FLUOR DANIEL GTI

Transmittal Letter

STID/630

Date: July 14, 1998

To: Mr. Dale Klettke

Company: Alameda County Health Care Services

Address: 1131 Harbor Bay Parkway

City: Alameda State/Zip: CA 94502-6577

We are sending via:

◯ Courier ◯ U.S. Mail ◯ UPS (√) Overnight Mail ◯ Other _____

The following:

(√) Report ◯ Shop Drawings ◯ Samples
◯ Proposal ◯ Specifications ◯ Other _____

Transmitted as checked:

◯ Approved ◯ For Approval ◯ Approved as Noted
◯ For Correction (√) For Your Use ◯ As Requested
◯ For Comments (√) For Your Records ◯ For Distribution

Comments:

Enclosed is the Second Quarter 1998, Groundwater Monitoring and Sampling Reports for Sears stores 1039, and 1058 located at 1911, and 2633 Telegraph Avenue, Oakland, California, respectively. If you have any questions, please contact me at (925) 370-3990 extension 206.

Sincerely,
Fluor Daniel GTI, Inc.

Brian Pierskalla
Staff Geologist

c: Mr. Scott DeMuth, Sears, Roebuck and Co.
Ms. Melissa Gossell, Fluor Daniel GTI, Inc.
Project Files, Martinez, CA
Central Files, Lenexa, KS

757 Arnold Drive, Suite D / Martinez, CA 94553 USA (510) 370-3990 FAX (510) 370-3991

FLUOR DANIEL GTI

July 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: Second Quarter 1998, 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 May 19, 1998, from the above referenced site. The seven groundwater monitoring wells were gauged to determine depth to groundwater and to check for the presence of separate-phase petroleum hydrocarbons. Separate-phase hydrocarbons were not detected in the monitoring wells. A potentiometric surface map is provided in Attachment 1 (Figure 1). A summary of monitoring data is provided in Attachment 2 (Table 1).

After measuring depth to water, all monitoring wells were purged and sampled. Groundwater monitoring and sample collection protocol, and field data sheets are provided in Attachment 3. The groundwater samples were analyzed for dissolved benzene, toluene, ethylbenzene and total xylenes (BTEX), methyl tert-butyl ether (MTBE), and total petroleum hydrocarbons as gasoline (TPH-g) 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).

Static groundwater elevations for the second quarter 1998, ranged from 77.40 to 78.91 feet above mean sea level. Groundwater elevations have increased by 0.6 foot since first quarter 1998 (February 11, 1998). The apparent groundwater flow is to the east, at an average hydraulic gradient of 0.01 ft/ft, and is consistent with previous quarterly data.

Results of quarterly sampling indicated detectable concentrations of BTEX in monitoring wells MW-2, and MW-4 through MW-7. Monitoring wells MW-2, -4, -5, and -7 contained detectable concentrations of TPH-g. MTBE was present in monitoring wells MW-2, -4, and -7. A summary of the groundwater analytical results is provided in Attachment 2 (Table 2). A distribution map of dissolved benzene, TPH as gasoline, and MTBE concentrations is provided in Attachment 1 (Figure 2). Laboratory reports and chain-of-custody documents are provided in Attachment 4.

757 Arnold Drive, Suite D / Martinez, CA 94553 USA (510) 370-3990 FAX (510) 370-3991

Increasing dissolved hydrocarbon concentrations in monitoring well MW-7 prompted a work plan to further characterize the groundwater, which was submitted to Alameda County on June 23, 1998.

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

Sincerely,
Fluor Daniel GTI, Inc.

Melissa Gossell
West Zone Project Manager

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

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

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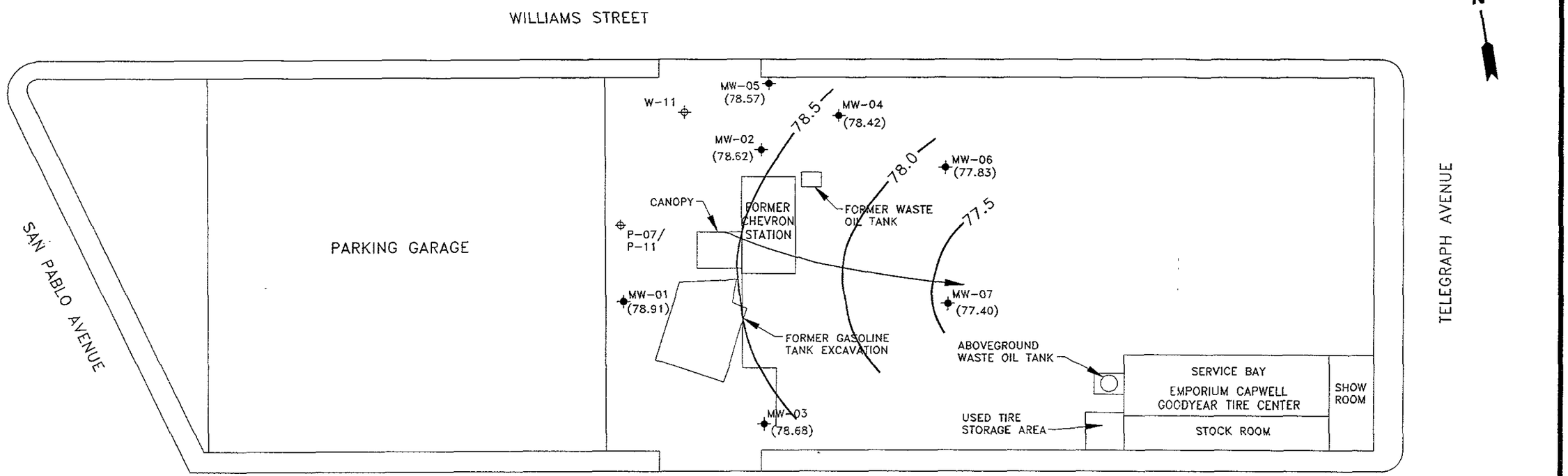
ATTACHMENT 1

