS*	CUBIC YARDS	DIMENSIONS OF PILE			

GASOLINE

<sup>\*</sup> IF DRUMS ARE GENERATED, COMPLETE PAGE 3 OF 3

SEARS DRUM INVENTORY FORM
Completion Date: 6/0/97

Store Number City/State CHKMD City/State CHKMD There should never be 2 drums with the same drum id present at a sears store at the same to					
DRUM ID	ACCUMU- LATION START DATE	CONTENTS (as on label) VOLUME (if mixed waste)	SOURCE (be specific)	SLUDGE PRESENT Y/N	VOLUME (gallon)
11 1	ا مسما	i .			l

DRUM ID	ACCUMU- LATION START DATE	CONTENTS (as on label) VOLUME (if mixed waste)	SOURCE (be specific)	SLUDGE PRESENT Y/N	VOLUME (gallon)
А	2/27/97	Purce Hz 0	Montocwell5	N	SS
В	2/27/97	PURGEHOD	MonitorWEIK	W	30
С	0/10/97	PURGE HO	MonitorWEBS	N	55
D	10/10/97	PURGEHOD PURGEHOD PURGEHOD	moiten WENS	NU	20
E					
F					
G					
Н					
1					
J					
К					
L					
М			. , ,		,
N					
О					
Р					
Q					
R					
S					
т					
υ					
V					
w		•			
х					
Y					
Z					

EXAMPLE					
Α	5/19/97	well purge water	MW-1 thru MW-5	no	50

Reporting Information:	American Enviro	onmantal Nativo	rk <b>AEN</b>		Page 1 .
1. Client: FLORTANIEL'ST Address: 757AR NOUDTL, SUT MCTNEZ D- Contact: ELEN BLEMAN Alt. Contact: MKE CHANGER VAN	3440 Vincent Road, I Phone (51	Pleasant Hill, CA 94523 0) 930-9090 0) 930-0256	Lab Job Number: Lab Destination:		Page of
Address Report To:	Send Invoice To:		Date Samples Shipped Lab Contact:	l:	
2	3. Some A	-1+2+ -3('	Date Results Required: Date Report Required: Client Phone No.: Client FAX No.:	(\$70) <b>37</b> 0 (\$70) <b>37</b> 0	3990
Send Report To: (or 2) Circle one)  Client P.O. No.: Client F  Sample Team Member (s)	Project I.D. No.: 0200028	32.0305431		ANALYSIS	
Lab Client Sample Number Identification	Air Date/ Time Sample Collected Type*	Pres. No. Type of Cont. Cont.			Comments / Hazards
Mw-1	6/12:30 7	Friting ?			
NW-3	- / B.40		XX	1 1	
MW-7 MW-6	10 3.00	4			
Mw-4 .	1530	1, 9			
MW-5	1 1220	7	XX		
Min-3	7 330	1,70	XX		
MWJDUP	67 13:33 V	(6)			
TBLB		1,000	T X 1		
				<u> </u>	
			70	<u> </u>	
				1	
				<del> </del>	
Relinquished by (Signature)	6/11/97	TIME Receiv (Signat	ed by: / luc de ad the	Nella	DATE SO
Relinquished by: (Signature)	DATE	TIME Receiv (Signa	ed by:		DATE TIME
Relinquished by: (Signature)	DATE	TIME Receiv (Signa			DATE TIME
Method of Shipment		Lab Co	mments		
*^		MODE O SEMMOS	MCEE 3) 35mm 0.4 um notuci	arb filtor	

### **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

ATTN: EILEEEN BRENNAN

CLIENT PROJ. ID: 020200282030543

Srs 1039 Oakland CA

REPORT DATE: 06/21/97

DATE(S) SAMPLED: 06/10/97

DATE RECEIVED: 06/11/97

AEN WORK ORDER: 9706147

#### PROJECT SUMMARY:

On June 11, 1997, this laboratory received 9 water sample(s).

