

# THRIFTY OIL CO.

July 25, 2000

O.05277

Ms. Susan Hugo  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay parkway, 2nd Floor  
Alameda, CA 94502

12004

RE: **Thrifty Oil Co. Station #049**  
3400 San Pablo Avenue  
Oakland, CA 94612  
*2nd Quarter 2000, Status Report*

Dear Ms. Hugo:

Presented herewith is the Second Quarter 2000, Status Report for former Thrifty Oil Co. Station #049 located at 3400 San Pablo Avenue, Oakland, California.

If you have any questions or comments, please contact the undersigned in this report or myself at (562) 921-3581.

Sincerely,



Chris Panaitescu  
General Manager  
Environmental Affairs

cc: ARCO Products Company  
File

00 JUL 29 PM 4:23  
ENVIRONMENTAL AFFAIRS



# THRIFTY OIL CO.

July 24, 2000

Ms. Susan Hugo  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, CA 94502

RE: **Former Thrifty Oil Co. Station #049**  
3400 San Pablo Avenue  
Oakland, CA 94612  
*2nd Quarter 2000, Status Report*

Dear Ms. Hugo:

Presented herein is the Second Quarter 2000, Status Report prepared for former Thrifty Oil Co. (Thrifty) Station #049 located at 3400 San Pablo Avenue, Oakland, California (**Figure 1**). Presented in this report are the results of the site monitoring efforts conducted on April 5, 2000 in the Second Quarter 2000. Thrifty has retained the services of Earth Management Company (EMC) to conduct quarterly monitoring and sampling activities at this site.

## **Groundwater Monitoring**

Depth to groundwater is measured in each monitoring well on a quarterly basis. In general, groundwater occurs under water table conditions beneath the station at depths ranging from 3.89 feet below surface grade (bsg) in monitoring well MW-6 to 8.85 feet (bsg) in recovery well MW-3 (**Appendix A**). A groundwater elevation contour map based on the April 5, 2000 data is presented in **Figure 2**. The groundwater is generally flowing to the west and northwest at a gradient ranging from approximately 0.06 to 0.07 feet/foot.

## **Quarterly Groundwater Sampling**

As part of the ongoing groundwater monitoring program, groundwater samples were obtained from monitoring wells MW-1 through MW-7 on April 5, 2000. Groundwater samples were obtained by EMC and delivered in a chilled state following strict Chain-of-Custody procedures to a state-certified laboratory and analyzed for total petroleum hydrocarbons (TPH-g) by EPA method 8015 modified for gasoline. Volatile aromatic compounds of benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tert-butyl ether (MTBE) were analyzed for by EPA method 8020A. Samples with detected MTBE were also analyzed by EPA method 8260B. A summary of historical analytical sampling results are provided in **Table 1**. Copies of the EMC Field Status Reports are presented in **Appendix A**, and copies of the laboratory analytical reports are contained in **Appendix B**.



TPH-g, BTEX, and MTBE concentrations appear in **Table 1** and **Appendix B**. The TPH-g, benzene, and MTBE isoconcentration maps are presented in **Figures 3, 4, and 5**. Laboratory results indicated the highest concentrations of TPH-g (61,200 ug/L) and MTBE (21,900 ug/L (by EPA method 8260B)) were detected in monitoring well MW-4. The highest benzene concentration (415 ug/L) is in well MW-7. The isoconcentration maps incorporate data from the treatment system influent, due to the fact the groundwater is pumped solely from RW-1. The elevated petroleum hydrocarbon concentrations in monitoring MW-6 appears to be from an off-site source. This was concluded by the fact that MW-6 is located far away and upgradient to cross-gradient of the on-site pump islands, and the underground storage tanks.

### **Remediation Status**

Site remedial activities were initiated in April 1991. Presently, the remediation system consists of a Groundwater Treatment System with carbon connected to recovery well RW-1. System operational data is included in **Table 2** and **Appendix C**. During this reporting period, the groundwater treatment system processed 7,756 gallons of groundwater, and has treated approximately 302,262 gallons of groundwater since start up (through June 26, 2000). The groundwater system was operational from January 1 through June 30, 2000, except from May 19 through June 5, 2000 (21 days) for carbon change out.

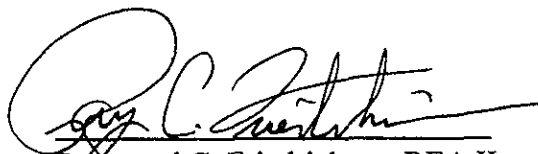
Influent, intermediate, and effluent water samples were collected on April 5 and June 16, 2000 from the treatment unit, and the samples collected by EMC were sent a state certified laboratory for analysis. The April samples were analyzed for TPH-g by 8015, BTEX and MTBE by EPA method 8020A, and the June samples were analyzed for TPH-g and BTEX by EPA methods 8015-g and 8021B. All laboratory results for the June effluent samples for TPH-g and BTEX were below laboratory detection limits, and the April effluent results were slightly above the method detection limits. Once the laboratory results received and analyzed by Thrifty, the system was shutdown for carbon change out. A copy of the laboratory analytical reports are included in **Appendix D**.

### **Other Activities**

The groundwater monitoring wells, and the treatment unit, will be monitored and sampled for the next quarter. All site monitoring/sampling data generated during the next quarter will be reported in the Third Quarter 2000 monitoring report.

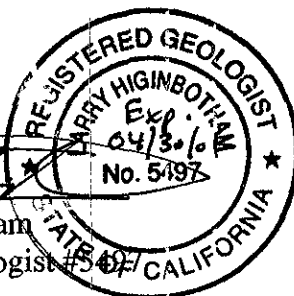
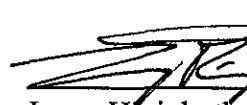
Interpretations expressed herein are based upon data collected by EMC.

Written by:



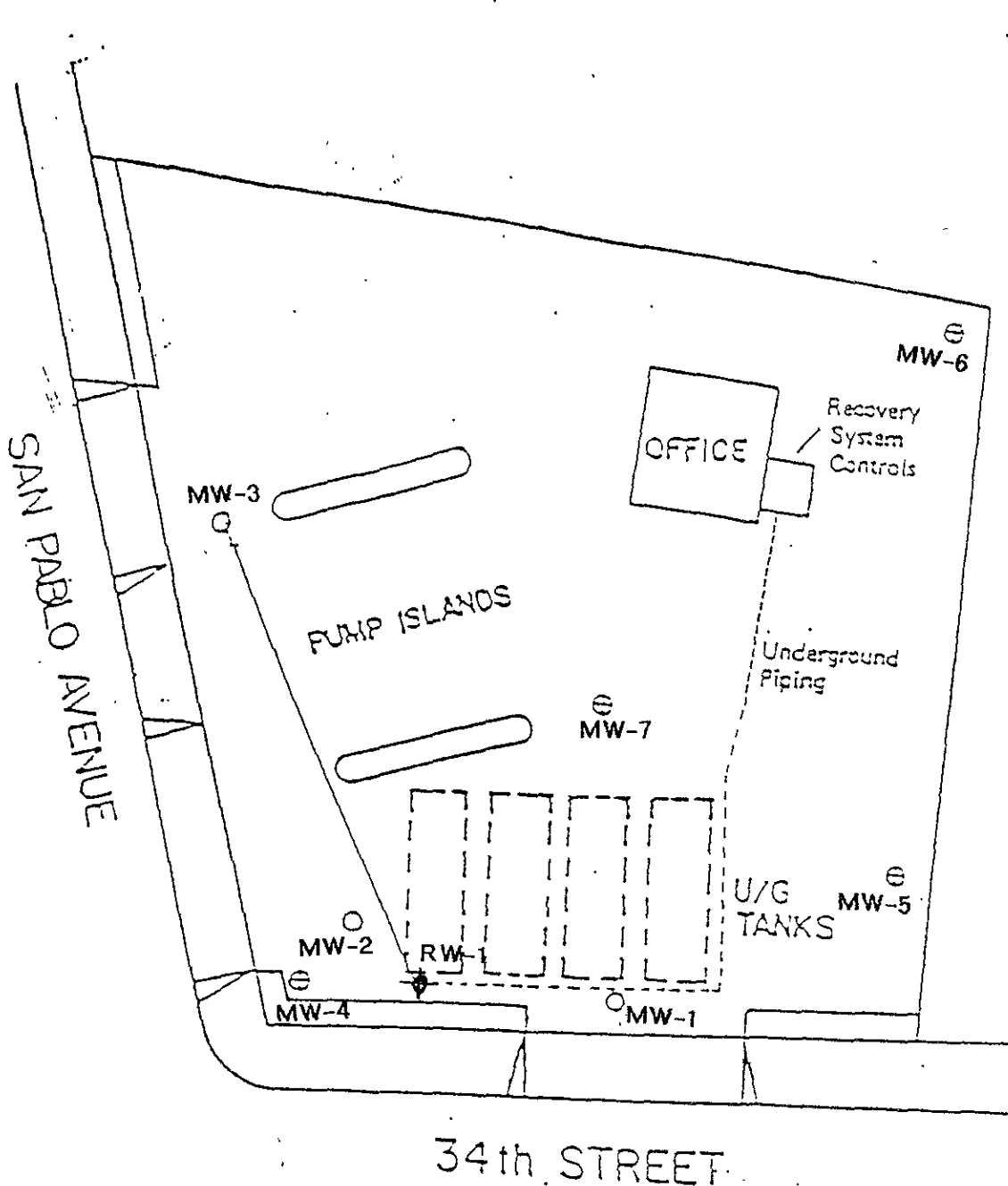
Raymond C. Friedrichsen, REA II  
Project Manager, MBA  
Senior Hydrogeologist

Reviewed by:



Larry Higinbotham  
Registered Geologist #5497

# FIGURES



SITE PLAN AND RECOVERY SYSTEM LOCATION  
 THRIFTY SERVICE STATION NO. 49  
 3400 SAN PABLO AVE.  
 OAKLAND, CA

LEGEND

- MW1 - GT MONITORING WELLS
- ⊖ MW-4 - WCC MONITORING WELLS
- ⊕ RW-1 - PROPOSED RECOVERY WELL

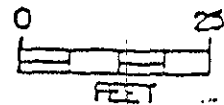
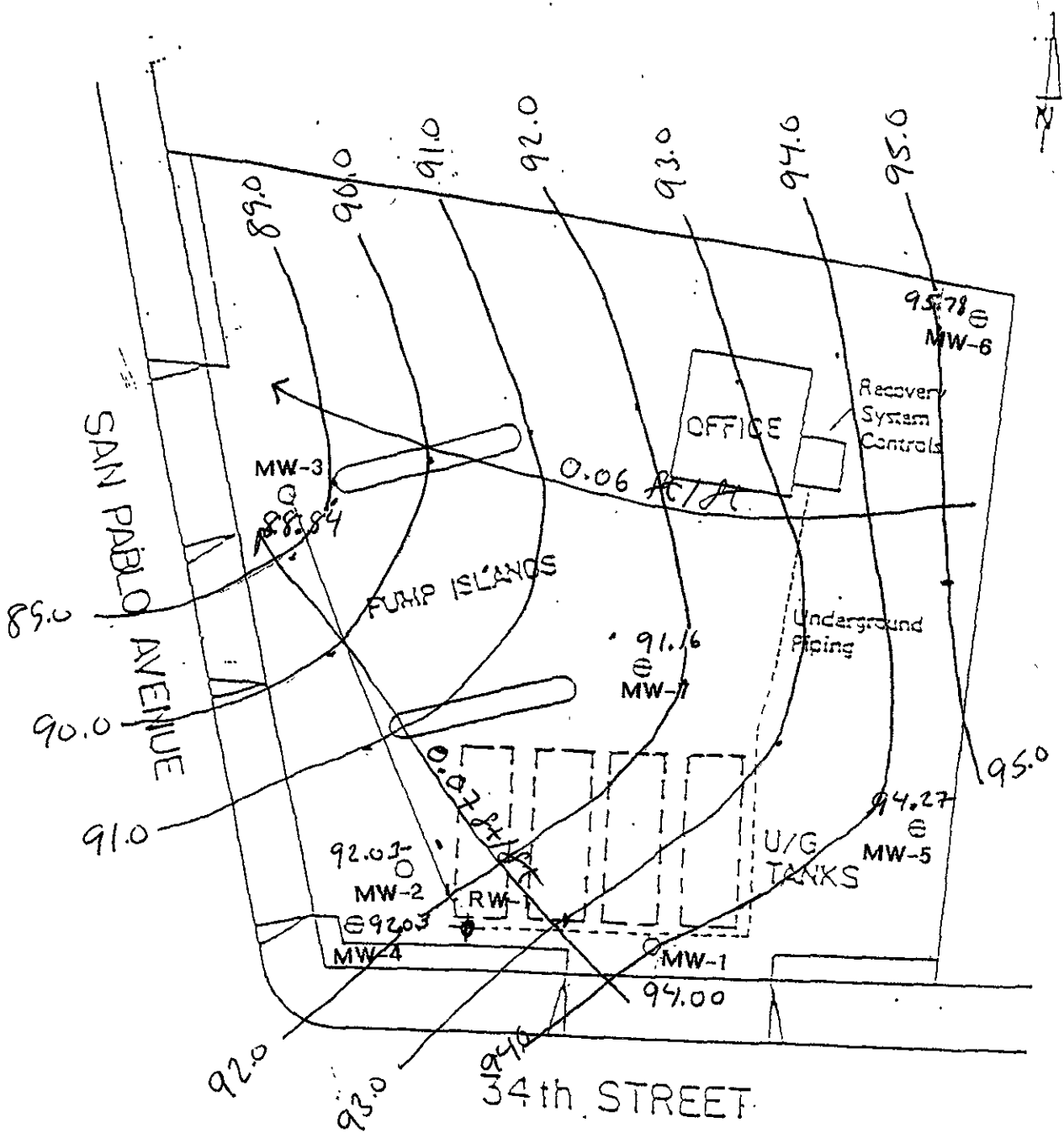