Figures

1. Potentiometric Surface Map (5/19/98)
2. Concentrations of Benzene, TPH as Gasoline, & MTBE in Groundwater (5/19/98)



LEGEND

- ⌖ MONITORING WELL
- ⌖ SOIL PROBE
- ( ) POTENTIOMETRIC SURFACE ELEVATION (RELATIVE)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION AND
- i=0.01 AVERAGE GRADIENT (ft/ft)

NOTES:

CONTOURS REPRESENT APPROXIMATE ELEVATIONS AT SEA LEVEL.
DEPTH TO GROUNDWATER GAUGED ON 19 MAY 1998.
CONTOUR INTERVAL = 0.5 FT
AVERAGE GROUNDWATER GRADIENT = 0.01 FT/FT

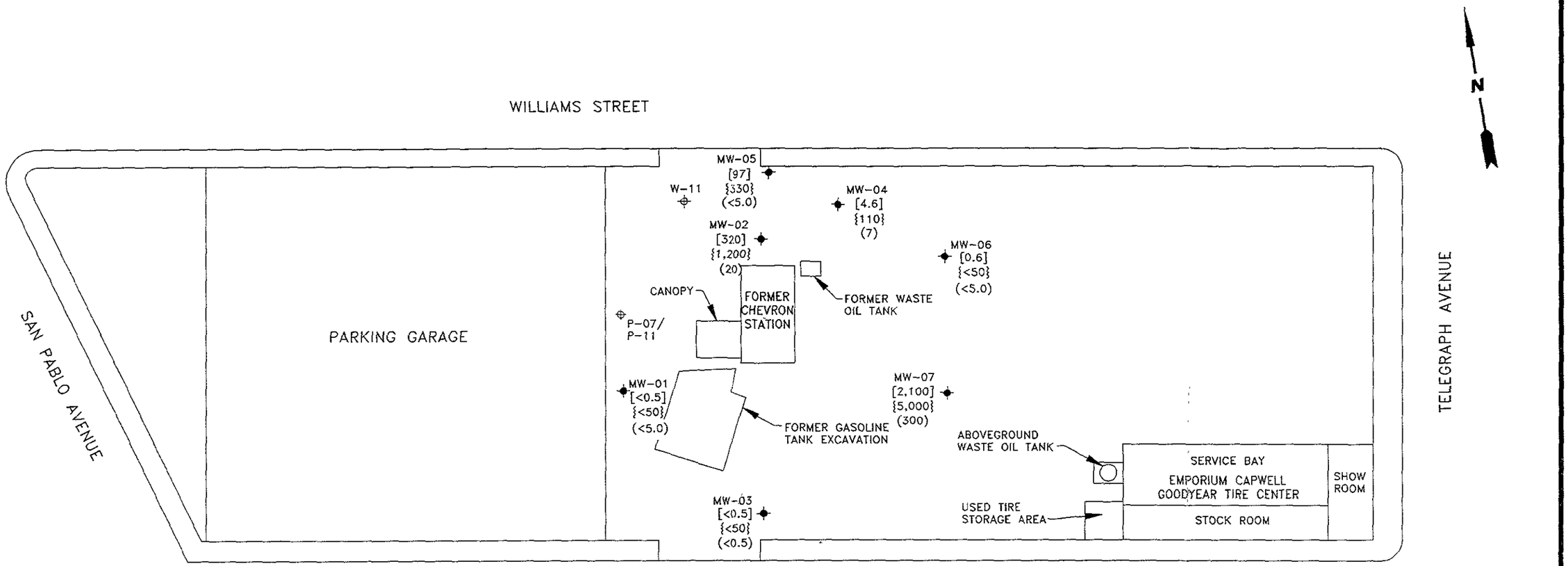
EDWARDAS (ED) K. SIMONIS
No. 4422
STATE OF CALIFORNIA

FLUOR DANIEL GTI

0 FEET 50
SCALE

POTENTIOMETRIC SURFACE MAP (5/19/98)

CLIENT:	SEARS, ROEBUCK & CO. SITE NO. 1039
LOCATION:	1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA
ACAD FILE: PSM51998	PROJECT NO.: 103231
REV.: 1	
DES.: BP / DET.: VR	DATE: 6/25/98
PM:	PE/RG: EKS 7/4/98
	FIGURE: 1



LEGEND

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

REGISTERED GEOLOGIST
EDVARDAS (ED) K. SIMONIS
No. 4422
STATE OF CALIFORNIA

FLUOR DANIEL GTI

0 FEET 50
SCALE

CONCENTRATIONS OF BENZENE, TPH-AS-GASOLINE & MTBE IN GROUNDWATER (5/19/98)

