

THRIFTY OIL CO.

Ruf

September 18, 2003

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

O.38724
Local #4057
RWQCB #01-1478
Global ID #T0600101365
Confirmation #2874669909

RE: **Former Thrifty Oil Co. Station #049**
ARCO Products Company Station #9535
3400 San Pablo Avenue
Oakland, CA 94612
3rd Quarter 2003, Status Report

Alameda County

Sept 18, 2003

Environmental Health

Dear Mr. Chan:

Presented herewith is the 3rd Quarter 2003, 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

c: BP West Coast Products LLP; Ms. Kateri Luka
File



13116 Imperial Highway, Santa Fe Springs, CA 90670 • (562) 921-3581

THRIFTY OIL CO.

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3400 San Pablo Avenue
Oakland, CA 94612
3rd Quarter 2003, Status Report

Alameda County
Environmental Health

Sept 8 2003

Environmental Health

Dear Mr. Chan:

Presented herein is the 3rd Quarter 2003, Status Report prepared for former Thrifty Oil Co. (Thrifty) Station #049 located at 3400 San Pablo Avenue, Oakland, California (**Figure 1**). This report presents the results of the site monitoring and remedial activities conducted during the third quarter of 2003. Thrifty has retained the services of Earth Management Company (EMC) to conduct quarterly monitoring and sampling, and remediation system monitoring activities at this site.

Groundwater Monitoring

Depth to groundwater is measured in each monitoring well on a quarterly basis. In general, groundwater occurs beneath the station at depths ranging from 4.55 feet below ground surface (bgs) in monitoring well MW-4 to 5.63 feet bgs in monitoring well MW-3 (**Appendix A**). A groundwater elevation contour map based on the July 10, 2003, monitoring data is presented in **Figure 2**. Groundwater elevation data indicates that groundwater flow to the southwest under at an approximate gradient of 0.0214 feet/foot.

Quarterly Groundwater Sampling

As part of the ongoing groundwater-monitoring program, EMC obtained groundwater samples from monitoring wells MW-1 through MW-7 on July 10, 2003. Groundwater samples were delivered by EMC in a chilled state following strict Chain-of-Custody procedures to a state-certified laboratory and analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M. Volatile organic compounds of benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tert butyl ether (MTBE), and other oxygenates were analyzed by EPA Method 8260B. A summary of historical analytical sampling results for TPHg, BTEX, and MTBE is provided in **Table 1** and other oxygenates data is provided on **Table 2**. Copies of the EMC Field Data Groundwater Sampling Forms are provided in **Appendix A**, and copies of the laboratory analytical reports are contained in **Appendix B**.

TPHg, benzene, and MTBE isoconcentration maps were prepared using data from the July 10, 2003, sampling event and are presented in **Figures 3, 4, and 5**, respectively. Laboratory results indicate the highest concentrations of TPHg and MTBE in groundwater were found in monitoring wells MW-2 (29,900 ug/L TPHg and 6,690 ug/L MTBE) and MW-4 (16,200 ug/L TPHg and 3,930 ug/L MTBE). Benzene was not detected above the highest method detection limit of 2.2 ug/L.



Remediation Status

Site remedial activities were initiated in April 1991. The remediation system consists of a Groundwater Treatment System using activated carbon, with groundwater extraction from recovery well RW-1. System operational data is included in **Table 3** and in **Appendix C**. On February 14, 2003, the groundwater system was shut down initially for carbon replacement, and on April 4, 2003, the system was left off for system upgrade activities. As of April 4, 2003, the system has treated approximately 1,445,088 gallons of groundwater since start up (April 1991).

Other Activities

Following review of Thrifty's workplan dated December 9, 2002, the Alameda County Health Care Agency (ACHCA) transmitted a fax letter dated December 18, 2002, which requested submittal of an addendum to the workplan. In response to this request, Thrifty submitted an Addendum to Workplan for Additional Site Assessment and Remedial System Upgrade (Addendum to Workplan) on February 28, 2003.