FIGURE 1



Date:  
4/5/00

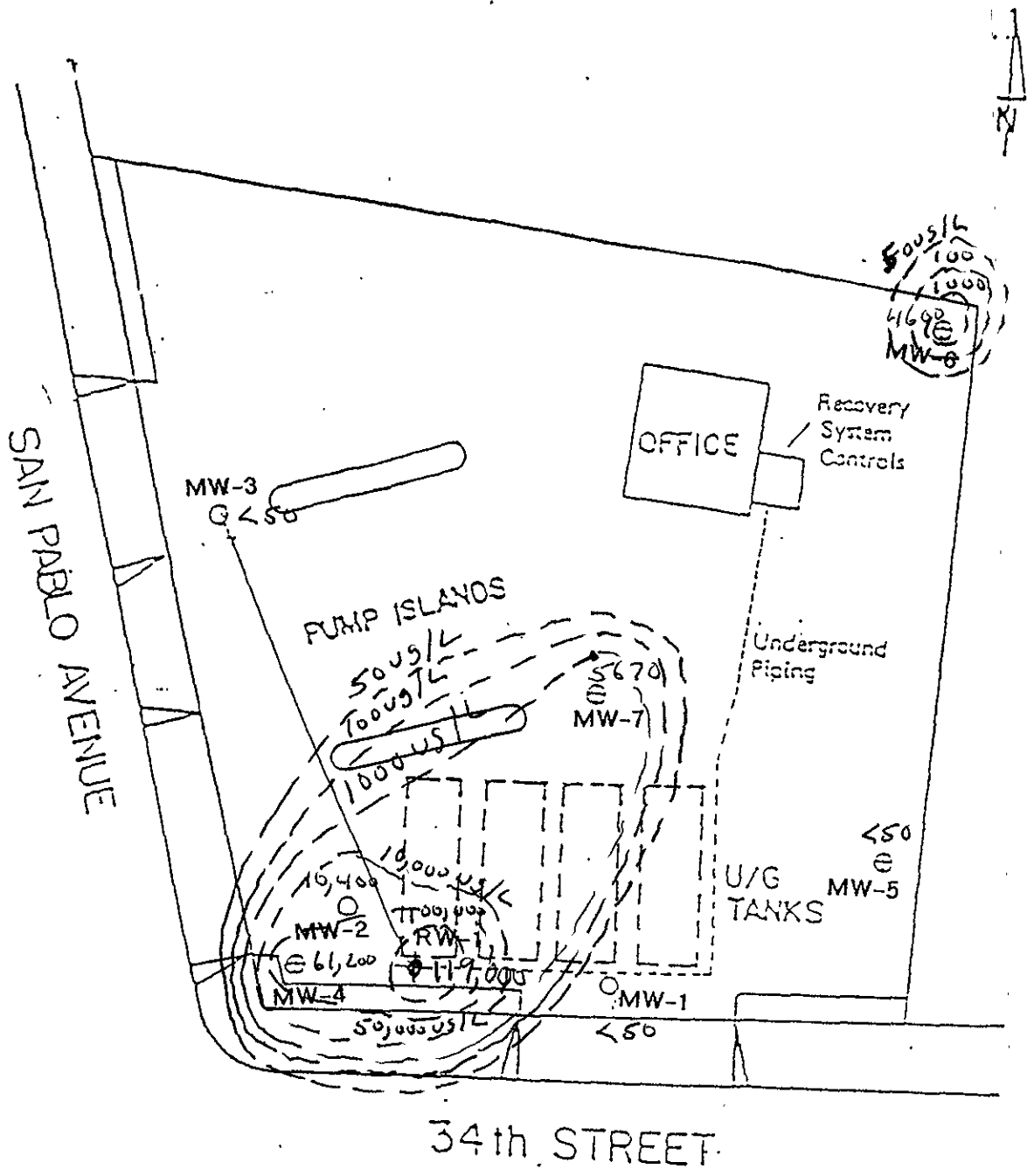
**GROUNDWATER CONTOUR MAP**  
**THRIFTY SERVICE STATION NO. 49**  
**3400 SAN PABLO AVE.**  
**OAKLAND, CA**

**LEGEND**

- MW1 - GT MONITORING WELLS
- ⊕ MW-4 - WCC MONITORING WELLS
- ⊕ RW-1 - PROPOSED RECOVERY WELL



FIGURE 2

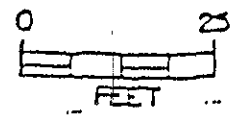


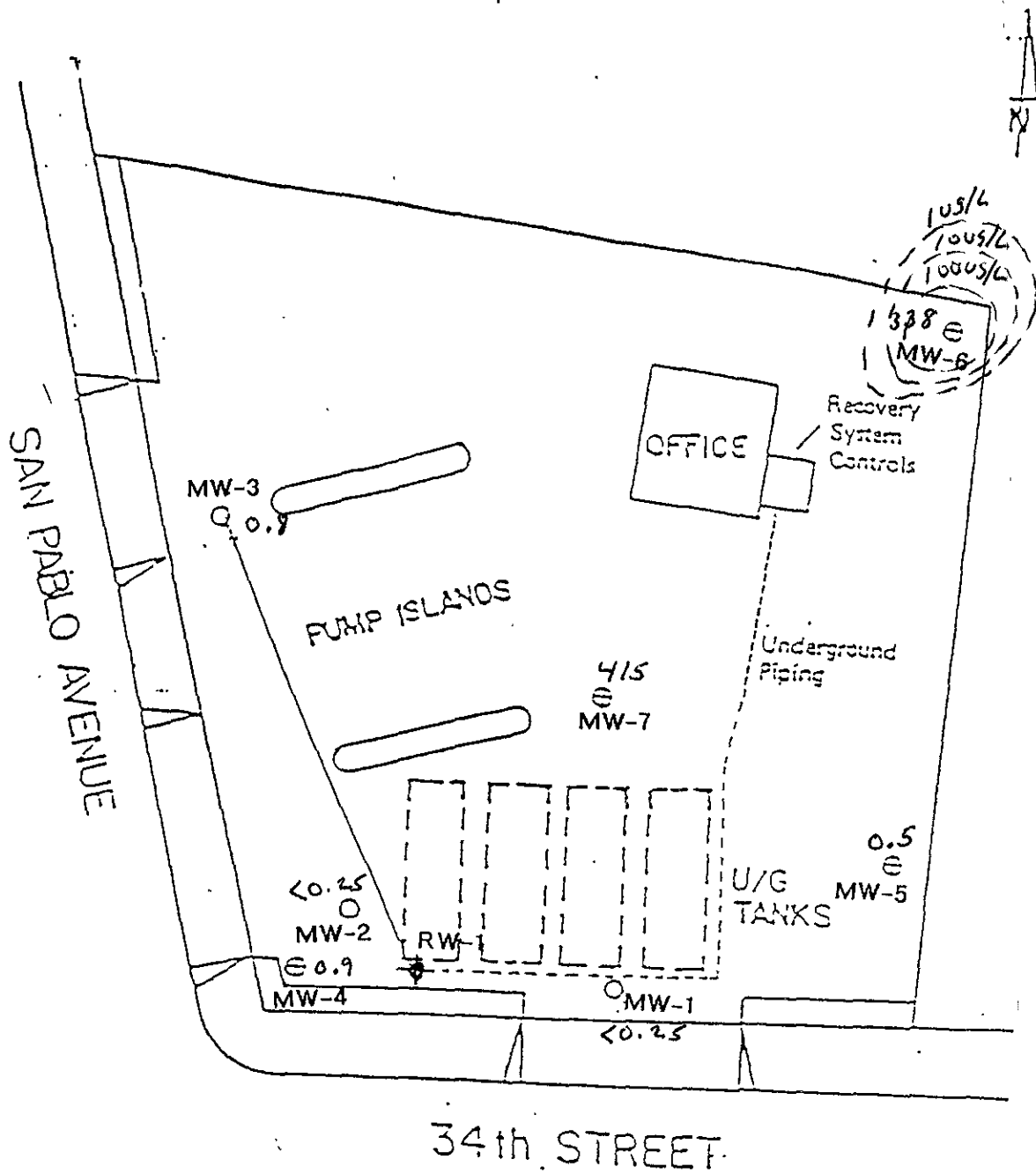
Date Sampled  
4/5/00

TPH ISOCONCENTRATION MAP  $\mu\text{g/L}$   
 THRIFTY SERVICE STATION NO. 49  
 3400 SAN PABLO AVE.  
 OAKLAND, CA

LEGEND

- MW1 - GT MONITORING WELLS
- ⊕ MW-4 - WCC MONITORING WELLS
- ⊕ RW-1 - PROPOSED RECOVERY WELL





**BENZENE ISOCONCENTRATION MAP ug/L**  
 THRIFTY SERVICE STATION NO. 49  
 3400 SAN PABLO AVE.  
 OAKLAND, CA

Date Sampled  
 4/5/2000

LEGEND

- MW1 - GT MONITORING WELLS
- ⊗ MW-4 - WCC MONITORING WELLS
- ⊕ RW-1 - PROPOSED RECOVERY WELL

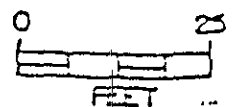
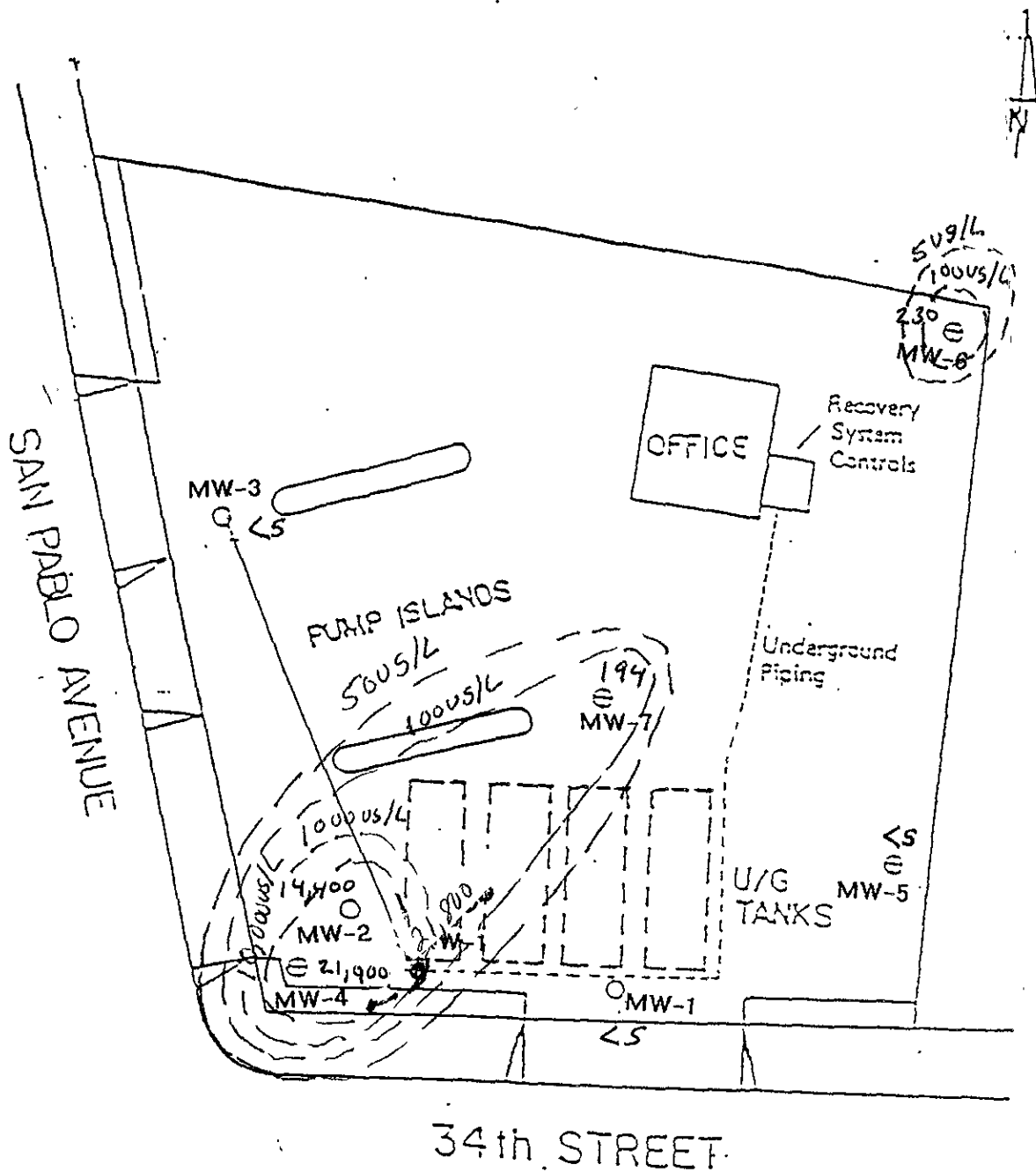


FIGURE 4





MTBE ISOCONCENTRATION MAP ug/L  
 THRIFTY SERVICE STATION NO. 49  
 3400 SAN PABLO AVE.  
 OAKLAND, CA

Date Sampled  
 4/5/2000



- LEGEND**
- MW1 - GT MONITORING WELLS
  - ⊗ MW-4 - WCC MONITORING WELLS
  - ⊕ RW-1 - PROPOSED RECOVERY WELL

FIGURE 5

# **TABLE(S)**

**TABLE 1  
GROUNDWATER DATA  
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
<b>MONITORING WELL #MW-1</b>											
01/09/92	-	-	-	-	-	-	5.54	NP	0.00	98.03	92.49
04/13/92	-	-	-	-	-	-	5.86	NP	0.00	98.03	92.17
10/05/92	-	-	-	-	-	-	9.39	NP	0.00	98.03	88.64
01/06/93	-	-	-	-	-	-	4.76	NP	0.00	98.03	93.27
04/26/93	-	-	-	-	-	-	4.96	NP	0.00	98.03	93.07
01/04/94	-	-	-	-	-	-	7.00	NP	0.00	98.03	91.03
04/05/94	-	-	-	-	-	-	6.44	NP	0.00	98.03	91.59
10/09/95	44,000	4,500	4,300	1,700	10,000	-	-	-	-	98.03	-
01/08/96	21,000	1,200	150	34	4,800	-	6.15	NP	0.00	98.03	91.88
04/08/96	4,700	80	110	10	910	-	5.40	NP	0.00	98.03	92.63
07/22/96	7,000	280	130	<3	2,100	440	5.50	NP	0.00	98.03	92.53
10/16/96	120	<0.3	<0.3	<0.3	<0.5	180	6.02	NP	0.00	98.03	92.01
01/22/97	160	<0.3	<0.3	<0.3	<0.5	360	4.40	NP	0.00	98.03	93.63
04/21/97	20,000	420	140	5.8	840	55,000	6.30	NP	0.00	98.03	91.73
07/14/97	13,000	<0.3	<0.3	<0.3	<0.55	30,000	5.92	NP	0.00	98.03	92.11
10/07/97	-	-	-	-	-	-	7.71	7.70	0.01	98.03	90.33
01/15/98	<50	0.3	<0.3	<0.3	<0.5	-	4.40	NP	0.00	98.03	93.63
04/23/98	540	<0.3	<0.3	<0.3	<0.5	<20	8.10	NP	0.00	98.03	89.93
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5	5.55	NP	0.00	98.03	92.48
10/14/98	50	1.4	0.56	<0.3	11	22	7.05	NP	0.00	98.03	90.98
01/21/99	<50	0.59	<0.3	<0.3	<0.5	<5	4.10	NP	0.00	98.03	93.93
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.30	NP	0.00	98.03	93.73
07/26/99	<50	<0.3	<0.3	<0.3	<0.5	<5	5.54	NP	0.00	98.03	92.49
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.13	NP	0.00	98.03	91.90
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5	6.04	NP	0.00	98.03	91.99
04/05/00	<50	<0.25	<0.25	<0.25	<0.5	<5	4.03	NP	0.00	98.03	94.00
<b>MONITORING WELL #MW-2</b>											
01/09/92	-	-	-	-	-	-	5.35	NP	0.00	97.44	92.09
04/13/92	-	-	-	-	-	-	7.42	NP	0.00	97.44	90.02
10/05/92	-	-	-	-	-	-	12.15	NP	0.00	97.44	85.29
01/06/93	-	-	-	-	-	-	5.46	NP	0.00	97.44	91.98
04/26/93	-	-	-	-	-	-	5.15	NP	0.00	97.44	92.29
01/04/94	-	-	-	-	-	-	9.45	NP	0.00	97.44	87.99