CLIENT:	SEARS, ROEBUCK & CO. SITE NO. 1039
LOCATION:	1901-1911 TELEGRAPH AVENUE OAKLAND, CALIFORNIA
ACAD FILE: TPH51998	PROJECT NO.: 103231
REV.: 1	
DES.: BP / DET.: VR	DATE: 6/25/98
PM:	PE/RG: EKS 7/14/98
	FIGURE: 2

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
		05/19/98	15.43	--	--	78.91
MW-2	93.94	06/12/96	16.01	--	--	77.93
		09/05/96	16.66	--	--	77.28
		12/03/96	16.20	--	--	77.74
		02/27/97	14.46	--	--	79.48
		06/10/97	14.00	--	--	79.94
		08/27/97	16.55	--	--	77.39
		11/26/97	16.86	--	--	77.08
		02/11/98	15.85	--	--	78.09
		05/19/98	15.32			78.62
MW-3	95.67	06/12/96	17.56	--	--	78.10
		09/05/96	18.32	--	--	77.35
		12/03/96	18.57	--	--	77.10
		02/27/97	17.43	--	--	78.24
		06/10/97	18.12	--	--	77.55
		08/27/97	18.47	--	--	77.20
		11/26/97	18.70	--	--	76.97
		02/11/98	17.76	--	--	77.91
		05/19/98	16.99	--	--	78.68
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
		05/19/98	13.57	--	--	78.42
MW-5	92.09	06/12/96	14.13	--	--	77.96
		09/05/96	14.77	--	--	77.32
		12/03/96	13.99	--	--	78.10
		02/27/97	12.08	--	--	80.01
		06/10/97	16.00	--	--	76.09
		08/27/97	14.55	--	--	77.54
		11/26/97	14.95	--	--	77.14
		02/11/98	13.97	--	--	78.12
		05/19/98	13.52	--	--	78.57

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
		05/19/98	14.32	--	--	77.83
MW-7	93.36	06/12/96	16.56	--	--	76.80
		09/05/96	17.10	--	--	76.26
		12/03/96	17.12	--	--	76.24
		02/27/97	16.20	--	--	77.16
		06/10/97	17.00	--	--	76.36
		08/27/97	17.18	--	--	76.18
		11/26/97	17.40	--	--	75.96
		02/11/98	16.65	--	--	76.71
		05/19/98	15.96	--	--	77.40

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
	05/19/98	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	14
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
	05/19/98	20	320	2.1	9.9	8	1,200	14	47	1.6	<0.5	--	0.5
MW-3	10/95	--	ND	ND	ND	ND	<50	ND	ND	--	--	--	ND
	01/96	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	06/12/96	--	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	--	--	<0.5	<0.5
	09/05/96	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	--	--	<0.5	<0.5
	12/03/96	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	2.3
	02/27/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	6.3
	06/10/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	5.9
	08/27/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	5.8
	11/26/97	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	7.9
	02/11/98	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	7.9
	05/19/98	<5.0	<0.5	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	--	5.5

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
	05/19/98	7	4.6	<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
	05/19/98	<5.0	97	2.6	<0.5	<2	330	<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
	05/19/98	<5	0.6	<0.5	<0.5	<2	<50	<0.5	<0.5	<0.5	<0.5	<500	0.6

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
	05/19/98	300	2,100	440	150	220	5,000	3.8	74	0.6	<0.5	--	1.5

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

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 deionized water before monitoring each well.

Groundwater Sampling

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

Groundwater samples are collected from each well using a new, prepackaged disposable bailer and string. The water sample is decanted from the bailer into laboratory-provided containers (appropriate for the analyses required) so that there is no headspace in the containers. Samples collected for benzene, toluene, 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.

SITE VISIT FORM
Fluor Daniel GTI - Martinez, California

Project: 103231.00 Technician: H. MEDINO
Site: SEARS/1039/Oakland, CA Scheduled: 5/04/98
Project Mgr: Melissa Gossell Site Mgr:

PREPARATORY COMMENTS

Visit Date: 5-18-98 Arrival Time: 10:30 Departure Time: 15:00

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). left message with full 5/15/98 2.42pc

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

SITE ADDRESS: 1911 Telegraph Avenue, Oakland, CA

cc: Melissa Gossell, 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 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 (Non

SITE VISIT FORM
Fluor Daniel GTI - Martinez, California

Project: 103231.00 Technician:
Site: SEARS/1039/Oakland, CA Scheduled: 5/04/98
Project Mgr: Melissa Gossell 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?_____. IF NO, EXPLAIN_____.

Hours Estimated	5.00	Hours Used	

FINAL CHECKS

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

WASTE COMPLIANCE: # of Drums w/: Water 2, Soil___, Empty___, Other___

DRUMS labeled? NA/Y/N Gen. Date: 5-19-98 Label Type: NON CLASS

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? Y/N

TECHNICIAN'S COMMENTS

TOTAL TRAVEL: 1 hr
TOTAL ONSITE TIME: 6 hr.

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: Melissa Gossell

Technician: HECTOR MERINO
Schedule: 5-19-98
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 15.43	SAT. THICK___	#GAL. BAILED	2"
MW-2:	DTB_24.10	DTW 15.32	SAT. THICK___	#GAL. BAILED	4"
MW-3:	DTB_27.75	DTW 16.99	SAT. THICK___	#GAL. BAILED	4"
MW-4:	DTB_23.55	DTW 13.57	SAT. THICK___	#GAL. BAILED	4"
MW-5:	DTB_25.10	DTW 13.52	SAT. THICK___	#GAL. BAILED	2"
MW-6:	DTB_26.75	DTW 14.32	SAT. THICK___	#GAL. BAILED	2" 2"
MW-7:	DTB_26.20	DTW 15.96	SAT. THICK___	#GAL. BAILED	2"

NOTES: _____

HOURS ESTIMATED: HOURS USED:

FINAL CHECKS

Are Wells Locked? (YES) NO Why Not?