In a letter to Thrifty on June 24, 2003 the ACHCA acknowledged receipt and review of several documents that Thrifty resubmitted on May 23, 2003. These documents included: the Workplan for Additional Site Assessment and Remediation System Upgrade (December 9, 2002), the Addendum to the Workplan (February 28, 2003) and a copy of the December 18, 2002, ACHCA e-mail letter. After reviewing these documents, the ACHCA approved the system upgrade, and requested a preliminary conduit and well survey to be performed before installing the off-site borings and well (the locations of the borings and well could change depending upon the outcome of the conduit search). Thrifty awarded the conduit and well survey search to Advanced GeoEnvironmental, Inc. (AGE). According to AGE, the two major utilities in the area of the site, East Bay Municipal Utilities District and Pacific Gas & Electric, do not maintain site maps of subsurface utilities nor do they give out information over the telephone regarding the cross-section specifications of the utility trenches. AGE has had to formally request specifications of the utility trenches. Although you have granted a 30 day extension to submit the well survey report, AGE has indicated that the well survey report should be completed by the end of September 2003. Following submittal of this report to the ACHCA, Thrifty will proceed with the offsite well/boring installation and system upgrade, unless otherwise directed by the ACHCA.

Thrifty is currently reviewing consultant bids for the remediation system upgrade and well replacement activities. Once the project is awarded, Thrifty will submit a schedule for system upgrade and well installation activities to the ACHCA

The groundwater monitoring wells will be monitored and sampled during the next quarter. All site monitoring/sampling data generated during the next quarter will be reported in the fourth quarter 2003 monitoring report.

All interpretations expressed in this report are based solely upon data collected by EMC and laboratory analyses conducted by Associated Laboratories.

Sincerely,



Michael H. Bowery, R.G.
Project Manager

TABLES

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)										
MONITORING WELL #MW-1															
<i>Screen Interval = 5 to 25 feet</i>															
01/09/92	-	-	-	-	-	-	5.54	NP	0.00	98.03					
04/13/92	-	-	-	-	-	-	5.86	NP	0.00	98.03					
10/05/92	-	-	-	-	-	-	9.39	NP	0.00	98.03					
01/06/93	-	-	-	-	-	-	4.76	NP	0.00	98.03					
04/26/93	-	-	-	-	-	-	4.96	NP	0.00	98.03					
01/04/94	-	-	-	-	-	-	7.00	NP	0.00	98.03					
04/05/94	-	-	-	-	-	-	6.44	NP	0.00	98.03					
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					
04/08/96	4,700	80	110	10	910	-	5.40	NP	0.00	98.03					
07/22/96	7,000	280	130	<3	2,100	440	5.50	NP	0.00	98.03					
10/16/96	120	<0.3	<0.3	<0.3	<0.5	180	6.02	NP	0.00	98.03					
01/22/97	160	<0.3	<0.3	<0.3	<0.5	360	4.40	NP	0.00	98.03					
04/21/97	20,000	420	140	5.8	840	55,000	6.30	NP	0.00	98.03					
07/14/97	13,000	<0.3	<0.3	<0.3	<0.55	30,000	5.92	NP	0.00	98.03					
10/07/97	-	-	-	-	-	-	7.71	7.70	0.01	98.03					
01/15/98	<50	0.3	<0.3	<0.3	<0.5	-	4.40	NP	0.00	98.03					
04/23/98	540	<0.3	<0.3	<0.3	<0.5	<20	8.10	NP	0.00	98.03					
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5	5.55	NP	0.00	98.03					
10/14/98	50	1.4	0.56	<0.3	11	22	7.05	NP	0.00	98.03					
01/21/99	<50	0.59	<0.3	<0.3	<0.5	<5	4.10	NP	0.00	98.03					
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.30	NP	0.00	98.03					
07/26/99	<50	<0.3	<0.3	<0.3	<0.5	<5	5.54	NP	0.00	98.03					
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.13	NP	0.00	98.03					
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5	6.04	NP	0.00	98.03					
04/05/00	<50	<0.25	<0.25	<0.25	<0.5	<5	4.03	NP	0.00	98.03					
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5	4.00	NP	0.00	98.03					
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.53	NP	0.00	98.03					
01/17/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.97	NP	0.00	98.03					
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.98	NP	0.00	98.03					
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.51	NP	0.00	98.03					
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.97	NP	0.00	98.03					
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.95	NP	0.00	98.03					
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	2.42	NP	0.00	98.03					
07/31/02	<50	<0.18	1.3	<0.18	<0.26	<0.24	5.49	NP	0.00	98.03					