**TABLE 1  
GROUNDWATER DATA  
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
04/05/94	-	-	-	-	-	-	8.23	NP	0.00	97.44	89.21
10/09/95	33,000	6,000	390	1,700	4,900	-	-	-	-	97.44	-
01/08/96	<50	0.32	<0.3	0.41	2.1	-	5.60	NP	0.00	97.44	91.84
04/08/96	10,000	490	210	210	830	-	5.43	NP	0.00	97.44	92.01
07/22/96	60,000	6,500	1,000	1,500	10,000	8,500	5.65	NP	0.00	97.44	91.79
10/16/96	6,500	12	0.34	0.72	110	4,700	5.82	NP	0.00	97.44	91.62
01/22/97	3,200	<0.3	0.46	0.37	<0.5	8,000	4.30	NP	0.00	97.44	93.14
04/21/97	66,000	5,300	1,000	2,300	14,000	30,000	5.80	NP	0.00	97.44	91.64
07/14/97	17,000	1.8	4.6	4.6	350	24,000	8.92	NP	0.00	97.44	88.52
10/07/97	220,000	5,200	1,700	3,800	15,000	-	6.80	NP	0.00	97.44	90.64
01/19/98	25,000	5.4	2.2	2.1	240	-	8.50	NP	0.00	97.44	88.94
04/23/98	7,700	<0.3	0.55	0.38	4.9	28,000	7.60	NP	0.00	97.44	89.84
07/20/98	430,000	4,200	10,000	5,400	28,000	77,000	6.94	NP	0.00	97.44	90.50
10/14/98	27,000	<0.3	4.5	4.1	4.6	65,000	8.45	NP	0.00	97.44	88.99
01/21/99	16,000	7.6	9.8	4.2	310	* 49,000 / 42,000	6.95	NP	0.00	97.44	90.49
04/15/99	20,000	<0.3	<0.3	<0.3	<0.5	* 31,000 / 30,000	8.45	NP	0.00	97.44	88.99
07/26/99	6,700	<6	<6	<6	<10	*11,000 / 15,000	6.94	NP	0.00	97.44	90.50
10/13/99	7,600	<3	3.7	<3	11	11,000	5.48	NP	0.00	97.44	91.96
01/20/00	7,500	<6	<6	<6	<10	*14,000 / 16,000	5.84	NP	0.00	97.44	91.60
04/05/00	10,400	<0.25	<0.25	<0.25	<0.5	*10,000 / 14,400	5.41	NP	0.00	97.44	92.03
<b>MONITORING WELL #MW-3</b>											
01/09/92	-	-	-	-	-	-	17.60	NP	0.00	97.69	80.09
04/13/92	-	-	-	-	-	-	17.40	NP	0.00	97.69	80.29
10/05/92	-	-	-	-	-	-	17.35	NP	0.00	97.69	80.34
01/06/93	-	-	-	-	-	-	17.40	NP	0.00	97.69	80.29
04/26/93	-	-	-	-	-	-	17.90	NP	0.00	97.69	79.79
01/04/94	-	-	-	-	-	-	17.60	NP	0.00	97.69	80.09
04/05/94	-	-	-	-	-	-	16.25	NP	0.00	97.69	81.44
01/08/96	-	-	-	-	-	-	7.11	NP	0.00	97.69	90.58
04/08/96	8,800	610	31	530	900	-	7.20	NP	0.00	97.69	90.49
07/22/96	38,000	4,100	1,500	1,600	5,400	2,600	6.82	NP	0.00	97.69	90.87
10/16/96	2,400	<0.3	<0.3	<0.3	<0.5	3,800	6.84	NP	0.00	97.69	90.85
01/22/97	2,200	<0.3	<0.3	<0.3	<0.5	5,500	4.80	NP	0.00	97.69	92.89
04/21/97	15,000	1,500	36	260	710	11,000	9.40	NP	0.00	97.69	88.29

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/14/97	5,400	0.45	<0.3	<0.3	<0.5	14,000	10.92	NP	0.00	97.69	86.77
10/07/97	8,800	0.39	<0.3	<0.3	0.88	-	11.95	NP	0.00	97.69	85.74
01/19/98	22,000	1,300	15	20	310	-	7.85	NP	0.00	97.69	89.84
04/23/98	9,200	3.9	3.1	5.7	9.8	16,000	11.20	NP	0.00	97.69	86.49
07/20/98	750	0.41	1.4	0.47	1.8	2,800	7.36	NP	0.00	97.69	90.33
10/14/98	750	<0.3	<0.3	<0.3	<0.5	15,000	11.95	NP	0.00	97.69	85.74
01/21/99	4,700	0.32	<0.3	<0.3	<0.5	* 12,000 / 16,000	10.45	NP	0.00	97.69	87.24
04/15/99	7,900	0.59	0.69	<0.3	0.94	* 11,000 / 14,000	7.86	NP	0.00	97.69	89.83
07/26/99	5,200	<3	<3	<3	<5	*9,600 / 11,000	10.40	NP	0.00	97.69	87.29
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5	7.09	NP	0.00	97.69	90.60
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5	6.86	NP	0.00	97.69	90.83
04/05/00	<50	0.8	<0.25	<0.25	<0.5	*5.6 / <5	8.85	NP	0.00	97.69	88.84
<b>MONITORING WELL #MW-4</b>											
01/09/92	-	-	-	-	-	-	5.25	NP	0.00	97.33	92.08
04/13/92	-	-	-	-	-	-	6.40	NP	0.00	97.33	90.93
10/05/92	-	-	-	-	-	-	9.95	NP	0.00	97.33	87.38
01/06/93	-	-	-	-	-	-	4.10	NP	0.00	97.33	93.23
04/26/93	-	-	-	-	-	-	4.84	NP	0.00	97.33	92.49
01/04/94	-	-	-	-	-	-	9.05	NP	0.00	97.33	88.28
04/05/94	-	-	-	-	-	-	8.10	NP	0.00	97.33	89.23
10/09/95	63,000	9,000	2,100	2,500	9,600	-	-	-	-	97.33	-
01/08/96	23,000	2,200	830	880	3,600	-	5.57	NP	0.00	97.33	91.76
04/08/96	56,000	5,000	2,500	2,600	11,000	-	5.36	NP	0.00	97.33	91.97
07/22/96	33,000	3,700	1,600	1,400	6,000	2,400	4.80	NP	0.00	97.33	92.53
10/16/96	2,800	7.8	0.60	0.41	52	2,000	5.47	NP	0.00	97.33	91.86
01/22/97	1,400	<0.3	<0.3	<0.3	<0.5	3,100	5.15	NP	0.00	97.33	92.18
04/21/97	-	-	-	-	-	-	6.36	5.30	1.06	97.33	91.77
07/14/97	-	-	-	-	-	-	5.24	5.21	0.03	97.33	92.11
10/07/97	-	-	-	-	-	-	7.82	7.80	0.02	97.33	89.53
01/15/98	-	-	-	-	-	-	6.68	6.60	0.08	97.33	90.71
04/23/98	-	-	-	-	-	-	6.36	5.30	1.06	97.33	91.77
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5	6.05	NP	0.00	97.33	91.28
10/14/98	3,100	86	23	2.0	520	1,100	6.85	NP	0.00	97.33	90.48
01/21/99	9,100	3.2	5.6	1.8	130	* 24,000 / 17,000	6.10	NP	0.00	97.33	91.23

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
04/15/99	14,000	<0.3	0.71	<0.3	<0.5	* 20,000 / 22,000	6.05	NP	0.00	97.33	91.28
07/26/99	4,500	<6	<6	<6	<10	*8,700 / 9,800	6.07	NP	0.00	97.33	91.26
10/13/99	410	<0.3	0.63	<0.3	<0.5	660	5.54	NP	0.00	97.33	91.79
01/20/00	770	<0.3	<0.3	<0.3	<0.5	*2,400 / 1,900	5.49	NP	0.00	97.33	91.84
04/05/00	61,200	0.9	<0.25	<0.25	<0.5	*18,500 / 21,900	5.30	NP	0.00	97.33	92.03
<b>MONITORING WELL #MW-5</b>											
01/09/92	-	-	-	-	-	-	5.32	NP	0.00	98.85	93.53
04/13/92	-	-	-	-	-	-	4.82	NP	0.00	98.85	94.03
10/0/92	-	-	-	-	-	-	8.78	NP	0.00	98.85	90.07
01/06/93	-	-	-	-	-	-	3.46	NP	0.00	98.85	95.39
04/26/93	-	-	-	-	-	-	4.66	NP	0.00	98.85	94.19
01/04/94	-	-	-	-	-	-	6.36	NP	0.00	98.85	92.49
04/05/94	-	-	-	-	-	-	5.94	NP	0.00	98.85	92.91
07/12/95	<100	<0.5	<0.5	<0.5	<1	-	-	-	-	98.85	-
10/09/95	440	31	11	19	84	-	-	-	-	98.85	-
01/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	6.63	NP	0.00	98.85	92.22
04/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	5.22	NP	0.00	98.85	93.63
07/22/96	<50	<0.3	<0.3	<0.3	<0.5	<20	6.62	NP	0.00	98.85	92.23
10/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	6.12	NP	0.00	98.85	92.73
01/22/97	<50	<0.3	<0.3	<0.3	<0.5	<20	5.17	NP	0.00	98.85	93.68
04/21/97	73	2.5	0.34	0.74	3.8	21	6.64	NP	0.00	98.85	92.21
07/14/97	<50	<0.3	<0.3	<0.3	<0.5	<20	6.67	NP	0.00	98.85	92.18
10/07/97	130	<0.3	<0.3	<0.3	<0.5	-	8.20	NP	0.00	98.85	90.65
01/19/98	85	<0.3	<0.3	<0.3	<0.5	-	1.55	NP	0.00	98.85	97.30
04/23/98	220	0.39	<0.3	<0.3	<0.5	350	8.10	NP	0.00	98.85	90.75
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5	6.30	NP	0.00	98.85	92.55
10/14/98	<50	<0.3	<0.3	<0.3	<0.5	<5	7.65	NP	0.00	98.85	91.20
01/21/99	<50	<0.3	<0.3	<0.3	<0.5	*6.7 / <5	6.15	NP	0.00	98.85	92.70
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	1.60	NP	0.00	98.85	97.25
07/26/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.13	NP	0.00	98.85	92.72
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.61	NP	0.00	98.85	92.24
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5	6.14	NP	0.00	98.85	92.71
04/05/00	<50	0.5	<0.25	<0.25	<0.5	*5.4 / <5	4.58	NP	0.00	98.85	94.27

**TABLE 1  
GROUNDWATER DATA  
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
<b>MONITORING WELL #MW-6</b>											
01/09/92	-	-	-	-	-	-	6.30	NP	0.00	99.67	93.37
04/13/92	-	-	-	-	-	-	5.47	NP	0.00	99.67	94.20
10/05/92	-	-	-	-	-	-	9.85	NP	0.00	99.67	89.82
01/06/93	-	-	-	-	-	-	4.16	NP	0.00	99.67	95.51
04/26/93	-	-	-	-	-	-	5.75	NP	0.00	99.67	93.92
01/14/94	-	-	-	-	-	-	7.20	NP	0.00	99.67	92.47
04/05/94	-	-	-	-	-	-	6.76	NP	0.00	99.67	92.91
07/10/95	<100	<0.5	0.9	<0.5	1.1	-	-	-	-	99.67	-
10/09/95	250	4.8	5.6	11	58	-	-	-	-	99.67	-
01/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	6.16	NP	0.00	99.67	93.51
04/08/96	230	4.6	4.7	3.2	33	-	4.60	NP	0.00	99.67	95.07
07/22/96	<50	<0.3	<0.3	<0.3	<0.5	<20	7.30	NP	0.00	99.67	92.37
10/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.82	NP	0.00	99.67	93.85
01/22/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.40	NP	0.00	99.67	95.27
04/21/97	130	<0.3	<0.3	<0.3	<0.5	<20	7.10	NP	0.00	99.67	92.57
07/14/97	<50	<0.3	<0.3	<0.3	0.70	<20	7.35	NP	0.00	99.67	92.32
10/07/97	<50	0.78	0.3	<0.3	<0.5	-	6.98	NP	0.00	99.67	92.69
01/23/98	<50	<0.3	<0.3	<0.3	<0.5	-	2.35	NP	0.00	99.67	97.32
04/23/98	<50	<0.3	<0.3	<0.3	<0.5	<20	6.90	NP	0.00	99.67	92.77
07/20/98	<50	<0.3	1.1	<0.3	1.4	<5	5.45	NP	0.00	99.67	94.22
10/14/98	<50	<0.3	<0.3	<0.3	<0.5	<5	4.95	NP	0.00	99.67	94.72
01/21/99	<50	0.35	0.62	<0.3	<0.5	<5	3.90	NP	0.00	99.67	95.77
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	2.35	NP	0.00	99.67	97.32
07/26/99	1,000	<0.3	<0.3	<0.3	<0.5	*2,300 / 3,900	3.93	NP	0.00	99.67	95.74
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.15	NP	0.00	99.67	93.52
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	*42 / 41	5.84	NP	0.00	99.67	93.83
04/05/00	4,600	338	2.8	1.2	55.2	*282 / 230	3.89	NP	0.00	99.67	95.78
<b>MONITORING WELL #MW-7</b>											
01/09/92	-	-	-	-	-	-	6.30	NP	0.00	99.02	92.72
04/13/92	-	-	-	-	-	-	6.68	NP	0.00	99.02	92.34
10/05/92	-	-	-	-	-	-	9.60	NP	0.00	99.02	89.42
01/06/93	-	-	-	-	-	-	13.90	NP	0.00	99.02	85.12
04/26/93	-	-	-	-	-	-	5.55	NP	0.00	99.02	93.47