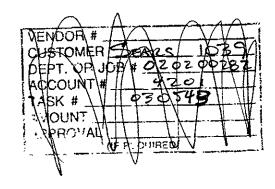
Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

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: 9706147-01

AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

METHOD/ REPORTING DATE **ANALYTE** CAS# **RESULT** LIMIT UNITS ANALYZED BTEX & Gasoline HCs EPA 8020 71-43-2 ND 0.5 ug/L 06/18/97 Benzene Toluene. 108-88-3 ND 0.5 ug/L 06/18/97 100-41-4 0.5 ug/L 06/18/97 Ethy1benzene ND Xylenes, Total 1330-20-7 ND 2 ug/L 06/18/97 Purgeable HCs as Gasoline 5030/GCFID ND 0.05 mg/L06/18/97 Methyl t-Butyl Ether 1634-04-4 06/18/97 ND 5 ug/L **EPA 8010** EPA 8010 - Water matrix 75-27-4 Bromodichloromethane ND 0.5 ug/L 06/14/97 0.5 ug/L 2 ug/L Bromoform 75-25-2 ND 06/14/97 Bromomethane 74-83-9 ND 06/14/97 56-23-5 0.5 ug/L Carbon Tetrachloride ND 06/14/97 108 - 90 - 70.5 ug/L 06/14/97 Chlorobenzene ND 06/14/97 Chloroethane 75-00-3 2 ug/L ND 0.5 ug/L 110-75-8 2-Chloroethyl Vinyl Ether ND 06/14/97 Chloroform 67-66-3 ND 0.5 ug/L 06/14/97 Chloromethane 74-87-3 ND 2 ug/L 06/14/97 124-48-1 0.5 ug/L Dibromochloromethane 06/14/97 ND 95-50-1 0.5 ug/L 06/14/97 1.2-Dichlorobenzene ND 1.3-Dichlorobenzene 541-73-1 ND 0.5 ug/L 06/14/97 1.4-Dichlorobenzene 106-46-7 ND 0.5 ug/L 06/14/97 2 ug/L Dichlorodifluoromethane 75-71-8 06/14/97 ND 75-34-3 0.5 ug/L 06/14/97 1.1-Dichloroethane ND 0.5 ug/L 1.2-Dichloroethane 107-06-2 ND 06/14/97 0.5 ug/L 0.5 ug/L 75-35-4 06/14/97 1.1-Dichloroethene ND cis-1,2-Dichloroethene 156-59-2 ND 06/14/97 trans-1.2-Dichloroethene 156-60-5 0.5 ug/L 06/14/97 ND 0.5 ug/L 1.2-Dichloropropane 78-87-5 ND 06/14/97 0.5 ug/L 0.5 ug/L cis-1,3-Dichloropropene 10061-01-5 ND 06/14/97 06/14/97 trans-1.3-Dichloropropene 10061-02-6 ND 2 ug/L 0.5 ug/L 06/14/97 Methylene Chloride 75-09-2 ND 1.1.2.2-Tetrachloroethane 79-34-5 ND 06/14/97 127-18-4 0.5 ug/L 19 \* 06/14/97 Tetrachloroethene 1,1,1-Trichloroethane 0.5 ug/L 71-55-6 ND 06/14/97 0.5 ug/L 06/14/97 79-00-5 1.1.2-Trichloroethane ND Trichloroethene 79-01-6 0.5 ug/L 06/14/97 ND 2 ug/L 0.5 ug/L 06/14/97 Trichlorofluoromethane 75-69-4 ND 06/14/97 1,1,2Trichlorotrifluoroethane 76-13-1 ND 75-01-4 ND 2 ug/L 06/14/97 Vinyl Chloride

PAGE 3

### FLUOR DANIEL GTI

SAMPLE ID: MW-1

AEN LAB NO: 9706147-01 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97

**REPORT DATE:** 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

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: 9706147-02 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