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)					
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	16	6.13	NP	0.00	98 03
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	2.45	NP	0.00	98.03
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	7.02	NP	0.00	98.03
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.15	NP	0.00	98.03

MONITORING WELL #MW-2										
Screen Interval = 5 to 25 feet										
01/09/92	-	-	-	-	-	-	5.35	NP	0.00	97.44
04/13/92	-	-	-	-	-	-	7.42	NP	0.00	97.44
10/05/92	-	-	-	-	-	-	12.15	NP	0.00	97.44
01/06/93	-	-	-	-	-	-	5.46	NP	0.00	97.44
04/26/93	-	-	-	-	-	-	5.15	NP	0.00	97.44
01/04/94	-	-	-	-	-	-	9.45	NP	0.00	97.44
04/05/94	-	-	-	-	-	-	8.23	NP	0.00	97.44
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
04/08/96	10,000	490	210	210	830	-	5.43	NP	0.00	97.44
07/22/96	60,000	6,500	1,000	1,500	10,000	8,500	5.65	NP	0.00	97.44
10/16/96	6,500	12	0.34	0.72	110	4,700	5.82	NP	0.00	97.44
01/22/97	3,200	<0.3	0.46	0.37	<0.5	8,000	4.30	NP	0.00	97.44
04/21/97	66,000	5,300	1,000	2,300	14,000	30,000	5.80	NP	0.00	97.44
07/14/97	17,000	1.8	4.6	4.6	350	24,000	8.92	NP	0.00	97.44
10/07/97	220,000	5,200	1,700	3,800	15,000	-	6.80	NP	0.00	97.44
01/19/98	25,000	5.4	2.2	2.1	240	-	8.50	NP	0.00	97.44
04/23/98	7,700	<0.3	0.55	0.38	4.9	28,000	7.60	NP	0.00	97.44
07/20/98	430,000	4,200	10,000	5,400	28,000	77,000	6.94	NP	0.00	97.44
10/14/98	27,000	<0.3	4.5	4.1	4.6	65,000	8.45	NP	0.00	97.44
01/21/99	16,000	7.6	9.8	4.2	310	* 49,000 / 42,000	6.95	NP	0.00	97.44
04/15/99	20,000	<0.3	<0.3	<0.3	<0.5	* 31,000 / 30,000	8.45	NP	0.00	97.44
07/26/99	6,700	<6	<6	<6	<10	* 11,000 / 15,000	6.94	NP	0.00	97.44
10/13/99	7,600	<3	3.7	<3	11	11,000	5.48	NP	0.00	97.44
01/20/00	7,500	<6	<6	<6	<10	* 14,000 / 16,000	5.84	NP	0.00	97.44
04/05/00	10,400	<0.25	<0.25	<0.25	<0.5	* 10,000 / 14,400	5.41	NP	0.00	97.44
07/19/00	130	<0.3	<0.3	<0.3	<0.6	* 9,620 / 6,520	5.40	NP	0.00	97.44
10/18/00	150	<0.18	<0.14	<0.18	<0.26	* 9,090 / 6,560	6.91	NP	0.00	97.44
01/17/01	75	<0.18	2.0	2.0	3.0	* 8,650 / 9,710	5.41	NP	0.00	97.44