Are Manholes Bolted Down? (YES) NO Why Not?

SITE VISIT FORM
FLUOR DANIELGTI

Project: Sears/1039/Oakland	Technician:
Store #: 1039, 1911 Telegraph Ave.	Schedule:
Project Manager: Melissa Gossell	Job No. 103231.030543

TECHNICIAN'S COMMENTS

TOTAL HOURS ESTIMATED:	HOURS USED:
TRAVEL TIME ESTIMATED:	TRAVEL TIME USED:

TECHNICIAN

DRUMMED MATERIAL INVENTORY FORM

Store Number 1039 Address/City/State/ZIP 1911 TELEGRAPH AVE

Sears Facility Contact and Phone #

Fluor Daniel GTI Representative HECTOR MERINO

Accumulation Start Date 5-19-98 Completion Date: 5-19-98

Exact Drum Storage Location IN SIDE GARAGE.

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

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

DRUMMED MATERIAL INVENTORY FORM

Store Number 1039 City/State 1911 TELEGRAPH AVE

Fluor Daniel GTI Representative HECTOR MARINO

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

DRUM ID	ACCUMU-LATION START DATE	CONTENTS (as on label) VOLUME (if mixed waste)	SOURCE (be specific)	SLUDGE PRESENT Y/N	VOLUME (gallon)
A	5-19-98	PURGE WATER	GW WELLS	NO	~~55GAL~~
B	5-19-98	PURGE WATER	GW WELLS	NO	55GAL

EXAMPLE

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

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

BULK MATERIAL INVENTORY FORM

Store Number 1039 Address/City/State/ZIP 19 WILLOWBROOK

Sears Facility Contact and Phone # _____

Fluor Daniel GTI Representative HECTOR MORENO

Accumulation Start Date 5-19-98 Completion Date 5-19-98

Exact Bulk Storage Location INSIDE GARAGE

CONTAMINANTS	SOIL (Cu Yds)	DEBRIS (Cu Yds)	LIQUID (Gallons)
GASOLINE			
FUEL OIL			
HYDRAULIC FLUID			
USED OIL			
CHLORINATED SOLVENT:			
NON-CHLORINATED SOLVENT:			
OTHER: PURGE WATER			50
OTHER: PURGE WATER			50

SOIL PILE CALCULATIONS

Calculation for a tent shaped soil pile:

Length _____ X Width _____ X Height _____ ÷ 2 ÷ 27 = _____ Yds^3

Calculation for a rectangular or square shaped soil pile:

Length _____ X Width _____ X Height _____ ÷ 27 = _____ Yds^3

Calculation for a conical (cone) shaped soil pile:

.04 X Radius _____ X Radius _____ X Height _____ = _____ Yds^3

Project Name: Sears/1099/Oakland
Site Address: 1911 Telegraph Ave., Oakland
Project Number: 103231.030543

Date: [illegible]
Page 1 of 7
Project Manager: Melissa Gossell

Well ID: MW-1
Well Diameter: 2

DTW Measurements:
Initial: 15.43
Recharge: ____
DTB: 24.25

Calc Well Volume: 1.4 gal
Well Volume: X3 4.3 gal

Purge Method
Peristaltic ____
Gear Drive ____
Submersible X

Pump Depth ____ ft.
Hand Bailed ____
Air Lift ____
Other ____

Instruments Used
YSI: X
Hydac: ____
Omega: ____
Other: ____

Time	Temp ✓ C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:00	20.1	0.55	6.01	1	CLOUDY	BROWN
11:01	20.2	0.52	6.00	2		
11:03	20.1	0.53	6.00	3		
11:04	20.0	0.52	5.95	4		
11:05	20.3	0.55	5.99	5		CLOUDY BROWN

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

Date: 3/17/10
Page 2 of 7
Project Manager: Melissa Gossell

Well ID: MW-3
Well Diameter: 4

DTW Measurements
Initial: 16.99
Recharge:
DTB: 27.75

Calc Well Volume: 7.0 gal
Well Volume: x3 21.0 gal

Purge Method
Peristaltic
Gear Drive
Submersible X

Pump Depth ft.
Hand Bailed
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:
Other:

Time	Temp X C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:20	20.4	1.19	6.16	5	cloudy	
11:23	20.5	0.60	6.36	10	↓	
11:27	19.9	0.56	6.33	15		
11:31	20.8	0.56	6.35	20		
11:34	20.9	0.56	6.37	22		

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

Date: [illegible]
Page 3 of 7
Project Manager: Melissa Gossell

Well ID: MW-7
Well Diameter: 2

DTW Measurements:
Initial: 15.96
Recharge:
DTB: 26.20

Calc Well Volume: 1.6 gal
Well Volume: X 5.0 gal

Purge Method
Peristaltic
Bear Drive
Submersible X

Pump Depth ft.
Hand Bailed
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:
Other:

Time	Temp X C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
11:45	20.8	0.85	6.40	1	Cloudy	
11:47	20.5	0.85	6.40	2		
11:49	20.8	0.85	6.40	3		
11:52	20.7	0.86	6.42	4		
11:54	20.8	0.87	6.40	5		