REPORTING METHOD/ DATE **ANALYTE** CAS# RESULT LIMIT UNITS **ANALYZED** EPA 8020 BTEX & Gasoline HCs Benzene 71-43-2 ND 0.5 ug/L06/19/97 ND  $0.5 \, \text{ug/L}$ 06/19/97 Toluene 108-88-3 0.5 ug/L 2 ug/L 06/19/97 Ethy1benzene 100-41-4 ND 06/19/97 Xylenes, Total 1330-20-7 ND 0.05 mg/L06/19/97 5030/GCFID Purgeable HCs as Gasoline ND Methyl t-Butyl Ether 1634-04-4 ND 5 ug/L 06/19/97 EPA 8010 - Water matrix **EPA 8010** 0.5 ug/L 06/14/97 Bromodichloromethane 75-27-4 ND 75-25-2 0.5 ug/L ND 06/14/97 Bromoform 2 ug/L 0.5 ug/L 74-83-9 ND 06/14/97 Bromomethane Carbon Tetrachloride 56-23-5 ND 06/14/97 ND 06/14/97 Chlorobenzene 108-90-7 0.5 ug/L06/14/97 Chloroethane 75-00-3 ND 2 ug/L 0.5 ug/L 06/14/97 2-Chloroethyl Vinyl Ether 110-75-8 ND 0.5 ug/L 06/14/97 67-66-3 ND Chloroform Chloromethane 74-87-3 ND 2 ug/L06/14/97 124-48-1 Dibromochloromethane ND 0.5 ug/L 06/14/97 0.5 ug/L 06/14/97 1,2-Dichlorobenzene 95-50-1 ND 06/14/97 541-73-1 ND  $0.5 \, \text{ug/L}$ 1.3-Dichlorobenzene 0.5 ug/L 06/14/97 1.4-Dichlorobenzene 106-46-7 ND 75-71-8 2 ug/L 06/14/97 Dichlorodifluoromethane ND 0.5 ug/L 06/14/97 1,1-Dichloroethane 75-34-3 ND 107-06-2 ND 0.5 ug/L 06/14/97 1.2-Dichloroethane 75-35-4 ND 0.5 ug/L 06/14/97 1.1-Dichloroethene cis-1,2-Dichloroethene 156-59-2 0.5 ug/L 06/14/97 ND 156-60-5 0.5 ug/L 06/14/97 trans-1.2-Dichloroethene ND 0.5 ug/L 06/14/97 1.2-Dichloropropane 78-87-5 ND cis-1.3-Dichloropropene 10061-01-5 ND 0.5 ug/L 06/14/97 trans-1,3-Dichloropropene 0.5 ug/L 10061-02-6 06/14/97 ND 06/14/97 75-09-2 ND 2 ug/L Methylene Chloride ND 0.5 ug/L 06/14/97 1.1.2.2-Tetrachloroethane 79-34-5 127-18-4 0.5 ug/L 06/14/97 Tetrachloroethene 5.9 \* 06/14/97 1,1,1-Trichloroethane 71-55-6 ND 0.5 ug/L 79-00-5 0.5 ug/L 06/14/97 1.1.2-Trichloroethane ND Trichloroethene 79-01-6 ND 0.5 ug/L 06/14/97 06/14/97 75-69-4 2 ug/L Trichlorofluoromethane ND 06/14/97 0.5 ug/L 1,1,2Trichlorotrifluoroethane 76-13-1 ND 06/14/97 Vinyl Chloride 75-01-4 ND 2 ug/L