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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 ($\mu\text{g/L}$)	BENZENE ($\mu\text{g/L}$)	TOLUENE ($\mu\text{g/L}$)	EthylBenzene ($\mu\text{g/L}$)	XYLENE ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)					
04/19/01	4,380	<0.18	<0.14	<0.18	<0.26	8,890	5.40	NP	0.00	97.44	92.04
07/18/01	3,260	<0.18	<0.14	<0.18	2.0	*7960 / 1,710	6.92	NP	0.00	97.44	90.52
10/10/01	1,760	<0.18	<0.14	<0.18	<0.26	*2,980 / 2,600	3.87	NP	0.00	97.44	93.57
01/30/02	1,770	<0.18	1.0	1.0	2.0	*2,560 / 1,590	8.45	NP	0.00	97.44	88.99
04/17/02	1,470	1.0	<0.14	<0.18	<0.26	*2,460 / 2,080	8.45	NP	0.00	97.44	88.99
07/31/02	3,910	<0.18	1.2	<0.18	2.1	*2,090 / 1,740	9.98	NP	0.00	97.44	87.46
11/14/02	39,400	1,680	728	173	5,120	8,270	5.40	NP	0.00	97.44	92.04
01/29/03	22,100	746	76	<1.0	2,840	8,220	8.43	NP	0.00	97.44	89.01
04/23/03	19,500	<0.8	<0.4	<0.4	<1.2	9,580	5.38	NP	0.00	97.44	92.06
07/10/03	29,900	<2.2	<3.2	<3.1	<4.0	6,690	5.10	NP	0.00	97.44	92.34

MONITORING WELL #MW-3											
Screen Interval = 5 to 25 feet											
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
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

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)					
01/20/00	<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
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5	8.86	NP	0.00	97.69	88.83
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.32	NP	0.00	97.69	90.37
01/17/01	<50	<0.18	2.0	<0.18	1.0	*39 / 39	5.40	NP	0.00	97.69	92.29
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	8.87	NP	0.00	97.69	88.82
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.32	NP	0.00	97.69	90.37
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	8.87	NP	0.00	97.69	88.82
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.78	NP	0.00	97.69	91.91
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.31	NP	0.00	97.69	90.38
07/31/02	138	1.1	1.2	<0.18	<0.26	<0.24	5.76	NP	0.00	97.69	91.93
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	21	5.73	NP	0.00	97.69	91.96
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	16	7.30	NP	0.00	97.69	90.39
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	16	5.76	NP	0.00	97.69	91.93
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	11	5.63	NP	0.00	97.69	92.06

MONITORING WELL #MW-4											
Screen Interval = 4 to 4 feet											
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

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)					
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5	6.05	NP	0.00	97.33
10/14/98	3,100	86	23	2.0	520	1,100	6.85	NP	0.00	97.33
01/21/99	9,100	3.2	5.6	1.8	130	* 24,000 / 17,000	6.10	NP	0.00	97.33
04/15/99	14,000	<0.3	0.71	<0.3	<0.5	* 20,000 / 22,000	6.05	NP	0.00	97.33
07/26/99	4,500	<6	<6	<6	<10	*8,700 / 9,800	6.07	NP	0.00	97.33
10/13/99	410	<0.3	0.63	<0.3	<0.5	660	5.54	NP	0.00	97.33
01/20/00	770	<0.3	<0.3	<0.3	<0.5	*2,400 / 1,900	5.49	NP	0.00	97.33
04/05/00	61,200	0.9	<0.25	<0.25	<0.5	*18,500 / 21,900	5.30	NP	0.00	97.33
07/19/00	96,600	1,770	1,760	2,690	8,730	21,900 / 9,740 J	5.29	NP	0.00	97.33
10/18/00	34,900	698	1,010	607	4,130	*27,800 / 15,900	6.02	NP	0.00	97.33
01/17/01	29,100	799	930	614	3,400	*24,300 / 31,400	4.88	NP	0.00	97.33
04/19/01	103,000	4,880	3,980	3,260	11,800	66,900	4.89	NP	0.00	97.33
07/18/01	52,200	3,320	2,090	440	5,520	*55,500 / 16,800	6.04	NP	0.00	97.33
10/10/01	8,580	6.1	14	5.3	70	*40,100 / 30,000	4.51	NP	0.00	97.33
01/30/02	36,500	<0.18	3.0	1.0	3 0	*43,000 / 24,900	4.51	NP	0.00	97.33
04/17/02	12,900	8.0	1 0	<0.18	1.0	16,000 / 13,600	4.51	NP	0.00	97.33
07/31/02	19,300	<0.18	1.2	1 5	2.6	*13,200 / 10,100	5.26	NP	0.00	97.33
11/14/02	36,200	1,720	940	235	6,190	8,280	5.27	NP	0.00	97.33
01/29/03	13,000	444	39	<0.4	1,200	8,160	4.50	NP	0.00	97.33
04/23/03	7,430	130	5 7	<0.2	387	5,830	4.80	NP	0.00	97.33
07/10/03	16,200	<2.2	<3.2	<3 1	<4.0	3,930	4.55	NP	0.00	97.33