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

Date: 2/11/10
Page 4 of 7
Project Manager: Melissa Gossell

Well ID: MW-6
Well Diameter: 2

DTW Measurements:
Initial: 14.32
Recharge: 26.75
DTB:
Calc Well Volume: 2.0 gal
Well Volume: X3 6.0 gal

Purge Method
Peristaltic
Gear Drive
Submersible X

Pump Depth ft.
Hand Bailed
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:
Other:

Time	Temp X C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
12:08	23.1	0.73	6.30	1	CLOUDY BROWN	
12:10	22.4	0.70	6.36	2		
12:12	21.3	0.77	6.37	3		
12:14	21.0	0.77	6.44	4		
12:16	21.0	0.78	6.45	5		
12:18	21.0	0.78	6.44	6	↓	↓

Project Name: Sears/1099/Oakland
Site Address: 1911 Telegraph Ave., Oakland
Project Number: 103231.030543

Date: [illegible]
Page 5 of 7
Project Manager: Melissa Gossell

Well ID: MW-4
Well Diameter: 4

DTW Measurements:
Initial: 13.57
Recharge: _____
DTB: 23.55

Calc Well Volume: 6.5 gal
Well Volume: X3 19.5 gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible X

Pump Depth _____ ft.
Hand Bailed _____
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____
Other: _____

Time	Temp °C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
12'30	21.4	0.72	6.35	5	CLOUDY	
12'33	21.1	0.70	6.35	10	↓	
12'37	22.4	0.71	6.34	15	↓	
12'40	21.3	0.71	6.35	20	↓	DRY @ 20 GAL

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

Date: [illegible]
Page 6 of 7
Project Manager: Melissa Gossell

Well ID: MW-5
Well Diameter: 2

DTW Measurements:
Initial: 13.52
Recharge:
DTB: 25.10

Calc Well Volume: 1.8 gal
Well Volume: x3 5.6 gal

Purge Method
Peristaltic
Gear Drive
Submersible X

Pump Depth ft.
Hand Bailed
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:
Other:

Time	Temp X C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
12:50	21.2	1.03	6.38	1	CLOUDY	
12:51	21.2	1.04	6.39	2		
12:52	21.1	1.05	6.40	3		
12:53	21.2	1.04	6.39	4		DRY @ 4 GALLONS
				5		
				6		

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

Date: 2 11 10
Page 7 of 7
Project Manager: Melissa Gossell

Well ID: MW-2
Well Diameter: 4

DTW Measurements:
Initial: 15.32
Recharge:
DTB: 24.18

Calc Well Volume: 5.7 gal
Well Volume: X3 17.2 gal

Purge Method
Peristaltic
Gear Drive
Submersible Y

Pump Depth ft.
Hand Bailed
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:
Other:

Time	Temp X C / F	Conductivity (mmhos/cm)	pH	Purge Volume Gallons	Turbidity	Comments
13:10	19.6	1.08	6.42	5	CLOUDY	
13:13	20.8	1.01	6.47	10		
13:16	21.4	0.97	6.51	15		
13:19	20.8	0.96	6.49	20	↓	

Reporting Information:

1. Client: FLUOR DANIEL GTI
Address: 757 ARNOLD DR. SUITE MARTINEZ CA. 94553
Contact: MELISSA GOSSELL
Alt. Contact:

American Environmental Network

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

AEN

Page ___ of ___

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number:
Lab Destination:
Date Samples Shipped:
Lab Contact:
Date Results Required:
Date Report Required:
Client Phone No.: (925) 370.3990
Client FAX No.: (925) 370.3991

Address Report To:

2. SAME AS #1

Send Invoice To:

3. 1 & 2

Send Report To: 1 or 2 (Circle one)

SEARS #1039 OAKLAND

Client P.O. No.: ___ Client Project I.D. No.: 103231.030543

Sample Team Member (s): HECTOR MERINO

Lab Number	Client Sample Identification	Air Volume	Date/ Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS: Oil & Grease	ANALYSIS: TPH as Diesel	ANALYSIS: TPH as Gasoline	ANALYSIS: BTEX 8020	Comments / Hazards
	MW-1		5/19 13:30	GW	HCl/NONE	7	40mL	X	X			
	MW-3		13:35			7	↓	X	X			
	MW-7		13:45			7		X	X			
	MW-6		13:55			9	40mL & 1 Liter	X	X	X		
	MW-4		14:00			9	↓	X	X	X		
	MW-5		14:10			7		X	X			
	MW-2		14:20			7		X	X			
	DUP MW2		14:30			3				X		
	TBLB		5/18 14:35	↓	↓	1	↓					

Relinquished by: (Signature)	DATE 5/19/98	TIME 15:07	Received by: (Signature) Paul C Roth
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Method of Shipment			Lab Comments

DATE 5/19/98 TIME 1507

*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 ___

ATTACHMENT 4

Laboratory Reports and Chain-of-Custody Documents

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATTN: MELISSA GOSSELL
CLIENT PROJ. ID: 103231.030543
CLIENT PROJ. NAME: SEARS #1039

P.O. NUMBER: 043633

REPORT DATE: 06/24/98

DATE(S) SAMPLED: 05/19/98

DATE RECEIVED: 05/19/98

AEN WORK ORDER: 9805193

PROJECT SUMMARY:

On May 19, 1998, this laboratory received 8 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.