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
01/04/94	-	-	-	-	-	-	7.58	NP	0.00	99.02	91.44
04/05/94	-	-	-	-	-	-	6.66	NP	0.00	99.02	92.36
10/09/95	27,000	2,400	140	1,700	2,700	-	-	-	-	99.02	-
01/08/96	13,000	800	42	540	860	-	6.94	NP	0.00	99.02	92.08
04/08/94	9,100	840	31	690	1,200	-	5.48	NP	0.00	99.02	93.54
07/22/96	11,000	1,700	22	660	700	840	6.60	NP	0.00	99.02	92.42
10/16/96	180	<0.3	<0.3	<0.3	<0.5	270	6.42	NP	0.00	99.02	92.60
01/22/97	130	<0.3	<0.3	<0.3	<0.5	470	5.70	NP	0.00	99.02	93.32
04/21/97	10,000	1,400	27	820	490	1,100	5.30	NP	0.00	99.02	93.72
07/14/97	8,200	660	15	230	270	560	7.90	NP	0.00	99.02	91.12
10/07/97	7,700	480	15	8.4	350	-	7.70	NP	0.00	99.02	91.32
01/19/98	1,400	20	0.74	0.46	4.4	-	6.05	NP	0.00	99.02	92.97
04/23/98	590	<0.3	<0.3	<0.3	<0.5	1,700	7.60	NP	0.00	99.02	91.42
07/20/98	4,900	570	150	300	500	1,500	5.30	NP	0.00	99.02	93.72
10/14/98	1,100	1.0	<0.3	<0.3	5.3	2,000	8.60	NP	0.00	99.02	90.42
01/21/99	570	0.32	<0.3	<0.3	<0.5	* 1,500 / 1,700	6.70	NP	0.00	99.02	92.32
04/15/99	770	<0.3	<0.3	<0.3	<0.5	* 1,400 / 1,200	6.07	NP	0.00	99.02	92.95
07/26/99	500	<0.3	<0.3	<0.3	<0.5	*710 / 950	7.86	NP	0.00	99.02	91.16
10/13/99	<50	<0.3	0.44	<0.3	0.62	<5	6.93	NP	0.00	99.02	92.09
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	*5 / <5	6.44	NP	0.00	99.02	92.58
04/05/00	5,670	415	19	1.7	60.1	*329 / 194	7.86	NP	0.00	99.02	91.16
<b>MONITORING WELL #RW-1</b>											
01/09/92	-	-	-	-	-	-	14.00	NP	0.00	-	-
04/13/92	-	-	-	-	-	-	14.00	NP	0.00	-	-
10/05/92	-	-	-	-	-	-	15.05	NP	0.00	-	-
01/06/93	-	-	-	-	-	-	5.43	NP	0.00	-	-
04/26/93	-	-	-	-	-	-	13.20	NP	0.00	-	-
01/04/94	-	-	-	-	-	-	14.30	NP	0.00	-	-
04/05/94	-	-	-	-	-	-	14.13	NP	0.00	-	-
01/08/96	-	-	-	-	-	-	14.22	NP	0.00	-	-
04/08/96	-	-	-	-	-	-	14.33	NP	0.00	-	-
07/22/96	8,100	530	84	120	860	-	14.27	NP	0.00	-	-
10/16/96	-	-	-	-	-	-	13.10	NP	0.00	-	-
01/22/97	-	-	-	-	-	-	16.97	NP	0.00	-	-



**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
10/07/97	-	-	-	-	-	-	14.20	NP	0.00	-	-
01/15/98	-	-	-	-	-	-	15.60	NP	0.00	-	-
04/23/98	81,000	0.72	1.4	3.2	5.7	270,000	14.20	NP	0.00	-	-
07/20/98	-	-	-	-	-	-	14.30	NP	0.00	-	-
10/14/98	-	-	-	-	-	-	11.20	NP	0.00	-	-
01/21/99	-	-	-	-	-	-	-	-	-	-	-
04/15/99	-	-	-	-	-	-	13.10	NP	0.00	-	-
07/26/99	4,400	<3	<3	<3	<5	*6,800 / 9,000	13.83	NP	0.00	-	-
10/13/99	-	-	-	-	-	-	-	-	-	-	-
01/20/00	-	-	-	-	-	-	13.22	NP	0.00	-	-
04/05/00	-	-	-	-	-	-	-	-	-	-	-

**NOTE:**  
 \* MTBE 8020 / 8260  
 ND = Nondetectable  
 NP = No free hydrocarbon product  
 " - " = Not analyzed / Not available

Benzene, toluene, ethylbenzene, and xylene analyzed by EPA method 8020  
 Total petroleum hydrocarbons (TPH) analyzed by EPA method 8015 modified for gasoline  
 Methyl-tert Butyl Ether (MTBE) analyzed by EPA method 8020 or 8260

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)						
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE	
4/8/91	1,310	0	-	-	<0.3	<0.3	<0.3	<0.9	-	-	910	2000	160	2000	-	
4/15/91	1,434	124	18	-	<0.3	<0.3	<0.3	<0.3	-	-	2800	4600	310	5000	-	
4/22/91	1,510	200	11	-	<15	<15	<15	<45	-	-	3100	3300	<15	2800	-	
4/29/91	1,660	350	21	-	<0.3	<0.3	<0.3	<0.9	-	-	3600	4500	300	5000	-	
5/6/91	1,740	430	11	-	<0.3	<0.3	<0.3	<0.9	-	-	3600	3500	300	3800	-	
5/13/91	1,880	570	20	-	<0.3	<0.3	<0.3	<0.9	-	-	3300	3200	230	3900	-	
5/20/91	2,010	700	19	-	<0.3	<0.3	<0.3	<0.9	-	-	3300	3400	260	5100	-	
5/28/91	2,050	740	5	-	<0.3	<0.3	<0.3	<0.9	-	-	2900	3000	230	4200	-	
6/3/91	2,110	800	10	-	<0.3	<0.3	<0.3	<0.9	-	-	2500	2100	110	2800	-	
6/10/91	2,160	850	7	-	<0.3	<0.3	<0.3	<0.9	-	-	1800	1700	120	2100	-	
6/17/91	2,219	909	8	-	<0.3	<0.3	<0.3	<0.9	-	-	2100	1900	170	2700	-	
6/24/91	2,263	953	6	-	<0.3	<0.3	<0.3	<0.9	-	-	2100	1800	150	2700	-	
07/01/91	2,313	1,003	7	-	<0.5	<0.5	<1	<1	-	-	2,700	2,000	150	2,900	-	
07/08/91	2,700	1,390	55	-	<0.5	<0.5	<1	<1	-	-	4,000	2,500	130	4,400	-	
07/15/91	2,872	1,562	25	-	<0.5	<0.5	<1	<1	-	-	3,100	1,900	140	3,200	-	
07/22/91	3,144	1,834	39	-	<0.5	<0.5	<1	<1	-	-	3,400	2,100	110	2,800	-	
07/29/91	3,220	1,910	11	-	<0.5	<0.5	<1	<1	-	-	5,100	2,200	180	2,700	-	
08/05/91	3,348	2,038	18	-	<0.5	<0.5	<1	<1	-	-	5,100	3,900	400	4,200	-	
08/12/91	3,472	2,162	18	-	<0.5	<0.5	<1	<1	-	-	11,000	6,200	440	8,400	-	
08/19/91	3,548	2,238	11	-	<0.5	<0.5	<1	<1	-	-	4,500	2,400	130	2,600	-	
08/26/91	3,655	2,345	15	-	<0.5	<0.5	<1	<1	-	-	4,400	2,500	260	3,600	-	
09/09/91	3,822	2,512	12	-	<0.5	<0.5	<1	<1	-	-	5,200	3,000	390	3,700	-	
09/16/91	3,884	2,574	9	-	<0.5	<0.5	<1	<1	-	-	4,100	2,000	460	4,900	-	
09/23/91	4,013	2,703	18	-	<0.5	<0.5	<1	<1	-	-	4,600	1,600	710	6,400	-	
09/30/91	4,092	2,782	11	-	<0.5	<0.5	<1	<1	-	-	5,700	2,000	380	6,200	-	
10/07/91	4,131	2,821	6	-	System shut down						-	-	-	-	-	-
10/14/91	4,195	2,885	9	-	<0.5	<0.5	<1	<1	-	-	4,400	2,000	370	8,100	-	
10/21/91	4,406	3,096	30	-	<0.5	<0.5	<1	<1	-	-	2,300	1,100	190	4,200	-	
10/28/91	4,474	3,164	10	-	<0.5	<0.5	<1	<1	-	-	6,400	4,100	620	6,100	-	
11/03/91	4,613	3,303	23	-	<0.5	<0.5	<1	<1	-	-	6,100	2,800	200	5,600	-	
11/11/91	4,700	3,390	11	-	<0.5	<0.5	<1	<1	-	-	6,500	2,300	<30	4,900	-	
11/18/91	4,887	3,577	27	-	<0.5	<0.5	<1	<1	-	-	5,600	2,500	300	4,600	-	
11/25/91	5,042	3,732	22	-	<0.5	<0.5	<1	<1	-	-	5,400	2,800	230	5,700	-	
12/03/91	5,263	3,953	28	-	<0.5	<0.5	<1	<1	-	-	7,200	3,300	490	5,500	-	
12/09/91	5,362	4,052	17	-	<0.5	<0.5	<1	<1	-	-	4,400	1,700	140	3,900	-	
12/16/91	5,488	4,176	18	-	<0.5	<0.5	<0.5	<0.5	-	-	4,700	2,300	310	4,600	-	
12/23/91	5,516	4,206	4	-	<0.5	<0.5	<0.5	<0.5	-	-	4,000	2,200	290	5,900	-	
12/30/91	5,575	4,265	8	-	<0.5	<0.5	<0.5	<0.5	-	-	5,200	2,500	350	5,800	-	

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)						
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE	
01/15/92	5,720	4,410	9	-	<0.5	<0.5	<0.5	<0.5	-	-	3,400	1,900	300	6,300	-	
02/10/92	6,264	4,954	21	-	<0.5	<0.5	<0.5	<0.5	-	-	5,800	2,800	320	7,200	-	
03/09/92	8,520	7,210	81	<200	<0.5	16	<0.5	<0.5	-	47,000	7,100	4,800	630	10,300	-	
04/13/92	22,888	21,578	411	<200	<0.5	<0.5	<0.5	<0.5	-	29,000	4,500	2,200	160	4,800	-	
05/11/92	24,920	23,610	73	<200	<0.5	<0.5	<0.5	<0.5	-	22,000	4,300	1,500	130	3,800	-	
06/01/92	28,330	27,020	162	<200	<0.5	<0.5	<0.5	<0.5	-	18,000	3,400	1,500	660	4,200	-	
07/13/92	72,675	-	-	-	<0.5	<0.5	<0.5	<0.5	-	-	1,800	750	150	5,600	-	
07/13/92	72,675	-	-	The system pumped air and flowmeter jumped from 30,000 gallons to 70,000 gallons						-	-	-	-	-	-	-
08/17/92	75,046	29,391	68	-	<0.5	<0.5	<0.5	<0.5	-	-	1,100	350	200	1,100	-	
09/14/92	75,582	29,927	19	-	<0.5	<0.5	<0.5	<1	-	-	2,100	520	<25	3,500	-	
10/05/92	75,680	30,025	5	<200	<0.5	<0.5	<0.5	<1	-	19,000	1,700	270	<25	4,000	-	
11/09/92	77,280	31,625	46	-	<0.5	<0.5	<0.5	<0.5	-	-	4,000	1,400	120	5,900	-	
12/14/92	79,420	33,765	61	-	<0.5	<0.5	<0.5	<1	-	-	7,300	4,900	1,800	16,000	-	
01/04/93	84,720	39,065	252	-	<0.5	<0.5	<0.5	<1	-	-	5,400	2,100	450	7,800	-	
02/15/93	102,689	57,034	428	<200	<0.5	<0.5	<0.5	<1	-	41,000	6,600	3,200	260	9,600	-	
02/22/93	146,430	-	-	The system pumped air and flowmeter jumped from 102,689 gallons to 146,430 gallons						-	-	-	-	-	-	
03/08/93	147,500	58,104	76	-	<0.5	<0.5	<0.5	<1	-	-	7,400	3,400	56	11,000	-	
04/26/93	151,200	61,804	76	<100	<0.5	<0.5	<0.5	<1	-	36,000	4,300	2,200	420	8,300	-	
04/26/93	151,200	61,804	-	Shut down system for repair						-	-	-	-	-	-	
07/21/93	151,240	61,844	0	Restart the system						-	-	-	-	-	-	
08/11/93	151,650	62,254	20	-	<0.5	<0.5	<0.5	<1	-	-	6,500	2,300	390	6,200	-	
09/16/93	154,005	64,609	65	<60	<0.3	<0.3	<0.3	<0.6	-	43,000	2,300	320	<4.4	2,900	-	
10/04/93	154,896	65,500	50	<60	<0.3	<0.3	<0.3	<0.6	-	33,000	2,900	470	6.9	3,500	-	
11/05/93	157,431	68,035	79	<50	<0.3	<0.3	<0.3	<0.5	-	15,000	1,100	27	<0.3	920	-	
12/03/93	159,324	69,928	68	<50	<0.3	<0.3	<0.3	<0.5	-	16,000	1,100	88	<6.6	2,300	-	
01/06/94	166,440	77,044	209	-	<0.3	<0.3	<0.3	<0.5	-	-	3,800	730	<13	1,200	-	
02/03/94	170,720	81,324	153	-	<0.3	<0.3	<0.3	<0.5	-	-	3,600	610	<4.4	4,800	-	
03/03/94	178,168	88,772	266	-	<0.3	<0.3	<0.3	<0.5	-	-	2,800	2,000	270	3,400	-	
04/07/94	185,670	96,274	214	<50	<0.3	<0.3	<0.3	<0.5	-	26,000	2,200	550	<6.6	1,900	-	
05/12/94	188,840	99,444	91	<50	<0.3	<0.3	<0.3	<0.5	-	4,600	100	10	8.4	280	-	
06/16/94	194,680	105,284	167	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-	
07/11/94	199,135	109,739	178	<50	<0.3	<0.3	<0.3	<0.5	-	4,000	220	<2.6	<2.6	320	-	
08/04/94	200,910	111,514	74	<50	<0.3	<0.3	<0.3	<0.5	-	7,800	480	6.2	<0.3	630	-	
09/15/94	203,450	114,054	60	<50	<0.3	<0.3	<0.3	<0.5	-	3,200	150	2.4	2.6	170	-	
10/10/94	205,210	115,814	70	<50	<0.3	<0.3	<0.5	<0.5	-	1,300	8.6	1.5	1.1	15	-	
11/07/94	206,060	116,664	30	<50	<0.3	<0.3	<0.5	<0.5	-	170	1.5	<0.3	<0.5	0.5	-	
12/05/94	207,093	117,697	37	<50	<0.3	<0.3	<0.5	<0.5	-	75	1.3	<0.3	<0.5	<0.5	-	
01/09/95	207,293	117,897	6	<50	<0.3	<0.3	<0.5	<0.5	-	<50	<0.3	<0.3	<0.5	<0.5	-	
02/01/95	207,650	118,254	16	<50	<0.3	<0.3	<0.5	<0.5	-	<50	<0.3	<0.3	<0.5	<0.5	-	