MONITORING WELL #MW-5		Screen Interval: 4 to 14 feet								
01/09/92	-	-	-	-	-	-	5.32	NP	0.00	98.85
04/13/92	-	-	-	-	-	-	4.82	NP	0.00	98.85
10/0/92	-	-	-	-	-	-	8.78	NP	0.00	98.85
01/06/93	-	-	-	-	-	-	3.46	NP	0.00	98.85
04/26/93	-	-	-	-	-	-	4.66	NP	0.00	98.85
01/04/94	-	-	-	-	-	-	6.36	NP	0.00	98.85
04/05/94	-	-	-	-	-	-	5.94	NP	0.00	98.85
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
04/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	5.22	NP	0.00	98.85
07/22/96	<50	<0.3	<0.3	<0.3	<0.5	<20	6.62	NP	0.00	98.85

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)					
10/16/96	<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
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5	4.59	NP	0.00	98.85	94.26
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.28	NP	0.00	98.85	92.57
01/17/01	<50	<0.18	<0.14	<0.18	1.0	*5 / 4.8	4.58	NP	0.00	98.85	94.27
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.58	NP	0.00	98.85	94.27
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.12	NP	0.00	98.85	92.73
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.58	NP	0.00	98.85	94.27
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.48	NP	0.00	98.85	94.37
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.58	NP	0.00	98.85	94.27
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.10	NP	0.00	98.85	92.75
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	9	6.11	NP	0.00	98.85	92.74
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	7.1	4.55	NP	0.00	98.85	94.30
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	7.9	3.03	NP	0.00	98.85	95.82
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	7.4	5.25	NP	0.00	98.85	93.60

MONITORING WELL #MW-6						Screen Interval = 4 to 14 feet					
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

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)					
01/14/94	-	-	-	-	-	-	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
07/19/00	60	1.0	2.0	<0.3	<0.6	*87 / 76	3.07	NP	0.00	99.67	96.60
10/18/00	-	-	-	-	-	-	-	-	-	99.67	-
01/17/01	103	<0.18	2.0	<0.18	3.0	*78 / 106	3.87	NP	0.00	99.67	95.80
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.86	NP	0.00	99.67	95.81
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.40	NP	0.00	99.67	94.27
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.86	NP	0.00	99.67	95.81
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.86	NP	0.00	99.67	95.81
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.86	NP	0.00	99.67	95.81
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.40	NP	0.00	99.67	94.27
11/14/02	140	3.2	<0.18	5.2	<0.4	111	5.42	NP	0.00	99.67	94.25
01/29/03	694 J	<0.04	<0.02	<0.02	<0.06	630	3.88	NP	0.00	99.67	95.79
04/23/03	1,550	<0.04	<0.02	<0.02	<0.06	578	3.86	NP	0.00	99.67	95.81
07/10/03	1,670	<0.22	<0.32	<0.31	<0.4	509	5.31	NP	0.00	99.67	94.36