Reviewed by:

William Luboda

Re-issue of report dated: 06/12/98

FLUOR DANIEL GTI

SAMPLE ID: MW-1
AEN LAB NO: 9805193-01
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	05/29/98
Toluene	108-88-3	ND	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	ND	2	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	05/29/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/26/98
Bromoform	75-25-2	ND	0.5	ug/L	05/26/98
Bromomethane	74-83-9	ND	2	ug/L	05/26/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/26/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/26/98
Chloroethane	75-00-3	ND	2	ug/L	05/26/98
Chloroform	67-66-3	ND	0.5	ug/L	05/26/98
Chloromethane	74-87-3	ND	2	ug/L	05/26/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/26/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/26/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/26/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/26/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/26/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/26/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	05/26/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/26/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	05/26/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/26/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/26/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/26/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/26/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/26/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/26/98
Tetrachloroethene	127-18-4	14 *	0.5	ug/L	05/26/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/26/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/26/98
Trichloroethene	79-01-6	ND	0.5	ug/L	05/26/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/26/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/26/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/26/98

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: 9805193-02
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	05/29/98
Toluene	108-88-3	ND	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	ND	2	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	05/29/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/26/98
Bromoform	75-25-2	ND	0.5	ug/L	05/26/98
Bromomethane	74-83-9	ND	2	ug/L	05/26/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/26/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/26/98
Chloroethane	75-00-3	ND	2	ug/L	05/26/98
Chloroform	67-66-3	ND	0.5	ug/L	05/26/98
Chloromethane	74-87-3	ND	2	ug/L	05/26/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/26/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/26/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/26/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/26/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/26/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/26/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	05/26/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/26/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	05/26/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/26/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/26/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/26/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/26/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/26/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/26/98
Tetrachloroethene	127-18-4	5.5 *	0.5	ug/L	05/26/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/26/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/26/98
Trichloroethene	79-01-6	ND	0.5	ug/L	05/26/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/26/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/26/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/26/98

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: 9805193-03
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	2,100 *	30	ug/L	05/29/98
Toluene	108-88-3	440 *	30	ug/L	05/29/98
Ethylbenzene	100-41-4	150 *	30	ug/L	05/29/98
Xylenes, Total	1330-20-7	220 *	100	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	5 *	3	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	300 *	300	ug/L	05/29/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/26/98
Bromoform	75-25-2	ND	0.5	ug/L	05/26/98
Bromomethane	74-83-9	ND	2	ug/L	05/26/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/26/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/26/98
Chloroethane	75-00-3	ND	2	ug/L	05/26/98
Chloroform	67-66-3	ND	0.5	ug/L	05/26/98
Chloromethane	74-87-3	ND	2	ug/L	05/26/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/26/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/26/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/26/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/26/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/26/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/26/98
1,2-Dichloroethane	107-06-2	74 *	0.5	ug/L	05/26/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/26/98
cis-1,2-Dichloroethene	156-59-2	0.6 *	0.5	ug/L	05/26/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/26/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/26/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/26/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/26/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/26/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/26/98
Tetrachloroethene	127-18-4	1.5 *	0.5	ug/L	05/26/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/26/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/26/98
Trichloroethene	79-01-6	3.8 *	0.5	ug/L	05/26/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/26/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/26/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/26/98

FLUOR DANIEL GTI

SAMPLE ID: MW-7
AEN LAB NO: 9805193-03
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits for gas/BTEX elevated due to high levels of target compounds. Sample run at dilution. MTBE included in gasoline result.

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: 9805193-04
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	0.6 *	0.5	ug/L	05/29/98
Toluene	108-88-3	ND	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	ND	2	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	05/29/98
#Water Extrn for HCs	EPA 413.1	-		Extrn Date	06/09/98
Hydrocarbons (IR) water	SM 5520F	ND	0.5	mg/L	06/10/98
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	06/10/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/27/98
Bromoform	75-25-2	ND	0.5	ug/L	05/27/98
Bromomethane	74-83-9	ND	2	ug/L	05/27/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/27/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/27/98
Chloroethane	75-00-3	ND	2	ug/L	05/27/98
Chloroform	67-66-3	ND	0.5	ug/L	05/27/98
Chloromethane	74-87-3	ND	2	ug/L	05/27/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/27/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/27/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/27/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/27/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/27/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/27/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	05/27/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/27/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	05/27/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/27/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/27/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/27/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/27/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/27/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/27/98
Tetrachloroethene	127-18-4	0.6 *	0.5	ug/L	05/27/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/27/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/27/98
Trichloroethene	79-01-6	ND	0.5	ug/L	05/27/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/27/98

FLUOR DANIEL GTI

SAMPLE ID: MW-6
AEN LAB NO: 9805193-04
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/27/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/27/98