# American Environmental Network

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# FLUOR DANIEL GTI

SAMPLE ID: MW-3

AEN LAB NO: 9706147-02 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97

**REPORT DATE:** 06/21/97

ANALYTE	METHOD/ CAS#	REPORTING RESULT LIMIT	UNITS	DATE ANALYZED

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: 9706147-03 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	EPORTING LIMIT UNITS	DATE ANALYZED
Benzene Toluene Ethylbenzene Xylenes, Total	EPA 8020 71-43-2 108-88-3 100-41-4 1330-20-7	1,700 * ND 59 * ND	5 ug/L 5 ug/L 5 ug/L 20 ug/L	06/18/97 06/18/97 06/18/97 06/18/97
Purgeable HCs as Gasoline Methyl t-Butyl Ether	5030/GCFID 1634-04-4	3.2 * ND	0.5 mg/L 50 ug/L	06/18/97 06/18/97
EPA 8010 - Water matrix Bromodichloromethane Bromomethane Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl Vinyl Ether Chloroform Chloromethane Dibromochloromethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Methylene Chloride 1,1,2,2-Tetrachloroethane Tetrachloroethene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichlorofluoromethane	EPA 8010 75-27-4 75-25-2 74-83-9 56-23-5 108-90-7 75-00-3 110-75-8 67-66-3 74-87-3 124-48-1 95-50-1 541-73-1 106-46-7 75-71-8 75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5 10061-01-5 10061-02-6 75-09-2 79-34-5 127-18-4 71-55-6 79-00-5 79-01-6 75-69-4 e 76-13-1 75-01-4	ND N	0.5 ug/L	06/14/97 06/14/97

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### FLUOR DANIEL GTI

SAMPLE ID: MW-7

AEN LAB NO: 9706147-03 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97

REPORT DATE: 06/21/97

		· ··-			
ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits elevated for gas/BTEX/MTBE due to high levels of target compounds. Sample run dilute.

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: 9706147-04 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97

**REPORT DATE: 06/21/97** 

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs Benzene Toluene Ethylbenzene Xylenes, Total Purgeable HCs as Gasoline Methyl t-Butyl Ether	EPA 8020 71-43-2 108-88-3 100-41-4 1330-20-7 5030/GCFID 1634-04-4	0.9 * ND ND ND ND ND	0.05 t	ug/L ug/L ug/L	06/18/97 06/18/97 06/18/97 06/18/97 06/18/97
#Water Extrn for HCs		-	1	Extrn Date	06/16/97
Hydrocarbons (IR)	SM 5520F	ND	0.5	mg/L	06/16/97
Oil & Grease (IR)	SM 5520C	ND	0.5 1	mg/L	06/16/97
EPA 8010 - Water matrix Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl Vinyl Ether Chloroform Chloromethane Dibromochloromethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropene trans-1,3-Dichloropropene dethylene Chloride 1,1,2-Tetrachloroethane Tetrachloroethene 1,1,1-Trichloroethane	EPA 8010 75-27-4 75-25-2 74-83-9 56-23-5 108-90-7 75-00-3 110-75-8 67-66-3 74-87-3 124-48-1 95-50-1 541-73-1 106-46-7 75-71-8 75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5 10061-01-5 10061-02-6 75-09-2 79-34-5 127-18-4 71-55-6	ND N	0.52552555555555555 0.000000000000000000	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	06/14/97 06/14/97

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### FLUOR DANIEL GTI

SAMPLE ID: MW-6 AEN LAB NO: 9706147-04 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Trichloroethene Trichlorofluoromethane 1,1,2Trichlorotrifluoroethane Vinyl Chloride	79-01-6 75-69-4 76-13-1 75-01-4	ND ND ND ND	0.5 u 2 u 0.5 u 2 u	g/L g/L	06/14/97 06/14/97 06/14/97 06/14/97