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 ($\mu\text{g/L}$)	BENZENE ($\mu\text{g/L}$)	TOLUENE ($\mu\text{g/L}$)	EthylBenzene ($\mu\text{g/L}$)	XYLENE ($\mu\text{g/L}$)					
MONITORING WELL #MW-7										
01/09/92	-	-	-	-	-	-	6.30	NP	0.00	99.02
04/13/92	-	-	-	-	-	-	6.68	NP	0.00	99.02
10/05/92	-	-	-	-	-	-	9.60	NP	0.00	99.02
01/06/93	-	-	-	-	-	-	13.90	NP	0.00	99.02
04/26/93	-	-	-	-	-	-	5.55	NP	0.00	99.02
01/04/94	-	-	-	-	-	-	7.58	NP	0.00	99.02
04/05/94	-	-	-	-	-	-	6.66	NP	0.00	99.02
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
04/08/94	9,100	840	31	690	1,200	-	5.48	NP	0.00	99.02
07/22/96	11,000	1,700	22	660	700	840	6.60	NP	0.00	99.02
10/16/96	180	<0.3	<0.3	<0.3	<0.5	270	6.42	NP	0.00	99.02
01/22/97	130	<0.3	<0.3	<0.3	<0.5	470	5.70	NP	0.00	99.02
04/21/97	10,000	1,400	27	820	490	1,100	5.30	NP	0.00	99.02
07/14/97	8,200	660	15	230	270	560	7.90	NP	0.00	99.02
10/07/97	7,700	480	15	8.4	350	-	7.70	NP	0.00	99.02
01/19/98	1,400	20	0.74	0.46	4.4	-	6.05	NP	0.00	99.02
04/23/98	590	<0.3	<0.3	<0.3	<0.5	1,700	7.60	NP	0.00	99.02
07/20/98	4,900	570	150	300	500	1,500	5.30	NP	0.00	99.02
10/14/98	1,100	1.0	<0.3	<0.3	5.3	2,000	8.60	NP	0.00	99.02
01/21/99	570	0.32	<0.3	<0.3	<0.5	* 1,500 / 1,700	6.70	NP	0.00	99.02
04/15/99	770	<0.3	<0.3	<0.3	<0.5	* 1,400 / 1,200	6.07	NP	0.00	99.02
07/26/99	500	<0.3	<0.3	<0.3	<0.5	*710 / 950	7.86	NP	0.00	99.02
10/13/99	<50	<0.3	0.44	<0.3	0.62	<5	6.93	NP	0.00	99.02
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	*5 / <5	6.44	NP	0.00	99.02
04/05/00	5,670	415	19	1.7	60.1	*329 / 194	7.86	NP	0.00	99.02
07/19/00	1,350	14	<3	<3	10	*237 / 120	7.10	NP	0.00	99.02
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	*63 / 41.1	5.28	NP	0.00	99.02
01/17/01	<50	<0.18	<0.14	<0.18	3.0	*57 / 81	5.27	NP	0.00	99.02
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	66	7.86	NP	0.00	99.02
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	*9 / 3.5	6.30	NP	0.00	99.02
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	*9.4 / 7.9	8.23	NP	0.00	99.02
01/30/02	2,590	40	9.0	8.0	6.0	*45 / 22	5.14	NP	0.00	99.02
04/17/02	51	<0.18	<0.14	<0.18	<0.26	*58 / 45	5.53	NP	0.00	99.02
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	*39 / 33	5.93	NP	0.00	99.02

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)					
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	6.8	5.92	NP	0.00	99.02
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.51	NP	0.00	99.02
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.14	NP	0.00	99.02
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.03	NP	0.00	99.02
MONITORING WELL #RW1										
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	-
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	-	-	-	-	-	-	-	-	-	-
07/19/00	-	-	-	-	-	-	13.25	NP	0.00	-
10/18/00	-	-	-	-	-	-	11.14	NP	0.00	-
01/17/01	-	-	-	-	-	-	11.12	NP	0.00	-
04/19/01	-	-	-	-	-	-	-	-	-	-
07/18/01	-	-	-	-	-	-	11.20	NP	0.00	-
10/10/01	-	-	-	-	-	-	11.20	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)					
01/30/02	-	-	-	-	-	-	12.30	NP	0.00	-	-
04/17/02	-	-	-	-	-	-	14.30	NP	0.00	-	-
07/31/02	-	-	-	-	-	-	14.21	NP	0.00	-	-
11/14/02	-	-	-	-	-	-	14.13	NP	0.00	-	-
01/29/03	-	-	-	-	-	-	13.12	NP	0.00	-	-
04/23/03	-	-	-	-	-	-	No Access	-	-	-	-
07/10/03	-	-	-	-	-	-	No Access	-	-	-	-

NOTE: * MTBE 8020 / 8260

Benzene, toluene, ethlybenzene, and xylene analyzed by EPA method 8020.