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

FLUOR DANIEL GTI

SAMPLE ID: MW-4
AEN LAB NO: 9805193-05
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	4.6 *	0.5	ug/L	05/29/98
Toluene	108-88-3	ND	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	ND	2	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	0.11 *	0.05	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	7 *	5	ug/L	05/29/98
#Water Extrn for HCs	EPA 413.1	-		Extrn Date	06/09/98
Hydrocarbons (IR) water	SM 5520F	ND	0.5	mg/L	06/10/98
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	06/10/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/27/98
Bromoform	75-25-2	ND	0.5	ug/L	05/27/98
Bromomethane	74-83-9	ND	2	ug/L	05/27/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/27/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/27/98
Chloroethane	75-00-3	ND	2	ug/L	05/27/98
Chloroform	67-66-3	ND	0.5	ug/L	05/27/98
Chloromethane	74-87-3	ND	2	ug/L	05/27/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/27/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/27/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/27/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/27/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/27/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/27/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	05/27/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/27/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	05/27/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/27/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/27/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/27/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/27/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/27/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/27/98
Tetrachloroethene	127-18-4	ND	0.5	ug/L	05/27/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/27/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/27/98
Trichloroethene	79-01-6	ND	0.5	ug/L	05/27/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/27/98

FLUOR DANIEL GTI

SAMPLE ID: MW-4
AEN LAB NO: 9805193-05
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/27/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/27/98

MTBE included in gasoline result.

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: 9805193-06
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	97 *	0.5	ug/L	05/29/98
Toluene	108-88-3	2.6 *	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	ND	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	ND	2	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	0.33 *	0.05	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	05/29/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/27/98
Bromoform	75-25-2	ND	0.5	ug/L	05/27/98
Bromomethane	74-83-9	ND	2	ug/L	05/27/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/27/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/27/98
Chloroethane	75-00-3	ND	2	ug/L	05/27/98
Chloroform	67-66-3	ND	0.5	ug/L	05/27/98
Chloromethane	74-87-3	ND	2	ug/L	05/27/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/27/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/27/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/27/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/27/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/27/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/27/98
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	05/27/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/27/98
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	05/27/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/27/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/27/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/27/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/27/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/27/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/27/98
Tetrachloroethene	127-18-4	ND	0.5	ug/L	05/27/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/27/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/27/98
Trichloroethene	79-01-6	ND	0.5	ug/L	05/27/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/27/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/27/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/27/98

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

FLUOR DANIEL GTI

SAMPLE ID: MW-2
AEN LAB NO: 9805193-07
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	320 *	0.5	ug/L	05/29/98
Toluene	108-88-3	2.1 *	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	9.9 *	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	8 *	2	ug/L	05/29/98
Purgeable HCs as Gasoline	5030/GCFID	1.2 *	0.05	mg/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	20 *	5	ug/L	05/29/98
EPA 8010	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	05/27/98
Bromoform	75-25-2	ND	0.5	ug/L	05/27/98
Bromomethane	74-83-9	ND	2	ug/L	05/27/98
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	05/27/98
Chlorobenzene	108-90-7	ND	0.5	ug/L	05/27/98
Chloroethane	75-00-3	ND	2	ug/L	05/27/98
Chloroform	67-66-3	ND	0.5	ug/L	05/27/98
Chloromethane	74-87-3	ND	2	ug/L	05/27/98
Dibromochloromethane	124-48-1	ND	0.5	ug/L	05/27/98
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	05/27/98
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	05/27/98
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	05/27/98
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	05/27/98
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	05/27/98
1,2-Dichloroethane	107-06-2	47 *	0.5	ug/L	05/27/98
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	05/27/98
cis-1,2-Dichloroethene	156-59-2	1.6 *	0.5	ug/L	05/27/98
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	05/27/98
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	05/27/98
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	05/27/98
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	05/27/98
Methylene Chloride	75-09-2	ND	2	ug/L	05/27/98
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	05/27/98
Tetrachloroethene	127-18-4	0.5 *	0.5	ug/L	05/27/98
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	05/27/98
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	05/27/98
Trichloroethene	79-01-6	14 *	0.5	ug/L	05/27/98
Trichlorofluoromethane	75-69-4	ND	2	ug/L	05/27/98
1,1,2-Trichlorotrifluoroethan	76-13-1	ND	0.5	ug/L	05/27/98
Vinyl Chloride	75-01-4	ND	2	ug/L	05/27/98

FLUOR DANIEL GTI

SAMPLE ID: MW-2
AEN LAB NO: 9805193-07
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

MTBE included in gasoline result.

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: 9805193-08
AEN WORK ORDER: 9805193
CLIENT PROJ. ID: 103231.030543

DATE SAMPLED: 05/19/98
DATE RECEIVED: 05/19/98
REPORT DATE: 06/24/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	230 *	0.5	ug/L	05/29/98
Toluene	108-88-3	1.9 *	0.5	ug/L	05/29/98
Ethylbenzene	100-41-4	7.5 *	0.5	ug/L	05/29/98
Xylenes, Total	1330-20-7	7 *	2	ug/L	05/29/98
Methyl t-Butyl Ether	1634-04-4	14 *	5	ug/L	05/29/98

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9805193
CLIENT PROJECT ID: 103231.030543

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.