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

#### FLUOR DANIEL GTI

SAMPLE ID: MW-4 AEN LAB NO: 9706147-05

AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs Benzene Toluene Ethylbenzene Xylenes, Total Purgeable HCs as Gasoline Methyl t-Butyl Ether	EPA 8020 71-43-2 108-88-3 100-41-4 1330-20-7 5030/GCFID 1634-04-4	11 * ND ND ND ND 0.2 *	0.5 ug 0.5 ug 0.5 ug 2 ug 0.05 mg 5 ug	/L /L /L /L	06/18/97 06/18/97 06/18/97 06/18/97 06/18/97
#Water Extrn for HCs		-	Ex	trn Date	06/16/97
Hydrocarbons (IR)	SM 5520F	ND	0.5 <b>m</b> g	/L	06/16/97
Oil & Grease (IR)	SM 5520C	ND	0.5 <b>m</b> g	/L	06/16/97
EPA 8010 - Water matrix Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl Vinyl Ether Chloroform Chloromethane Dibromochloromethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Methylene Chloride 1,1,2,2-Tetrachloroethane Tetrachloroethene 1,1,1-Trichloroethane 1,1,2-Trichloroethane	EPA 8010 75-27-4 75-25-2 74-83-9 56-23-5 108-90-7 75-00-3 110-75-8 67-66-3 74-87-3 124-48-1 95-50-1 541-73-1 106-46-7 75-71-8 75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5 10061-01-5 10061-02-6 75-09-2 79-34-5 127-18-4 71-55-6 79-00-5		.5.2.5.5.2.5.5.2.5.5.2.5.5.2.5.5.2.5.5.2.5.5.2.5.5.2.5		06/14/97 06/14/97

## FLUOR DANIEL GTI

SAMPLE ID: MW-4

AEN LAB NO: 9706147-05 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97

**REPORT DATE: 06/21/97** 

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Trichloroethene Trichlorofluoromethane 1,1,2Trichlorotrifluoroethane Vinyl Chloride	79-01-6 75-69-4 76-13-1 75-01-4	ND ND ND ND	0.5 u 2 u 0.5 u 2 u	g/L g/L	06/14/97 06/14/97 06/14/97 06/14/97

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

#### FLUOR DANIEL GTI

 SAMPLE ID: MW-5
 DATE SAMPLED: 06/10/97

 AEN LAB NO: 9706147-06
 DATE RECEIVED: 06/11/97

 AEN WORK ORDER: 9706147
 REPORT DATE: 06/21/97

CLIENT PROJ. ID: 020200282030543

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs  Benzene Toluene Ethylbenzene Xylenes, Total Purgeable HCs as Gasoline Methyl t-Butyl Ether	PA 8020 71-43-2 108-88-3 100-41-4 1330-20-7 5030/GCFID 1634-04-4	490 * 19 * ND ND 1.2 *	3 ug 3 ug 3 ug 10 ug 0.3 mg 30 ug	/L /L /L /L	06/18/97 06/18/97 06/18/97 06/18/97 06/18/97 06/18/97
EPA 8010 - Water matrix Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl Vinyl Ether Chloroform Chloromethane Dibromochloromethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Methylene Chloride 1,1,2,2-Tetrachloroethane Tetrachloroethene 1,1,1-Trichloroethane Trichloroethene Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane	PA 8010 75-27-4 75-25-2 74-83-9 56-23-5 108-90-7 75-00-3 110-75-8 67-66-3 74-87-3 124-48-1 95-50-1 541-73-1 106-46-7 75-71-8 75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5 10061-01-5 10061-02-6 75-09-2 79-34-5 127-18-4 71-55-6 79-01-6 75-69-4		ug u	ルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルルル	06/14/97 06/14/97

#### FLUOR DANIEL GTI

SAMPLE ID: MW-5 AEN LAB NO: 9706147-06 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97

REPORT DATE: 06/21/97

		-			
ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits elevated for gas/BTEX/MTBE due to high levels of target compounds. Sample run dilute.