ND = Nondetectable

Total petroleum hydrocarbons (TPH) analyzed by EPA method 8015 modified for gasoline

NP = No free hydrocarbon product

Methyl-tert Butyl Ether (MTBE) analyzed by EPA method 8020 or 8260

" - " = Not analyzed / Not available

On 7/10/03 & 11/14/02, BTEX and MTBE done by 8260B

TABLE 2
ADDITIONAL GROUNDWATER DATA
THRIFTY OIL STATION # 049, OAKLAND, CA.

DATE SAMPLED	OXYGENATES					1,2-Dichloroethane (ug/L)
	Di-isopropyl Ether (DIPE) (ug/L)	Ethyl-Tert-Butyl Ether (ETBE) (ug/L)	Tert-Amyl Methyl Ether (TAME) (ug/L)	Tert-Butyl Alcohol (TBA) (ug/L)		
MONITORING WELL # MW-1						
11/14/02	<0.2	<0.12	<0.16	<10	<0.13	
01/29/03	-	-	-	-	-	
04/23/03	-	-	-	-	-	
07/10/03	<0.29	<0.17	<0.28	<10	-	
MONITORING WELL # MW-2						
11/14/02	<2.0	<1.2	111	341	<1.3	
01/29/03	-	-	-	-	-	
04/23/03	-	-	-	-	-	
07/10/03	<2.9	<1.7	59	449	-	
MONITORING WELL # MW-3						
11/14/02	<0.2	<0.12	<0.16	<10	<0.13	
01/29/03	-	-	-	-	-	
04/23/03	-	-	-	-	-	
07/10/03	<0.29	<0.17	<0.28	<10	-	
MONITORING WELL # MW-4						
11/14/02	<2.0	<1.2	106	281	<1.3	
01/29/03	-	-	-	-	-	
04/23/03	-	-	-	-	-	
07/10/03	<2.9	<1.7	35	<100	-	
MONITORING WELL # MW-5						
11/14/02	<0.2	<0.12	<0.16	<10	<0.13	
01/29/03	-	-	-	-	-	
04/23/03	-	-	-	-	-	
07/10/03	<0.29	<0.17	<0.28	<10	-	
MONITORING WELL # MW-6						
11/14/02	<0.2	<0.12	<0.16	<10	<0.13	
01/29/03	-	-	-	-	-	
04/23/03	-	-	-	-	-	
07/10/03	<0.29	<0.17	2.1	38	-	
MONITORING WELL # MW-7						
11/14/02	<0.2	<0.12	<0.16	<10	<0.13	
01/29/03	-	-	-	-	-	

TABLE 3
ADDITIONAL GROUNDWATER DATA
THRIFTY OIL STATION # 049, OAKLAND, CA.

DATE SAMPLED	OXIGENATES					1,2-Dichloroethane (ug/L)
	Di-isopropyl Ether (DIPE) (ug/L)	Ethyl-Tert-Butyl Ether (ETBE) (ug/L)	Tert-Amyl Methyl Ether (TAME) (ug/L)	Tert-Butyl Alcohol (TBA) (ug/L)		
04/23/03	-	-	-	-	-	-
07/10/03	<0.29	<0.17	<0.28	<10		