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)						
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE	
02/06/95	207,810	118,414	32	<50	<0.3	<0.3	<0.5	<0.5	-	<50	2.7	<0.3	<0.5	<0.5	-	
03/10/95	208,430	119,034	19	<100	<0.5	<0.5	<0.5	<1	-	<100	<0.5	<0.5	<0.5	<1	-	
04/10/95	208,564	119,168	4	<100	<0.5	<0.5	<0.5	<1	-	3,300	180	7.6	2.1	150	-	
05/08/95	208,608	119,212	2	<100	<0.5	<0.5	<0.5	<1	-	11,000	640	9.2	<5	1,100	-	
06/05/95	208,926	119,530	11	<100	<0.5	<0.5	<0.5	<1	-	5,100	270	2.2	<0.5	49	-	
07/10/95	214,182	124,786	150	<100	<0.5	<0.5	<0.5	<1	-	13,000	1,600	120	24	1,300	-	
08/07/95	221,876	132,480	275	Shut down system for repair						-	-	-	-	-	-	-
08/28/95	221,997	132,601	6	Restart the system						-	-	-	-	-	-	-
09/06/95	222,003	132,607	1	<100	<0.5	<0.5	<0.5	<1	-	2,300	<0.5	<0.5	<0.5	<1	-	
10/09/95	222,343	132,947	10	<100	<0.5	<0.5	<0.5	<1	-	2,000	5.6	0.77	0.66	3.8	-	
11/06/95	222,704	133,308	13	<50	0.3	0.31	<0.3	0.68	-	3,000	27	1.7	3.7	48	-	
12/11/95	223,792	134,396	31	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	0.96	-	
01/08/96	224,861	135,265	31	970	<0.3	<0.3	<0.3	0.67	-	1,800	39	<0.3	<0.3	<0.5	-	
02/12/96	227,812	138,416	90	<50	10	0.37	<0.3	0.53	-	3,300	190	<7.5	<7.5	20	-	
03/12/96	229,301	139,905	51	<50	<0.3	<0.3	<0.3	<0.5	-	2,700	250	2.3	<1.5	<2.5	-	
04/08/96	242,320	152,924	482	<50	<0.3	<0.3	<0.3	<0.5	-	1,000	90	5	<0.3	67	-	
05/06/96	247,840	158,444	197	100	<0.3	<0.3	<0.3	<0.5	-	15,000	2,200	600	32	2,400	-	
06/03/96	248,423	159,027	21	Shut down system for carbon change						-	-	-	-	-	-	
08/08/96	248,423	159,027	-	Start-up system						-	-	-	-	-	-	
08/20/96	248,630	159,234	17	<50	<0.3	<0.3	<0.3	<0.5	-	2,100	24	<0.3	<0.3	49	-	
09/23/96	259,030	169,634	306	<50	<0.3	<0.3	<0.3	<0.5	-	4,100	260	<3	<3	34	-	
10/16/96	263,610	174,214	199	<50	<0.3	<0.3	<0.3	<0.5	-	2,700	220	3.8	<0.6	44	-	
11/19/96	263,986	174,590	11	<50	<0.3	<0.3	<0.3	<0.5	-	1,200	<0.3	<0.3	<0.3	<0.5	-	
12/16/96	264,210	174,814	8	<50	<0.3	<0.3	<0.3	1.5	-	29,000	410	2,300	120	1,100	-	
01/22/97	266,220	176,824	54	<50	<0.3	<0.3	<0.3	<0.5	-	68,000	<0.3	<0.3	<0.3	<0.5	-	
02/24/97	267,030	177,634	25	<50	<0.3	<0.3	<0.3	<0.5	-	51,000	3,500	3,200	390	2,200	-	
03/17/97	267,230	177,834	10	<50	<0.3	<0.3	<0.3	<0.5	-	89,000	<6	11	<6	14	-	
04/21/97	267,415	178,019	5	<50	<0.3	<0.3	<0.3	<0.5	-	61,000	730	18	130	360	-	
05/22/97	276,535	187,139	294	<50	<0.3	<0.3	<0.3	<0.5	-	850	1.3	<0.3	0.4	4.6	-	
06/23/97	281,214	191,816	146	-	-	-	-	-	-	-	-	-	-	-	-	
07/14/97	284,210	194,814	143	<50	<0.3	<0.3	<0.3	<0.5	-	6,600	<0.3	0.59	<0.3	9	-	
08/18/97	298,610	209,214	411	-	-	-	-	-	-	-	-	-	-	-	-	
09/15/97	301,043	211,647	87	-	-	-	-	-	-	-	-	-	-	-	-	
10/07/97	333,480	244,084	1,474	<50	<0.3	<0.3	<0.3	<0.5	-	94,000	<0.3	<0.3	<0.3	<0.5	-	
11/17/97	334,286	244,890	20	-	-	-	-	-	-	-	-	-	-	-	-	
12/08/97	334,382	244,986	5	-	-	-	-	-	-	-	-	-	-	-	-	
12/12/97	-	-	-	Shut down system due to stolen equipment						-	-	-	-	-	-	-
04/08/98	-	-	-	<50	<0.3	<0.3	<0.3	<0.5	<20	3,100	12	1	<0.3	490	2,600	
05/11/98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
06/22/98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/20/98	334,382	244,986	-	<50	<0.3	<0.3	<0.3	<0.5	-	52,000	8	0.52	0.83	1.5	-
08/03/98	346,521	257,125	867	Shut down system for carbon canisters replacement						-	-	-	-	-	-
09/17/98	354,985	265,589	188	-	-	-	-	-	-	-	-	-	-	-	-
10/14/98	358,015	268,619	112	<50	<0.3	<0.3	<0.3	1.6	-	3,100	45	13	3.5	350	-
11/05/98	359,600	270,204	72	System shut down due to vandalism and stolen equipment						-	-	-	-	-	-
11/20/98	359,600	270,204	-	Restart						-	-	-	-	-	-
12/11/98	369,452	280,056	469	-	-	-	-	-	-	-	-	-	-	-	-
12/24/98	-	-	-	No reading, meter broken						-	-	-	-	-	-
01/15/99	0	280,056	-	Replaced Flowmeter started at 0						-	-	-	-	-	-
01/21/99	985.5	281,042	164	57	<0.3	<0.3	<0.3	0.76	-	380	6.2	1	<0.3	9.1	-
02/12/99	1,971.0	282,027	45	-	-	-	-	-	-	-	-	-	-	-	-
03/12/99	4,390.0	284,446	86	-	-	-	-	-	-	-	-	-	-	-	-
04/15/99	8,595.0	288,651	124	<50	<0.3	<0.3	<0.3	<0.5	<5	410	1.6	0.78	<0.3	5	*580 / 330
05/04/99	9,410.0	289,466	43	-	-	-	-	-	-	-	-	-	-	-	-
05/18/99	9,410.0	289,466	-	Shut down system for pump controller repair by manufacturer						-	-	-	-	-	-
09/20/99	9,411.0	289,467	0	Restart the system						-	-	-	-	-	-
09/24/99	9,412.4	289,468	0	-	-	-	-	-	-	-	-	-	-	-	-
10/13/99	9,509.8	289,566	5	<50	<0.3	<0.3	<0.3	<0.5	<5	6,000	<0.3	<0.3	<0.3	<0.5	13,000
11/12/99	9,701.9	289,758	6	-	-	-	-	-	-	-	-	-	-	-	-
12/17/99	9,893.7	289,950	5	-	-	-	-	-	-	-	-	-	-	-	-
01/20/00	10,052.1	290,108	5	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
02/17/00	10,156.6	290,213	4	-	-	-	-	-	-	-	-	-	-	-	-
03/13/00	10,354.7	290,411	8	-	-	-	-	-	-	-	-	-	-	-	-
04/05/00	10,545.7	290,602	8	72.7	1.8	4.1	0.7	6.7	-	119,000	2,380	6,440	6,240	25,200	*30,800 / 21,800
05/19/00	11,071.7	291,128	12	Shut down system for carbon drum replacement						-	-	-	-	-	-
06/05/00	11,075.4	291,131	0	Restart the system						-	-	-	-	-	-
06/14/00	11,131.6	291,188	6	<50	<0.3	<0.3	<0.3	<0.6	<5	<1,000	<6	<6	<6	14	24,500

**Note:** TPH is analyzed by EPA Method 8015 M  
 BTEX is analyzed by EPA Method 602 or 8020  
 < = less than laboratory detection level indicated  
 - = no sample / not analyzed  
 \*MTBE 8020/8260

In February 2000, the total cumulative discharge amount was corrected to reflect all system maintenance and flowmeter changeouts since the startup of the system. The total number may be different from previous versions of this table.

# **APPENDIX A**



**PROJECT STATUS REPORT**

SITE: THRIFTY OIL CO. #049  
 ADDR: 3400 SAN PABLO AVENUE  
OAKLAND, CA.

DATE: 04-05-00

PERSON: SERBAN P.

OBSERVATION WELLS

WELL ID	DTP (FT)	DTW (FT)	DTB (FT)	PT (FT)	DIA (IN)	PURGE (GAL)	ODORS			FP		COMMENT
							Y	N	S	Y	N	
M O N T H L Y												
MW-1		4.03	17.78		2"	9		X			X	
MW-2		5.41	23.80		2"	12		X			X	
MW-3		8.85	24.20		2"	10		X			X	
MW-4		5.30	13.71		4"	22		X			X	
MW-5		4.58	13.78		2"	6		X			X	
MW-6		3.84	13.08		2"	6		X			X	
MW-7		2.86	13.60		4"	15		X			X	
RW-1		N/A	14.20		6"	0		X			X	

FREE PRODUCT REMOVED: APPROX — GALLONS

WATER REMOVED: APPROX 80 GALLONS

REMARKS:

Q. W. S.

EXPLANATION:

DTP= DEPTH TO PRODUCT FROM TOP OF CASING, DTW= DEPTH TO WATER FROM TOP OF CASING  
 DTB= DEPTH TO BOTTOM FROM TOP OF CASING, PT= PRODUCT THICKNESS, S= SLIGHT

FIELD DATA -GROUNDWATER SAMPLING PROGRAM

Site: # 049	Date: 04-05-00
Address:	
Personnel: SERBAM	Weather: SUNNY DAY
Well No: MW-1	Equip: BAUER

<b>Before Purging:</b>	
Total Well Depth: (ft.) 17.80	Well Diameter 2 1/2
Depth to Water (ft) 4.03	Est. Purge Volume: 9

<b>Sampling Data:</b>							
Initial Turbidity:				Final Turbidity:			
Time	9:47	9:48	9:49	9:51	9:52	9:53	9:55
EC	870	850	820	860	840	830	810
pH	6.03	6.01	5.98	5.93	5.87	5.83	5.81
Temp	21.3	21.1	21.2	21.4	21.2	20.9	20.7
Gal.	1	2	3	5	6	7	9
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>	
Depth to Water (ft.) 3.20	Total Well Depth(ft) 17.80



FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site: <u>H 049</u>	Date: <u>04-05-00</u>
Address: _____	
Personnel: <u>SERBAH</u>	Weather: <u>SUNNY DAY</u>
Well No: <u>MW-2</u>	Equip: <u>BATLER</u>

<b>Before Purging:</b>			
Total Well Depth: (ft.)	<u>23.80</u>	Well Diameter	<u>2"</u>
Depth to Water (ft)	<u>5.41</u>	Est. Purge Volume:	<u>12</u>

<b>Sampling Data:</b>							
Initial Turbidity:				Final Turbidity:			
Time	<u>10:00</u>	<u>10:01</u>	<u>10:03</u>	<u>10:04</u>	<u>10:06</u>	<u>10:08</u>	<u>10:10</u>
EC	<u>780</u>	<u>760</u>	<u>780</u>	<u>750</u>	<u>740</u>	<u>720</u>	<u>720</u>
pH	<u>6.18</u>	<u>6.13</u>	<u>6.15</u>	<u>6.11</u>	<u>6.08</u>	<u>6.06</u>	<u>6.03</u>
Temp	<u>71.4</u>	<u>71.2</u>	<u>71.3</u>	<u>71.1</u>	<u>70.8</u>	<u>70.6</u>	<u>70.7</u>
Gal.	<u>1</u>	<u>3</u>	<u>5</u>	<u>6</u>	<u>8</u>	<u>10</u>	<u>12</u>
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>	
Depth to Water (ft.)	<u>3.27</u> Total Well Depth(ft.) <u>23.80</u>

**FIELD DATA -GROUNDWATER SAMPLING PROGRAM**

Site:	# 049	Date:	06-05-00
Address:			
Personnel:		Weather:	SUNNY DAY
Well No:	MW-3	Equip:	BAYER

<b>Before Purging:</b>			
Total Well Depth: (ft.)	24.20	Well Diameter	2 1/2
Depth to Water (ft)	8.85	Est. Purge Volume:	10

<b>Sampling Data:</b>							
<b>Initial Turbidity:</b>				<b>Final Turbidity:</b>			
Time	9:06	9:07	9:09	9:10	9:12	9:13	9:15
EC	830	850	810	820	810	790	810
pH	6.21	6.16	6.13	6.08	6.06	6.08	6.04
Temp	71.3	71.1	70.9	70.7	70.8	70.6	70.4
Gal.	1	2	4	5	7	8	10
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>	
Depth to Water (ft.)	6.35
Total Well Depth(ft).	24.20

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	#049	Date:	04-05-00
Address:			
Personnel:	SERBAH	Weather:	SUNNY DAY
Well No.:	MW-4	Equip:	BAILER

Before Purging:			
Total Well Depth: (ft.)	13.71	Well Diameter	44
Depth to Water (ft)	5.30	Est. Purge Volume:	22

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	10:11	10:14	10:17	10:20	10:23	10:26	10:30
EC	810	790	760	740	710	720	690
pH	6.09	6.04	6.01	6.03	5.93	5.87	5.83
Temp	71.4	71.1	70.9	70.7	70.5	70.3	70.1
Gal.	3	6	9	12	15	18	22
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection	
Depth to Water (ft.)	4.30
Total Well Depth(ft.)	13.71

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site: # 049	Date: 04-05-00
Address:	
Personnel: SERBAX	Weather: SUNNY DAY
Well No: MW-5	Equip: BAILER

Before Purging:			
Total Well Depth: (ft.)	13.78	Well Diameter	2"
Depth to Water (ft)	4.58	Est. Purge Volume:	6

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	9:39	9:40	9:41	9:42	9:43	9:44	9:45
EC	770	790	760	740	750	780	740
pH	6.18	6.14	6.10	6.15	6.09	6.03	5.97
Temp	71.3	71.2	71.0	70.9	70.7	70.4	70.2
Gal.	0.5	1	2	3	4	5	6
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection	
Depth to Water (ft.)	3.42
Total Well Depth(ft.)	13.78

## FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site: <u># 049</u>	Date: <u>04-05-00</u>
Address: _____	
Personnel: <u>SERBAN</u>	Weather: <u>SUNNY DAY</u>
Well No: <u>MW-6</u>	Equip: <u>BAPUER</u>

Before Purging:			
Total Well Depth: (ft.)	<u>13.08</u>	Well Diameter	<u>24</u>
Depth to Water (ft)	<u>3.89</u>	Est. Purge Volume:	<u>6</u>