ANALYSIS: Oil & Grease (IR)

MATRIX: Water

METHOD BLANK SAMPLES

SAMPLE TYPE: Blank-Method/Media blank
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:
LAB ID: BLKW-0608-1
PREPARED: 06/08/98
ANALYZED: 06/10/98
INSTR RUN: IR\980610000000/1/
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	ND		0.5						

SAMPLE TYPE: Blank-Method/Media blank
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:
LAB ID: BLKW-0609-1
PREPARED: 06/09/98
ANALYZED: 06/10/98
INSTR RUN: IR\980610000000/8/
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	ND		0.5						

LABORATORY CONTROL SAMPLES

SAMPLE TYPE: Laboratory Control Spike
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:
LAB ID: LCDW-0608-1
PREPARED: 06/08/98
ANALYZED: 06/10/98
INSTR RUN: IR\980610000000/3/ 1
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	7.32	ND	0.5	7.50	97.6	70	130		

SAMPLE TYPE: Laboratory Control Spike
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:
LAB ID: LCDW-0609-1
PREPARED: 06/09/98
ANALYZED: 06/10/98
INSTR RUN: IR\980610000000/10/8
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	6.97	ND	0.5	7.50	92.9	70	130		

SAMPLE TYPE: Laboratory Control Spike
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:
LAB ID: LCSW-0608-1
PREPARED: 06/08/98
ANALYZED: 06/10/98
INSTR RUN: IR\980610000000/2/1
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	7.32	ND	0.5	7.50	97.6	70	130		

SAMPLE TYPE: Laboratory Control Spike
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:
LAB ID: LCSW-0609-1
PREPARED: 06/09/98
ANALYZED: 06/10/98
INSTR RUN: IR\980610000000/9/ 8
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	7.32	ND	0.5	7.50	97.6	70	130		

ANALYSIS: Oil & Grease (IR)

MATRIX: Water

LABORATORY CONTROL DUPLICATES

SAMPLE TYPE: Laboratory Control Sample Duplicate
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:

LAB ID: LCRW-0608-1
PREPARED: 06/08/98
ANALYZED: 06/10/98

INSTR RUN: IR\980610000000/4/2
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	7.32	7.32	0.5					0	20

SAMPLE TYPE: Laboratory Control Sample Duplicate
INSTRUMENT: IR Spectrophotometer
UNITS: mg/L
METHOD:

LAB ID: LCRW-0609-1
PREPARED: 06/09/98
ANALYZED: 06/10/98

INSTR RUN: IR\980610000000/16/9
BATCH ID: IRW060898-1
DILUTION: 1.000000

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Oil & Grease (IR)	6.97	7.32	0.5					4.90	20

QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9805193
INSTRUMENT: I
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery: Bromochloro-methane	Percent Recovery: 1-Bromo-3-chloro-propane
05/26/98	MW-1	01	79	95
05/26/98	MW-3	02	81	94
05/26/98	MW-7	03	90	113
05/27/98	MW-6	04	89	112
05/27/98	MW-4	05	87	114
05/27/98	MW-5	06	88	103
05/27/98	MW-2	07	90	117
QC Limits:			70-130	70-130

DATE ANALYZED: 05/26/98
SAMPLE SPIKED: LCS
INSTRUMENT: I

Laboratory Control Sample Recovery

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits: Percent Recovery	QC Limits: RPD
1,1-Dichloroethene	25	93	4	70-130	20
Trichloroethene	25	94	2	70-130	20
Chlorobenzene	25	89	<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 GCFID

AEN JOB NO: 9805193
INSTRUMENT: E, H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
05/29/98	MW-1	01	98
05/29/98	MW-3	02	98
05/29/98	MW-7	03	100
05/29/98	MW-6	04	98
05/29/98	MW-4	05	100
05/29/98	MW-5	06	95
05/29/98	MW-2	07	95
05/29/98	DUPMW2	08	92
QC Limits:			70-130

DATE ANALYZED: 06/01/98
SAMPLE SPIKED: LCS
INSTRUMENT: H

Laboratory Control Sample Recovery

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	200	99	1	70-130	20
Toluene	200	96	1	70-130	20
Ethylbenzene	200	98	1	70-130	20
Total Xylenes	600	94	2	70-130	20

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

*** END OF REPORT ***

[redacted] Rep[redacted] Infor[redacted]:

1. Client: FLUOR DANIEL GTI
Address: 75 ARNOLD DR. SUITE D MARTINEZ CA. 94553
Contact: MELISSA GOSSELL
Alt. Contact:

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

AEN

Page ___ of ___

REQUEST FOR ANALYSIS / CHAIN OF CUSTOD

Lab Job Number: 9805193
Lab Destination:
Date Samples Shipped:
Lab Contact:
Date Results Required:
Date Report Required:
Client Phone No.: (925) 370.3990
Client FAX No.: (925) 370.3991

Address Report To:
2. SAME AS #1

Send Invoice To:
3. 1 & 2

Send Report To: 1 or 2 (Circle one)

SEARS #1039 OAKLAND

Client P.O. No.: ___ Client Project I.D. No.: 103231.030543

Sample Team Member (s): HECTOR MERINO

Lab Number	Client Sample Identification	Air Volume	Date/ Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS: CHLORINATED HYDROCARBONS	BTEX + OXYGENATES	TOTAL OIL & GREASE	BTEX 8020	Comments / Hazards
01A-F	MW-1		5/13/98 13:30	GW	HCl/NONE	7	40mL	X	X			
02A-F	MW-3		13:35			7		X	X			
03A-F	MW-7		13:45			7		X	X			
04A-H	MW-6		13:55			9	40mL LITER	X	X	X		
05A-H	MW-4		14:00			9		X	X	X		
06A-F	MW-5		14:10			7		X	X			
07A-F	MW-2		14:20			7		X	X			
08A-C	DUP MW2		14:30			3				X	✓	
	TBLB		14:35			1						

Relinquished by: (Signature)	DATE 5/19/98	TIME 15:07	Received by: (Signature) Paul C Roth
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Method of Shipment			Lab Comments

DATE 5/19/98 TIME 1507

*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 ___