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: 9706147-07 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT UNITS	DATE ANALYZED
BTEX & Gasoline HCs Benzene Toluene Ethylbenzene Xylenes, Total Purgeable HCs as Gasoline Methyl t-Butyl Ether	PA 8020 71-43-2 108-88-3 100-41-4 1330-20-7 5030/GCFID 1634-04-4	510 * 3 * 6 * ND 1.8 *	3 ug/L 3 ug/L 3 ug/L 10 ug/L 0.3 mg/L 30 ug/L	06/18/97 06/18/97 06/18/97 06/18/97 06/18/97 06/18/97
EPA 8010 - Water matrix Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl Vinyl Ether Chloroform Chloromethane Dibromochloromethane 1.2-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene Dichlorodifluoromethane 1.1-Dichloroethane 1.1-Dichloroethane 1.1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Methylene Chloride 1,1,2,2-Tetrachloroethane Tetrachloroethene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane Trichlorofluoromethane	PA 8010 75-27-4 75-25-2 74-83-9 56-23-5 108-90-7 75-00-3 110-75-8 67-66-3 74-87-3 124-48-1 95-50-1 541-73-1 106-46-7 75-71-8 75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5 10061-01-5 10061-02-6 75-09-2 79-34-5 127-18-4 71-55-6 79-00-5 79-01-6 75-69-4 76-13-1 75-01-4	ND N	0.5 ug/L 0.5 ug/L 0.5 ug/L 0.5 2 ug/L 0.5 2 ug/L 0.5 2 ug/L 0.5 2 ug/L 0.5 2 ug/L 0.5 2 ug/L 0.5 ug/L	06/14/97 06/14/97

#### FLUOR DANIEL GTI

SAMPLE ID: MW-2

AEN LAB NO: 9706147-07

AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: 06/10/97 DATE RECEIVED: 06/11/97

REPORT DATE: 06/21/97

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits elevated for gas/BTEX/MTBE due to high levels of target compounds. Sample run dilute.

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

#### FLUOR DANIEL GTI

SAMPLE ID: MW2 DUP AEN LAB NO: 9706147-08

AEN WORK ORDER: 9706147 CLIENT PROJ. ID: 020200282030543

**DATE SAMPLED:** 06/10/97 DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX Benzene Toluene Ethylbenzene Xylenes, Total Methyl t-Butyl Ether	EPA 8020 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	520 : 3 : 7 : ND ND	* 3 * 3 10	ug/L ug/L ug/L ug/L ug/L	06/18/97 06/18/97 06/18/97 06/18/97 06/18/97

Reporting limits elevated due to high levels of target compounds. Sample run dilute.

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

## American Environmental Network

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#### FLUOR DANIEL GTI

SAMPLE ID: TBLB AEN LAB NO: 9706147-09 AEN WORK ORDER: 9706147

CLIENT PROJ. ID: 020200282030543

DATE SAMPLED: DATE RECEIVED: 06/11/97 REPORT DATE: 06/21/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX Benzene Toluene Ethylbenzene Xylenes, Total Methyl t-Butyl Ether	EPA 8020 71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	ND ND ND ND ND	0.5 ug 0.5 ug 0.5 ug 2 ug 5 ug	g/L g/L g/L	06/18/97 06/18/97 06/18/97 06/18/97 06/18/97

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

# AEN (CALIFORNIA) OUALITY CONTROL REPORT

AEN JOB NUMBER: 9706147

CLIENT PROJECT ID: 020200282030543

### Quality Control Summary

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

#### Definitions

Laboratory Control Sample (LCS)/Method Spike(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 analysis.

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 behavior, 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 instrumental performance.

- D: Surrogates diluted out.
- #: Indicates result outside of established laboratory QC limits.

### QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9706147 INSTRUMENT: I

MATRIX: WATER

## Surrogate Standard Recovery Summary

			Percent Recovery				
Date Analyzed	Client Id.	Lab Id.	Bromochloro- methane	1-Bromo-3-chloro- propane			
06/14/97 06/14/97 06/14/97 06/14/97 06/14/97 06/14/97	MW-1 MW-3 MW-7 MW-6 MW-4 MW-5 MW-2	01 02 03 04 05 06 07	95 95 93 97 92 90 97	102 105 100 104 92 100 99			
QC Limits:			70-130	70-130			

DATE ANALYZED: 06/11/97

SAMPLE SPIKED: LCS INSTRUMENT: I

## Laboratory Control Sample Recovery

	0.11			QC Limits	
Analyte	Spike Added (ug/L)	Percent Recovery	RPD	Percent Recovery	RPD
1,1-Dichloroethene Trichloroethene Chlorobenzene	20 20 20	96 115 95	3 6 1	78-122 80-128 66-120	20 20 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: 9706147

INSTRUMENT: E MATRIX: WATER

## Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
06/18/97 06/19/97 06/18/97 06/18/97 06/18/97 06/18/97 06/18/97 06/18/97	MW-1 MW-3 MW-7 MW-6 MW-4 MW-5 MW-2 MW2 DUP TBLB	01 02 03 04 05 06 07 08 09	102 102 98 102 101 107 104 105 102
QC Limits:			70-130

DATE ANALYZED: 06/18/97

SAMPLE SPIKED: LCS INSTRUMENT: E

## Laboratory Control Sample Recovery

			·	QC Limi	ts
Analyte	Spike Added (ug/L)	Percent Recovery	RPD	Percent Recovery	RPD
Benzene Toluene	18.5 64.7	108 106	7 3	85-117 84-120	20 20
Hydrocarbons as Gasoline	500	105	1	85-115	20

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

#### QUALITY CONTROL DATA

METHOD: SM 5520

AEN JOB NO: 9706147

DATE EXTRACTED: 06/16/97 DATE ANALYZED: 06/16/97

SAMPLE SPIKED: LCS INSTRUMENT: IR MATRIX: WATER

## Laboratory Control Sample

	Spike Added		QC Limits
Analyte	Added (mg/L)	Percent Recovery	Percent Recovery
0i1	7.50	98	73-112

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

Reporting Information:	¬ American Envi	ronmental Netwo	k <b>AEN</b>	Page of
1. Client: FLORTANIC (27) Address: 757ARADUOTIC, 547E3  Contact: F. LEN PLEMAN Alt. Contact: MKE CHANGER IAN	3440 Vincent Road Phone (	I, Pleasant Hill, CA 94523 510) 930-9090 510) 930-0256	R352 R15E Lab Job Number: Lab Destination:	REQUEST FOR ANALYSIS / CHAIN OF CUSTODY
	Send Invoice To:		Date Samples Shipped:_ Lab Contact:	
Address Report To:		140	Date Results Required:	
2 <u>CAME AS H</u> )	3. Some	715	Date Report Required: Client Phone No.: Client FAX No.:	570) 370·3990 570) 270·3991
			I AN	NALYSIS
Send Report To: or 2 (Circle one)  Client P.O. No.:  Sample Team Member (s)  Client Projection (s)		\'	CHIX COS	
	Air Date/ Samp	F   1169'   OL/LT/61		////
Number Identification Vo	olume Collected Type	Cont. Cont.	/	/ / / Comments / Hazards
01A-6 MW-1	6/12:30 7	BUHWE 7	XX	
02A-6 NW-3	12:40		XX	O86=1,520CF
03A-6 MW-7	12.50		XX	201 Eilsen 13 senn
04A-I MW-6	0 3.00	1 2	XXX	K. Byans
05A-I MW-4	13:10	1, 1	XXX	
06A-G MW-5	1320		XX	
6-MM 2-ATO			XX	
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MA TBLB	11		19 X 1	
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Relinquished by: (Signature) Wesker & Kanul	DATE 6/1/87	TIME Receive (Signate	d by:	DATE
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Method of Shipment		Lab Co	<del></del>	
*Samo	le type (Specify): 1) 37mm 0.8	um MCEF 2) 25mm 0.8 um l	MCEF 3) 25mm 0.4 µm polycarb	, filter

\*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 \_\_\_\_ 11) Other \_\_\_\_ PINK - CLIENT