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	8:55	8:56	8:57	8:57	8:58	8:59	9:00
EC	920	910	930	840	870	880	860
pH	6.21	6.17	6.13	6.10	6.10	6.04	6.07
Temp	71.3	71.4	71.2	70.9	70.7	70.4	70.2
Gal.	0.5	1	2	3	4	5	6
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection	
Depth to Water (ft.)	Total Well Depth(ft.)
<u>2.70</u>	<u>13.08</u>

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site: # 049	Date: 04-05-00
Address:	
Personnel: SERBAN	Weather: SUNNY DAY
Well No: MW-7	Equip: BAILER

Before Purging:			
Total Well Depth: (ft.)	13.60	Well Diameter	44
Depth to Water (ft)	7.86	Est. Purge Volume:	15

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	9:22	9:24	9:26	9:28	9:30	9:32	9:35
EC	810	790	760	730	740	720	730
pH	6.04	5.97	5.90	5.87	5.83	5.79	5.72
Temp	71.4	71.2	70.8	70.6	70.3	70.3	70.1
Gal.	2	4	6	8	10	12	15
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection	
Depth to Water (ft.)	4.35
Total Well Depth(ft.)	13.60

# **APPENDIX B**



## American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

### Ordered By

Thrifty Oil Company  
13539 E. Foster Road  
Santa Fe Springs, CA 90670-

Telephone: (562) 921-3581  
Attention: Jeff Suryakusuma

Number of Pages 9  
Date Received 04/10/2000  
Date Reported 05/19/2000

Job Number	Order Date	Client
15143	04/10/2000	TOC

Project ID: #049  
Project Name: Quarterly Water Sampling  
Site: TOC-#049  
3400 San Pablo Ave.  
Oakland, CA 94612

Enclosed please find results of analyses of 8 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

*Joe Sullivan*

Approved By:

*C. Razmara*

Cyrus Razmara, Ph.D.  
Laboratory Director





# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-#049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 2

Project ID: #049

Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

QC Batch Number: 04192000 / 04192000

Our Lab I.D.			AE71983	AE71984	AE71985	AE71986
Client Sample I.D.		Method Blank	MW-6	MW-3	MW-7	MW-5
Date Sampled		04/05/2000	04/05/2000	04/05/2000	04/05/2000	04/05/2000
Date Prepared		04/19/2000	04/19/2000	04/19/2000	04/19/2000	04/19/2000
Preparation Method		5030B	5030B	5030B	5030B	5030B
Date Analyzed		04/19/2000	04/19/2000	04/19/2000	04/19/2000	04/19/2000
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results
Benzene	0.25	0.50	ND	338	0.8	415
Ethylbenzene	0.25	0.50	ND	1.2	ND	1.7
Toluene (Methyl benzene)	0.25	0.50	ND	2.8	ND	19.0
Xylenes (Total)	0.50	1.00	ND	55.2	ND	60.1
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	282	5.6J	329
TPH as Gasoline and Light HC. (C4-C12)	50	100	ND	4,600	ND	5,670

Our Lab I.D.			AE71983	AE71984	AE71985	AE71986
Surrogates	Con. Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125	104	93	103	89	101
Trifluorotoluene	75-125	106	120	111	120	116



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-#049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 3  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AE TL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

QC Batch Number: 04192000 / 04192000

Our Lab I.D.		AE71987	AE71988	AE71989	AE71990	
Client Sample I.D.		MW-1	MW-2	MW-4	Trip Blank	
Date Sampled		04/05/2000	04/05/2000	04/05/2000	04/05/2000	
Date Prepared		04/19/2000	04/19/2000	04/19/2000	04/19/2000	
Preparation Method		5030B	5030B	5030B	5030B	
Date Analyzed		04/19/2000	04/19/2000	04/19/2000	04/19/2000	
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>
Benzene	0.25	0.50	ND	ND	0.9	ND
Ethylbenzene	0.25	0.50	ND	ND	ND	ND
Toluene (Methyl benzene)	0.25	0.50	ND	ND	ND	ND
Xylenes (Total)	0.50	1.00	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	10,000	18,500	ND
TPH as Gasoline and Light HC. (C4-C12)	50	100	ND	10,400	61,200	ND

Our Lab I.D.		AE71987	AE71988	AE71989	AE71990	
<b>Surrogates</b>	<b>Con. Limit</b>	<b>% Rec.</b>	<b>% Rec.</b>	<b>% Rec.</b>	<b>% Rec.</b>	
Bromofluorobenzene	75-125	102	109	109	103	
Trifluorotoluene	75-125	108	116	116	116	



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-#049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 4  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

QC Batch Number: 04192000-1 / 04192000-1

Our Lab I.D.			AE71983			
Client Sample I.D.			MW-6			
Date Sampled			04/05/2000			
Date Prepared			04/19/2000			
Preparation Method			5030B			
Date Analyzed			04/19/2000			
Matrix			Aqueous			
Units			ug/L			
Dilution Factor			10			
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>			
Methyl-tert-butyl ether (MTBE)	50	100	230			

Our Lab I.D.			AE71983			
<b>Surrogates</b>	<b>Con.Limit</b>		<b>% Rec.</b>			
Bromofluorobenzene	75-125		106			
Dibromofluoromethane	75-125		105			
Toluene-d8	75-125		98			



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-#049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 5  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

QC Batch Number: 04192000-1 / 04192000-1

Our Lab I.D.			AE71984	AE71985	AE71986	
Client Sample I.D.		Method Blank	MW-3	MW-7	MW-5	
Date Sampled		04/05/2000	04/05/2000	04/05/2000	04/05/2000	
Date Prepared		04/19/2000	04/19/2000	04/19/2000	04/19/2000	
Preparation Method		5030B	5030B	5030B	5030B	
Date Analyzed		04/19/2000	04/19/2000	04/19/2000	04/19/2000	
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	<5	194	<5

Our Lab I.D.			AE71984	AE71985	AE71986	
<b>Surrogates</b>	<b>Con. Limit</b>		<b>% Rec.</b>	<b>% Rec.</b>	<b>% Rec.</b>	<b>% Rec.</b>
Bromofluorobenzene	75-125		104	104	105	105
Dibromofluoromethane	75-125		104	106	105	108
Toluene-d8	75-125		98	96	96	97



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-#049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 6  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AE TL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

QC Batch Number: 04192000-1 / 04192000-1

Our Lab I.D.			AE71988			
Client Sample I.D.			MW-2			
Date Sampled			04/05/2000			
Date Prepared			04/19/2000			
Preparation Method			5030B			
Date Analyzed			04/19/2000			
Matrix			Aqueous			
Units			ug/L			
Dilution Factor			100			
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>			
Methyl-tert-butyl ether (MTBE)	500	1000	14,400			

Our Lab I.D.			AE71988			
Surrogates	Con. Limit		% Rec.			
Bromofluorobenzene	75-125		105			
Dibromofluoromethane	75-125		105			
Toluene-d8	75-125		98			



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
13539 E. Foster Road  
Santa Fe Springs, CA 90670-

### Site

TOC-#049  
3400 San Pablo Ave.  
Oakland, CA 94612

Telephone: (562)921-3581  
Attn: Jeff Suryakusuma

Page: 7

Project ID: #049

Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

QC Batch Number: 04192000-1 / 04192000-1

Our Lab I.D.			AE71989				
Client Sample I.D.			MW-4				
Date Sampled			04/05/2000				
Date Prepared			04/19/2000				
Preparation Method			5030B				
Date Analyzed			04/19/2000				
Matrix			Aqueous				
Units			ug/L				
Dilution Factor			500				
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>				
Methyl-tert-butyl ether (MTBE)	2500	5000	21,900				

Our Lab I.D.			AE71989				
<b>Surrogates</b>	<b>Con. Limit</b>		<b>% Rec.</b>				
Bromofluorobenzene	75-125		93				
Dibromofluoromethane	75-125		104				
Toluene-d8	75-125		105				



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-#049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 8  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

## QUALITY CONTROL REPORT

QC Batch Number: 04192000 / 04192000

Analytes	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	50.0	55.0	110	50.0	53.0	106	3.7	75-125	<20
Ethylbenzene	50.0	54.0	108	50.0	52.0	104	3.8	75-125	<20
Toluene (Methyl benzene)	50.0	54.0	108	50.0	52.0	104	3.8	75-125	<20
<b>LCS</b>									
o-Xylene	50.0	51.0	102	50.0	49.0	98	4.0	75-125	<20
m,p-Xylenes	100.0	89.0	89	100.0	85.0	85	4.6	75-125	<20

QC Batch Number: 04192000 / 04192000

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS/LCSD % Limit
Benzene	50.0	38.0	76	75-125
Ethylbenzene	50.0	50.0	100	75-125
Toluene (Methyl benzene)	50.0	41.0	82	75-125
<b>LCS</b>				
o-Xylene	50.0	43.0	86	75-125
m,p-Xylenes	100.0	81.0	81	75-125



## American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

### ANALYTICAL RESULTS

**Ordered By**

Thrifty Oil Company  
13539 E. Foster Road  
Santa Fe Springs, CA 90670-

**Site**

TOC-#049  
3400 San Pablo Ave.  
Oakland, CA 94612

Telephone: (562)921-3581

Attn: Jeff Suryakusuma

Page: 9

Project ID: #049

Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15143	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

### QUALITY CONTROL REPORT

QC Batch Number: 04192000-1 / 04192000-1

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Methyl-tert-butyl ether (MTBE)	50.0	62.0	124	50.0	55.5	111	11.1	75-125	<20	





## American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

### Data Qualifiers and Descriptors

#### *Data Qualifier:*

- B:** Analyte was present in the Method Blank.
- D:** Result is from a diluted analysis.
- E:** Result is beyond calibration limits and is estimated.
- J:** Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

#### *Definition:*

- %Limi:** Percent acceptable limits.
- %REC:** Percent recovery.
- Con.L:** Acceptable Control Limits
- Conce:** Added concentration to the sample.
- LCS:** Laboratory Control Sample
- MDL:** Method Detection Limit
- MS:** Matrix Spike
- MS DU:** Matrix Spike Duplicate
- ND:** Analyte was not detected in the sample at or above MDL.
- PQL:** Practical Quantitation Limit
- Recov:** Recovered concentration in the sample.
- RPD:** Relative Percent Difference
-



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## CHAIN OF CUSTODY RECORD

COMPANY <u>T. O. C.</u> PHONE <u>(562) 921-3581</u>							AETL JOB No. <u>15143</u>		Page <u>1</u> of <u>1</u>			
PROJECT MANAGER <u>JEFF SURYAKUSUMA</u> FAX							ANALYSIS REQUESTED			TEST INSTRUCTIONS & COMMENT		
PROJECT NAME <u>Q.W.S.</u> PROJECT #												
SITE NAME AND ADDRESS <u># 049 3400 SAN PABLO AVE. OAKLAND, CA. 94612</u>							T P H		B T E X		M T B E	
SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.						
MW-6	AE71983	04.05.00	13:00	WATER	3 VIALS	HCL	X	X	X			
MW-3	AE71984	↑	13:10	↑	↑	↑	X	X	X			
MW-7	AE71985	↑	13:15	↑	↑	↑	X	X	X			
MW-5	AE71986	↑	13:20	↑	↑	↑	X	X	X			
MW-1	AE71987	↑	13:25	↑	↑	↑	X	X	X			
MW-2	AE71988	↑	13:35	↑	↑	↑	X	X	X			
MW-4	AE71989	↑	13:40	↑	↑	↑	X	X	X			
TRIP BLANK	AE71990	↓	7:30	↓	2 VIALS	↓	X	X				

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY				RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
TOTAL NUMBER OF CONTAINERS	<u>23</u>	PROPERLY COOLED Y/N/NA	<u>Y</u>	Signature <u>[Signature]</u>	Signature	Signature
CUSTODY SEALS Y/N/NA	<u>N</u>	SAMPLES INTACT Y/N/NA	<u>Y</u>	Printed Name <u>SERBON P</u>	Printed Name	Printed Name
RECEIVED IN GOOD COND. Y/N	<u>Y</u>	SAMPLES ACCEPTED Y/N	<u>Y</u>	Date <u>04.05.00</u> Time <u>17:00</u>	Date	Date
TURN AROUND TIME				RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY LABORATORY: 3.
<input checked="" type="checkbox"/> NORMAL	<input type="checkbox"/> RUSH	<input type="checkbox"/> SAME DAY	<input type="checkbox"/> 48 HRS.	Signature	Signature	Signature <u>[Signature]</u>
		<input type="checkbox"/> 24 HRS.	<input type="checkbox"/> 72 HRS.	Printed Name	Printed Name	Printed Name <u>CANOS BOWEN</u>
				Date	Date	Date <u>4/10/00</u> Time <u>08:20</u>

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

# APPENDIX C

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN P.

DATE OF INSPECTION: 06-26-00

OBSERVATIONS AND COMMENTS: Check oil, belt, hoses connections,  
clean water bag filter,

FLOW METER READING: 112.675

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 12

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.2

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN P.

DATE OF INSPECTION: 06.19.00

OBSERVATIONS AND COMMENTS: check oil, belt, clean water filter  
replace cartridge water filter.

FLOW METER READING: 112084

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.0

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA.  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN P.

DATE OF INSPECTION: 06-12-00

OBSERVATIONS AND COMMENTS: Add oil, check belt hoses,  
clean water filter bag, replace cartridge  
water filter

FLOW METER READING: 111366

SAMPLES OBTAINED: N/A

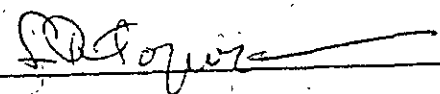
PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.0

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: 



DATE: 06.05.00

START UP / SHUT DOWN REPORT  
STATION # 0609  
SYSTEM TYPE : GU

START UP REPORT:

Restart system after change the carbon drums -  
110754 FLOWMETER -

SHUT DOWN REPORT:

SIGNATURE: \_\_\_\_\_

*[Handwritten Signature]*



049

DATE: 05-31-00

START UP / SHUT DOWN REPORT  
STATION # 049  
SYSTEM TYPE : GW

START UP REPORT:

SHUT DOWN REPORT:

System is still shut down for carbon change.

FLOW METER  
110717 -

SIGNATURE: \_\_\_\_\_

*[Handwritten Signature]*



U.S. FILTER/WESTATES  
P.O. BOX 83249  
CHICAGO, IL 60673-2249

INVOICE NUMBER: 0122297-IN  
INVOICE DATE: 05/26/00  
YOUR ORDER NO. 2950 (2951)

TOLB, &  
J.S.

THRIFTY OIL CORPORATION  
13639 E. FOSTER ROAD  
Santa Fe Springs CA 90670

US FILTER/WESTATES  
CUSTOMER - WILL CALL  
6611 SAN LEANDRO ST.  
Oakland CA 94621

ATTN: JEFF SURYAKASUMA

8095

10832LA	0114516	Net 30 Days
---------	---------	-------------

DESCRIPTION	PL	QUANTITY	UNIT PRICE	AMOUNT
200SCA 200 SERIES CARBON ADSORBER - AQUA UNIT SN 33396		1.	363.0000	363.00
CC602BB ACTIVATED CARBON VIRGIN COCO 12x30		200.	.0000	.00

INV. AMT. _____	
ACCT. # _____	
_____	
_____	
_____	
VENDOR # _____	

NET INVOICE:	363.00
LESS DISCOUNT:	.00
FREIGHT:	.00
SALES TAX:	29.95

OK FOR PAYMENT  
JUN 1 2000

RECEIVED  
JUN 01 2000  
ACCOUNTS PAYABLE

*[Signature]*  
6/1/00

The amount is for current charges. Please pay the amount listed below. All past due amounts will bear interest at 3 1/2 percent per month or the maximum rate allowed by law, whichever is less.

\* Prices shown are current prices in effect at time of shipment.  
\* Merchandise was properly packed and delivered to transportation company in first class condition. We assume no responsibility for loss or damage in transit. We will render all possible assistance in the presentation and collection of claims for loss or damage.  
\* We will furnish F.O.B. our plant without charge, parts required to replace material found defective within 30 days after shipment. U.S. FILTER WESTATES shall not be held liable for any further cost or expense of indirect or consequential damages.

392.95 ✓

NO MATERIAL RETURNABLE WITHOUT OUR RETURN MATERIAL AUTHORIZATION FORM



PURCHASE ORDER NO.  
02951

<b>VENDOR:</b> U.S. FILTER /WESTATES 5375 SOUTH BOYLE AVE. LOS ANGELES, CA 90058	<b>SHIP TO:</b> Earth Management Co. 13539 E. Foster Rd. Santa Fe Springs, Ca. 90670
---	---

ORDER DATE	DATE WANTED	VENDOR TELEPHONE	JOB/ACCOUNT NO.	INTERNAL DEST.
05/26/00		(800)659-1771	Station # 049	JSS

QUANTITY	DESCRIPTION	UNIT COST	TOTAL
1	ASC-200-2 CANISTER WITH 200# OF VIRGIN COCONUT SHELL CARBON, LIQUID PHASE CARBON. INLET & OUTLET= 2"NPT.	363.00	363.00
	CANISTER TO BE WILL CALLED BY SERBAN PROTOPOPESCU ON 05/25/00 OR 05/26/00		
	ADDRESS STN. #049 2400 SAN PABLO AVE. OAKLAND, CA 94612		
1	SALES TAX	29.95	29.95
	COST NOT TO EXCEED: \$392.25		

COMMENTS  
This is a reprint of purchase order number 2951.  
This reprint is not a request for duplicate or additional services.

AUTHORIZED SIGNATURE: [Signature] *6/1/00*

# PURCHASE ORDER

## EARTH MANAGEMENT CO.

Environmental Remediation

PURCHASE ORDER NO.

02951

<b>VENDOR:</b> U.S. FILTER /WESTATES 5375 SOUTH BOYLE AVE. LOS ANGELES, CA 90058	<b>SHIP TO:</b> Earth Management Co. 13539 E. Foster Rd. Santa Fe Springs, Ca. 90670
---	---

ORDER DATE	DATE WANTED	VENDOR TELEPHONE	JOB/ACCOUNT NO.	INTERNAL DEST.
05/26/00		(800)659-1771	Station # 049	JSS

QUANTITY	DESCRIPTION	UNIT COST	TOTAL
1	ASC-200-2 CANISTER WITH 200# OF VIRGIN COCONUT SHELL CARBON, LIQUID PHASE CARBON. INLET & OUTLET= 2"NPT.	363.00	363.00
	CANISTER TO BE WILL CALLED BY SERBAN PROTOPOPESCU ON 05/25/00 OR 05/26/00		
	ADDRESS STN. #049 3400 SAN PABLO AVE OAKLAND, CA 94612		
1	SALES TAX	29.95	29.95
	COST NOT TO EXCEED: \$392.95		

**COMMENTS**

AUTHORIZED SIGNATURE: \_\_\_\_\_  
*[Handwritten Signature]*  
 Fred 6-5-00

This Shipping Order must be legibly filled in, in ink, in indelible pencil, or in carbon and retained by the Agent.

Shipper's No 10832CA

WILL CALL

Carrier

Agent's No.

RECEIVE subject to the classifications and tariffs in effect on the date of the issue of this Shipping Order

at 5/26/00 from US Filter Westates #

It is hereby certified that the above-named goods are the property of the shipper and are being transported under the terms of the tariff in effect on the date of the issue of this Shipping Order. The shipper hereby certifies that the above-named goods are not being transported in violation of any law or regulation, and that the same are not being transported in violation of any law or regulation, and that the same are not being transported in violation of any law or regulation. The shipper hereby certifies that the above-named goods are not being transported in violation of any law or regulation, and that the same are not being transported in violation of any law or regulation. The shipper hereby certifies that the above-named goods are not being transported in violation of any law or regulation, and that the same are not being transported in violation of any law or regulation.

(Mail or street address of consignee--For purposes of notification only)

Consigned to Thrifty Oil #49 #

Destination \_\_\_\_\_ State of \_\_\_\_\_ Zip Code \_\_\_\_\_ County of \_\_\_\_\_

Routing \_\_\_\_\_ Delivering Carrier \_\_\_\_\_ Vehicle or Car Initial \_\_\_\_\_ No. \_\_\_\_\_

Collect On Delivery  C. O. D. charge to be paid by  Shipper  Consignee

\$ \_\_\_\_\_ and remit to: PO 2951 Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

No. Pict 3295	Description of Articles, Specs, Marks and Exceptions	Weight (Sub to Con.)	Class or Rate	Check Column
1	<u>ASC 200 w/cc 602 SN 33396</u>	<u>250</u>	<u>70</u>	

*[Handwritten signature across table]*

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse of the shipper, the consignee shall sign the following statements:  
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)  
If charges are to be prepaid, write or stamp here, "TO BE PREPAID."

Received \$ \_\_\_\_\_ to apply to prepayment of the charges on the property described hereon.  
Agent or Cashier

Per \_\_\_\_\_  
(the signature here acknowledges only the amount prepaid.)

Charges Advanced \$ \_\_\_\_\_

If the shipment moves between two points by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE--Where the rate is dependent on weight, shipment must be stated specifically in writing the agreed or declared value of the property.  
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \$ \_\_\_\_\_

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading. **2**

Shipper, Per \_\_\_\_\_

Permanent post-office address of shipper, \_\_\_\_\_

(This Bill of Lading is to be signed by the shipper and agent of the carrier issuing same.)



PURCHASE ORDER REQUEST

NEW

DATE: 05/26/00  
 STATION #: 049  
 REQUESTED BY: JSS

COST NOT TO EXCEED: \$ 392.95

APPROVAL: *[Signature]* 5/26/00

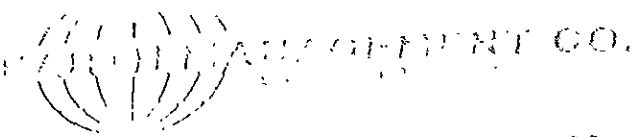
VENDOR: 1 Vendor #: 5021	Ship to (if different than our address):
U.S. FILTERS	POC # 049
5375 SOUTH BOYLE AVE	EARTH MANAGEMENT
LA CA 90057	13539 E FOSTER RD STEESPRINGS
	(OAKLAND, CA) CA 90608

Qty.	DESCRIPTION	UNIT PRICE	TOTAL
1	ASC-200-2 <sup>CANISTER WITH</sup> A 200 # OF VIRGIN COCOON SHELL CARBON, LIQUID PHASE CARBON. INLET & OUTLET = 2" NPT	363	363
<p><del>ONE</del> CANISTER TO BE WILL-CALLED BY SERBAN PROTOPESCU ON 5/25/00 or 5/26/00</p>			

SUBTOTAL	363
SALES TAX	29.95
FREIGHT	—
TOTAL	392.95

Please attach all supporting documentation with this P.O. Request form.

NOTE: To replace 3<sup>rd</sup> drums from g.w. system (first two replacement drums are already on site (from warehouse))



100%  
 COMPLETION  
 2,500  
 TOTAL TBS  
 600  
 11,000

ACTIVATED CARBON REPLACEMENT LOG

DATE	FLOW METER P REPLACE GAL OR CEM	HOUR METER READING ACTUAL	READING DIFFERENCE	GAL CEM TREATED HD	QUANTITY TAR	PERMIL	COMMENTS
8/5/99	3,559.91			25.53			2 DRUMS
8/15/99	3,942.0			11,036.5			ONLY TREATED WASTE IN = 771 = 11,036.5, B = 2.30 OUT = 771 = 727, B = 1.8 INTERMEDIATE = 1130 76,900 MTEE
5/15/00	11,536.5			130,296			OVER LIMIT CHANGE TO 2 DRUMS
6/26/00	112,675			2310			CHANGED 2 DRUMS

ADDITIONAL COMMENTS:

01/24/97



049

DATE: 05-19-00

START UP / SHUT DOWN REPORT  
STATION # 049  
SYSTEM TYPE : GM

START UP REPORT:

SHUT DOWN REPORT:

Shut down system for carbon drums  
replacement

FLOW METER 110717 =

SIGNATURE: \_\_\_\_\_

*[Handwritten signature]*

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN P.

DATE OF INSPECTION: 05.15.00

OBSERVATIONS AND COMMENTS: Add oil, check hoses, belt, clean water bag filter, replace cartridge water filter

FLOW METER READING: 110365

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: 



THRIFTY OIL CO. SERVICE STATION # 049  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATA P.

DATE OF INSPECTION: 05-08-00

OBSERVATIONS AND COMMENTS: Add oil, check belt, hoses, clean water filter;

FLOW METER READING: 109738

SAMPLES OBTAINED: HA

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: 



PROJECT STATUS REPORT  
 THRIFTY OIL CO. S.S. #049  
 3400 SAN PABLO AVENUE  
 BELL, CA  
 DATE: 05-01-00

OBSERVATION WELLS

NO.	DTW	DTP	PT		DTB	DIA.	ODORS			F/P	
							YES	NO	S	YES	NO
MONTHLY											
MW-1	5.60				17.78	2 <sup>4</sup>		X		X	-
MW-2	5.44				23.80	2 <sup>4</sup>		X		X	-
MW-3	2.20				24.20	2 <sup>4</sup>		X		X	-
MW-4	6.38				13.71	4 <sup>4</sup>		X		X	-
MW-5	5.22				13.78	2 <sup>7</sup>		X		X	-
MW-6	4.57				13.08	2 <sup>4</sup>		X		X	-
MW-7	5.50				13.60	4 <sup>4</sup>		X		X	-
RW-1	15.30				24.38	6 <sup>4</sup>		X		X	-

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE                      DTP - DEPTH TO PRODUCT FROM SURFACE  
 PT - PRODUCT THICKNESS    S - SLIGHT  
 MEASUREMENTS IN FEET  
 REMARKS: MONITORING WELLS  
 FREE PRODUCT REMOVED: APPROX.      GALLONS              WATER REMOVED: APPROX.      GALLONS  
 DATA RECORDED BY: SERBIA P    INPUT BY: C.D.

049

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATA P.

DATE OF INSPECTION: 05-01-00

OBSERVATIONS AND COMMENTS: Add oil, check belt, hoses,  
replace cartridge water filter, clean water  
bag

FLOW METER READING: 108.982

SAMPLES OBTAINED: H/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.2

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: [Signature]

49

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATA P.

DATE OF INSPECTION: 04-20-00

OBSERVATIONS AND COMMENTS: Add oil, check belt, hoses, clean water bag.

FLOW METER READING: 107244

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.0

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: [Signature]

049

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATA P

DATE OF INSPECTION: 04-13-00

OBSERVATIONS AND COMMENTS: Add oil, check belt, hoses, clean water filter, replace cartridge water filter

FLOW METER READING: 106379

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.0

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.9

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION # 49  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATA P.

DATE OF INSPECTION: 04-05-00

OBSERVATIONS AND COMMENTS: Add oil, check belt, hoses, clean water

bag,

FLOW METER READING: 105457

SAMPLES OBTAINED: yes

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.1

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.0

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.8

INSPECTOR'S SIGNATURE: [Signature]

# **APPENDIX D**



## American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

### Ordered By

Thrifty Oil Company  
13539 E. Foster Road  
Santa Fe Springs, CA 90670-

Telephone: (562) 921-3581  
Attention: Jeff Suryakusuma

Number of Pages 8  
Date Received 04/10/2000  
Date Reported 05/19/2000

Job Number	Order Date	Client
15144	04/10/2000	TOC

Project ID: #049  
Project Name: Quarterly Water Sampling  
Site: TOC-049  
3400 San Pablo Ave.  
Oakland, CA 94612

Enclosed please find results of analyses of 3 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

*Joe Secrean*

Approved By:

*C. Razmara*

Cyrus Razmara, Ph.D.  
Laboratory Director





# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 2  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

QC Batch Number: 04192000 / 04192000

Our Lab I.D.			AE71991			
Client Sample I.D.			Method Blank	EFFLUENT		
Date Sampled			04/05/2000	04/05/2000		
Date Prepared			04/19/2000	04/19/2000		
Preparation Method			5030B	5030B		
Date Analyzed			04/19/2000	04/19/2000		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Benzene	0.25	0.50	ND	1.8		
Ethylbenzene	0.25	0.50	ND	0.7		
Toluene (Methyl benzene)	0.25	0.50	ND	4.1		
Xylenes (Total)	0.50	1.00	ND	6.7		
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	N/A		
TPH as Gasoline and Light HC. (C4-C12)	50	100	ND	72.7J		

Our Lab I.D.			AE71991			
Surrogates	Con. Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		104	102		
Trifluorotoluene	75-125		106	111		



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581

Attn: Jeff Suryakusuma

Page: 3

Project ID: #049

Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

QC Batch Number: 04192000 / 04192000

Our Lab I.D.			AE71992			
Client Sample I.D.			INTERMED			
Date Sampled			04/05/2000			
Date Prepared			04/19/2000			
Preparation Method			5030B			
Date Analyzed			04/19/2000			
Matrix			Aqueous			
Units			ug/L			
Dilution Factor			200			
Analytes	MDL	PQL	Results			
Benzene	50	100	1,290			
Ethylbenzene	50	100	1,820			
Toluene (Methyl benzene)	50	100	2,520			
Xylenes (Total)	100	200	8,480			
Methyl-tert-butyl ether (MTBE)	1000	2000	N/A			
TPH as Gasoline and Light HC. (C4-C12)	10000	20000	62,600			

Our Lab I.D.			AE71992			
Surrogates	Con. Limit		% Rec.			
Bromofluorobenzene	75-125		94			
Trifluorotoluene	75-125		115			



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 4  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AE TL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

QC Batch Number: 04192000 / 04192000

Our Lab I.D.	AE71993		
Client Sample I.D.	INFLUENT		
Date Sampled	04/05/2000		
Date Prepared	04/19/2000		
Preparation Method	5030B		
Date Analyzed	04/19/2000		
Matrix	Aqueous		
Units	ug/L		
Dilution Factor	100		
Analytes	MDL	PQL	Results
Benzene	25	50	2,360
Ethylbenzene	25	50	6,240
Toluene (Methyl benzene)	25	50	6,440
Xylenes (Total)	50	100	25,200
Methyl-tert-butyl ether (MTBE)	500	1000	30,800
TPH as Gasoline and Light HC. (C4-C12)	5000	10000	119,000

Our Lab I.D.	AE71993		
Surrogates	Con. Limit	% Rec.	
Bromofluorobenzene	75-125	116	
Trifluorotoluene	75-125	101	



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
13539 E. Foster Road  
Santa Fe Springs, CA 90670-

### Site

TOC-049  
3400 San Pablo Ave.  
Oakland, CA 94612

Telephone: (562)921-3581  
Attn: Jeff Suryakusuma

Page: 5  
Project ID: #049  
Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

QC Batch Number: 04192000-1 / 04192000-1

Our Lab I.D.						
Client Sample I.D.			Method Blank			
Date Sampled			04/05/2000			
Date Prepared			04/19/2000			
Preparation Method			5030B			
Date Analyzed			04/19/2000			
Matrix			Aqueous			
Units			ug/L			
Dilution Factor			1			
Analytes	MDL	PQL	Results			
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND			

Our Lab I.D.						
Surrogates	Con. Limit		% Rec.			
Bromofluorobenzene	75-125		104			
Dibromofluoromethane	75-125		104			
Toluene-d8	75-125		98			



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

### Site

TOC-049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 6  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

QC Batch Number: 04192000-1 / 04192000-1

Our Lab I.D.			AE71993				
Client Sample I.D.			INFLUENT				
Date Sampled			04/05/2000				
Date Prepared			04/19/2000				
Preparation Method			5030B				
Date Analyzed			04/19/2000				
Matrix			Aqueous				
Units			ug/L				
Dilution Factor			500				
<b>Analytes</b>	<b>MDL</b>	<b>PQL</b>	<b>Results</b>				
Methyl-tert-butyl ether (MTBE)	2500	5000	21,800				

Our Lab I.D.			AE71993				
Surrogates	Con. Limit		% Rec.				
Bromofluorobenzene	75-125		97				
Dibromofluoromethane	75-125		108				
Toluenc-d8	75-125		103				



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

**Ordered By**

Thrifty Oil Company  
 13539 E. Foster Road  
 Santa Fe Springs, CA 90670-

**Site**

TOC-049  
 3400 San Pablo Ave.  
 Oakland, CA 94612

Telephone: (562)921-3581  
 Attn: Jeff Suryakusuma

Page: 7  
 Project ID: #049  
 Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8020A/M8015G, Aromatic Volatile Organics, TPH Gasoline and Light HC. by GC

### QUALITY CONTROL REPORT

QC Batch Number: 04192000 / 04192000

Analytes	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	50.0	55.0	110	50.0	53.0	106	3.7	75-125	<20
Ethylbenzene	50.0	54.0	108	50.0	52.0	104	3.8	75-125	<20
Toluene (Methyl benzene)	50.0	54.0	108	50.0	52.0	104	3.8	75-125	<20
<b>LCS</b>									
o-Xylene	50.0	51.0	102	50.0	49.0	98	4.0	75-125	<20
m,p-Xylenes	100.0	89.0	89	100.0	85.0	85	4.6	75-125	<20

QC Batch Number: 04192000 / 04192000

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS/LCSD % Limit
Benzene	50.0	38.0	76	75-125
Ethylbenzene	50.0	50.0	100	75-125
Toluene (Methyl benzene)	50.0	41.0	82	75-125
<b>LCS</b>				
o-Xylene	50.0	43.0	86	75-125
m,p-Xylenes	100.0	81.0	81	75-125



# American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## ANALYTICAL RESULTS

### Ordered By

Thrifty Oil Company  
13539 E. Foster Road  
Santa Fe Springs, CA 90670-

### Site

TOC-049  
3400 San Pablo Ave.  
Oakland, CA 94612

Telephone: (562)921-3581  
Attn: Jeff Suryakusuma

Page: 8  
Project ID: #049  
Project Name: Quarterly Water Sampling

AETL Job Number	Submitted	Client
15144	04/10/2000	TOC

Method: 8260B, MTBE Confirmation by GC/MS (8260B) Analysis

## QUALITY CONTROL REPORT

QC Batch Number: 04192000-1 / 04192000-1

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Methyl-tert-butyl ether (MTBE)	50.0	62.0	124	50.0	55.5	111	11.1	75-125	<20	



## American Environmental Testing Laboratory Inc.

2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

### Data Qualifiers and Descriptors

#### **Data Qualifier:**

- B:** Analyte was present in the Method Blank.
- D:** Result is from a diluted analysis.
- E:** Result is beyond calibration limits and is estimated.
- J:** Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

#### **Definition:**

- %Limi:** Percent acceptable limits.
- %REC:** Percent recovery.
- Con.L:** Acceptable Control Limits
- Conce:** Added concentration to the sample.
- LCS:** Laboratory Control Sample
- MDL:** Method Detection Limit
- 
- MS:** Matrix Spike
- MS DU:** Matrix Spike Duplicate
- ND:** Analyte was not detected in the sample at or above MDL.
- PQL:** Practical Quantitation Limit
- Recov:** Recovered concentration in the sample.
- RPD:** Relative Percent Difference
-





# American Environmental Testing Laboratory Inc.

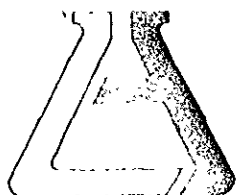
2834 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181  
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

## CHAIN OF CUSTODY RECORD

COMPANY <b>T.O.C.</b>				PHONE <b>(562) 921-3581</b>		AETL JOB No <b>15144</b>			Page <b>1</b> of <b>1</b>		
PROJECT MANAGER <b>JEFF JURYAKUSUMA</b>				FAX		ANALYSIS REQUESTED			TEST INSTRUCTIONS & COMMENT:		
PROJECT NAME <b>Q.W.S.</b>				PROJECT #							
SITE NAME AND ADDRESS <b>#049 3400 SAN PABLO AVE. OAKLAND CA 94612</b>											
SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	T	D	B	M	
1 EFFLUENT	AET1991	04.05.00	11:00	WATER	2 VIALS	HCL	X	X			
2 INTERMED	AET1992	04.05.00	11:10	WATER	2 VIALS	HCL	X	X			
3 INFLUENT	AET1993	04.05.00	11:20	WATER	3 VIALS	HCL	X	X	X		
<del>4-15</del>											
<b>SAMPLE RECEIPT - TO BE FILLED BY LABORATORY</b>						<b>RELINQUISHED BY: 1.</b>		<b>RELINQUISHED BY: 2.</b>		<b>RELINQUISHED BY: 3.</b>	
TOTAL NUMBER OF CONTAINERS <b>7</b>		PROPERLY COOLED <input checked="" type="checkbox"/> N / NA		SIGNATURE <b>[Signature]</b>		SIGNATURE		SIGNATURE		SIGNATURE	
CUSTODY SEALS <input checked="" type="checkbox"/> NA		SAMPLES INTACT <input checked="" type="checkbox"/> N / NA		PRINTED NAME <b>SERBOK P.</b>		PRINTED NAME		PRINTED NAME		PRINTED NAME	
RECEIVED IN GOOD COND. <input checked="" type="checkbox"/> N		SAMPLES ACCEPTED <input checked="" type="checkbox"/> N		DATE <b>04.05.00</b> TIME <b>11:00</b>		DATE		DATE		DATE	
<b>TURN AROUND TIME</b>						<b>RECEIVED BY: 1.</b>		<b>RECEIVED BY: 2.</b>		<b>RECEIVED BY: 3.</b>	
<input checked="" type="checkbox"/> NORMAL		<input type="checkbox"/> RUSH		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
<input type="checkbox"/> SAME DAY		<input type="checkbox"/> 48 HRS.		PRINTED NAME		PRINTED NAME		PRINTED NAME		PRINTED NAME	
<input type="checkbox"/> 24 HRS.		<input type="checkbox"/> 72 HRS.		DATE		DATE		DATE		DATE	
						DATE		DATE		DATE	

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

**Charles Gonzalez**  
Date: **4/10/00** Time: **0820**



# ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Thrifty Oil (8871)  
ATTN: Jeff Suryakusuma  
13539 E. Foster Rd.  
Santa Fe Springs, CA 90670

LAB REQUEST 54971  
REPORTED 07/03/2000  
RECEIVED 06/19/2000

PROJECT Station #049  
3400 San Pablo Ave., Oakland

SUBMITTER Client

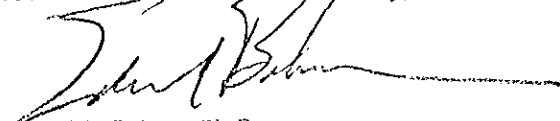
## COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

<u>Order No.</u>	<u>Client Sample Identification</u>
192569	TOC #049, Effluent
192570	TOC #049, Intermed.
192571	TOC #049, Influent

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,



Edward S. Behare, Ph.D.  
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

The reports of the Associated Laboratories are confidential property of our clients and not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

Order #: 192569

Client Sample ID: TOC #049, Effluent

Log Date: 06/20/20

Matrix: WATER

Date Sampled: 06/14/2000

Time Sampled: 11:30

Analyte

Result

DLR

Units

Date/Analyst

8021B BTEX + MTBE

Benzene	ND	0.3	ug/L	06/23/00	HP
Ethyl benzene	ND	0.3	ug/L	06/23/00	HP
Methyl t - butyl ether	ND	5	ug/L	06/23/00	HP
Toluene	ND	0.3	ug/L	06/23/00	HP
Xylene (total)	ND	0.6	ug/L	06/23/00	HP

8015M - Total Petroleum Hydrocarbons

Gasoline	ND	50	ug/L	06/23/00	HP
----------	----	----	------	----------	----

Order #: 192570

Client Sample ID: TOC #049, Intermed.

Log Date: 06/20/20

Matrix: WATER

Date Sampled: 06/14/2000

Time Sampled: 11:35

Analyte

Result

DLR

Units

Date/Analyst

8021B BTEX + MTBE

Benzene	5.0	1.5	ug/L	06/23/00	HP
Ethyl benzene	9.0	1.5	ug/L	06/23/00	HP
Methyl t - butyl ether	16,900	7140.0	ug/L	06/23/00	HP
Toluene	7.0	1.5	ug/L	06/23/00	HP
Xylene (total)	82	3.0	ug/L	06/23/00	HP

8015M - Total Petroleum Hydrocarbons

Gasoline	1,130	250	ug/L	06/23/00	HP
----------	-------	-----	------	----------	----

Order #: 192571

Client Sample ID: TOC #049, Influent

Log Date: 06/20/20

Matrix: WATER

Date Sampled: 06/14/2000

Time Sampled: 11:40

Analyte

Result

DLR

Units

Date/Analyst

8021B BTEX + MTBE

Benzene	ND	6.0	ug/L	06/23/00	HP
Ethyl benzene	ND	6.0	ug/L	06/23/00	HP

DLR - Detection limit for reporting purposes, ND = Not Detected below indicated detection limit



Methyl t - butyl ether	24,500	12500.0	ug/L	06/23/00	HP
Toluene	ND	6.0	ug/L	06/23/00	HP
Xylene (total)	14	12.0	ug/L	06/23/00	HP

**8015M - Total Petroleum Hydrocarbons**

Gasoline	ND	1000	ug/L	06/23/00	HP
----------	----	------	------	----------	----

DLR - Detection limit for reporting purposes, ND = Not Detected below indicated detection limit



**ASSOCIATED LABORATORIES**  
QA REPORT FORM

QC Sample: LR 54971 - 569

Matrix: WATER

Prep. Date: 06/23/00

Analysis Date: 06/23/00

LAB ID#'s in Batch: LR 54971, 54944

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

REPORTING UNITS = ug/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spk. Dup	%Rec MS	%Rec MSD	RPD
Benzene	8021	ND	8.0	6.3	6.7	78.8	83.8	6.2
Toluene	8021	ND	8.0	7.6	8.0	95.0	100.0	5.1
Ethylbenzene	8021	ND	8.0	7.9	8.4	98.8	105.0	6.1
Xylenes	8021	ND	24.0	26.1	27.3	108.8	113.8	4.5

\* - Matrix Interference LCS OK. Data Reported.

ND - Not Detected

RPD - Relative Percent Difference of Matrix Spike and Matrix Spike Dup

%REC-MS & MSD - Percent Recovery of Matrix Spike & Matrix Spike Duplicate

%REC LIMITS = 70 - 130
RPD LIMITS = 30

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

Test	Method	PREP. BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
Benzene	8021	ND	8.0	9.0	88.9	80%	120%
Toluene	8021	ND	8.3	9.0	92.2	80%	120%
Ethylbenzene	8021	ND	8.6	9.0	95.6	80%	120%
Xylenes	8021	ND	28.0	27.0	103.7	80%	120%

LCS - Lab Control Sample Result

TRUE - True Value of LCS

L.LIMIT H.LIMIT - LCS Control Limits

**ASSOCIATED LABORATORIES**  
QA REPORT FORM

QC Sample: LR 54971 - 569  
 Matrix: WATER  
 Prep. Date: 06/23/00  
 Analysis Date: 06/23/00  
 ID#'s in Batch: LR 54971, 54944

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

Reporting Units - ug/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
TPH	8015M-G	ND	400	422	458	105.5	114.5	8.2

ND - Not Detected

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate

%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

%REC LIMITS = 70 - 130

RPD LIMITS = 30

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

PREP BLK	LCS				
Value	Result	True	%Rec	L.Limit	H.Limit
ND	518	500	103.6	80%	120%

LCS Result - Lab Control Sample Result

True - True Value of LCS

L.Limit / H.Limit = LCS Control Limits



806 H. BATHUA, ORANGE, CA. 92868

COMPANY T. O. C. PHONE 662/921-3581

AETL JOB No.

Page 1 of 1

PROJECT MANAGER JEFF JURYARUSUMIT N/A FAX

ANALYSIS REQUESTED

TEST INSTRUCTIONS & COMMENTS

PROJECT NAME SYSTEM SAMPLING PROJECT # 049

SITE NAME AND ADDRESS 3400 SAN PABLO AVE. OAKLAND, CA. 94612

Table with columns: SAMPLE ID, LAB ID, DATE, TIME, MATRIX, CONTAINER NUMBER/SIZE, PRES. Rows include EFFLUENT, INTERMED, and INFLUENT.

Table for ANALYSIS REQUESTED and TEST INSTRUCTIONS & COMMENTS. Includes handwritten 'TPTB HEX' and 'X' marks.

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY. Includes fields for TOTAL NUMBER OF CONTAINERS, CUSTODY SEALS, and RECEIVED IN GOOD COND.

RELINQUISHED BY: 1, 2, 3. Includes signature and printed name fields for the sampler.

TURN AROUND TIME. Includes checkboxes for NORMAL, RUSH, SAME DAY, 48 HRS., 24 HRS., and 72 HRS.

RECEIVED BY: 1, 2, 3. Includes signature and printed name fields for laboratory reception.