NOTE: DIPE, ETBE, TAME, TBA analyzed by EPA Method 8260B

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)	Total H-C Removed (lbs)	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	-	0 000	-	<0 3	<0 3	<0 3	<0 9	-	-	910	2000	160	2000	-
4/15/91	1,434	124	18	0 049	-	<0 3	<0 3	<0 3	<0 3	-	-	2800	4600	310	5000	-
4/22/91	1,510	200	11	0 078	-	<15	<15	<15	<45	-	-	3100	3300	<15	2800	-
4/29/91	1,660	350	21	0 137	-	<0 3	<0 3	<0 3	<0 9	-	-	3600	4500	300	5000	-
5/6/91	1,740	430	11	0 168	-	<0 3	<0 3	<0 3	<0 9	-	-	3600	3500	300	3800	-
5/13/91	1,880	570	20	0 223	-	<0 3	<0 3	<0 3	<0 9	-	-	3300	3200	230	3900	-
5/20/91	2,010	700	19	0 274	-	<0 3	<0 3	<0 3	<0 9	-	-	3300	3400	260	5100	-
5/28/91	2,050	740	5	0 290	-	<0 3	<0 3	<0 3	<0 9	-	-	2900	3000	230	4200	-
6/3/91	2,110	800	10	0 313	-	<0 3	<0 3	<0 3	<0 9	-	-	2500	2100	110	2800	-
6/10/91	2,160	850	7	0 333	-	<0 3	<0 3	<0 3	<0 9	-	-	1800	1700	120	2100	-
6/17/91	2,219	909	8	0 356	-	<0 3	<0 3	<0 3	<0 9	-	-	2100	1900	170	2700	-
6/24/91	2,263	953	6	0 373	-	<0 3	<0 3	<0 3	<0 9	-	-	2100	1800	150	2700	-
07/01/91	2,313	1,003	7	0 393	-	<0 5	<0 5	<1	<1	-	-	2,700	2,000	150	2,900	-
07/08/91	2,700	1,390	55	0 544	-	<0 5	<0 5	<1	<1	-	-	4,000	2,500	130	4,400	-
07/15/91	2,872	1,562	25	0 611	-	<0 5	<0 5	<1	<1	-	-	3,100	1,900	140	3,200	-
07/22/91	3,144	1,834	39	0 718	-	<0 5	<0 5	<1	<1	-	-	3,400	2,100	110	2,800	-
07/29/91	3,220	1,910	11	0 748	-	<0 5	<0 5	<1	<1	-	-	5,100	2,200	180	2,700	-
08/05/91	3,348	2,038	18	0 798	-	<0 5	<0 5	<1	<1	-	-	5,100	3,900	400	4,200	-
08/12/91	3,472	2,162	18	0 846	-	<0 5	<0 5	<1	<1	-	-	11,000	6,200	440	8,400	-
08/19/91	3,548	2,238	11	0 876	-	<0 5	<0 5	<1	<1	-	-	4,500	2,400	130	2,600	-
08/26/91	3,655	2,345	15	0 918	-	<0 5	<0 5	<1	<1	-	-	4,400	2,500	260	3,600	-
09/09/91	3,822	2,512	12	0 983	-	<0 5	<0 5	<1	<1	-	-	5,200	3,000	390	3,700	-
09/16/91	3,884	2,574	9	1 007	-	<0 5	<0 5	<1	<1	-	-	4,100	2,000	460	4,900	-
09/23/91	4,013	2,703	18	1 058	-	<0 5	<0 5	<1	<1	-	-	4,600	1,600	710	6,400	-
09/30/91	4,092	2,782	11	1 089	-	<0 5	<0 5	<1	<1	-	-	5,700	2,000	380	6,200	-
10/07/91	4,131	2,821	6	1 104	System shut down	-	-	-	-	-	-	-	-	-	-	-
10/14/91	4,195	2,885	9	1 129	-	<0 5	<0 5	<1	<1	-	-	4,400	2,000	370	8,100	-
10/21/91	4,406	3,096	30	1 212	-	<0 5	<0 5	<1	<1	-	-	2,300	1,100	190	4,200	-
10/28/91	4,474	3,164	10	1 238	-	<0 5	<0 5	<1	<1	-	-	6,400	4,100	620	6,100	-
11/03/91	4,613	3,303	23	1 293	-	<0 5	<0 5	<1	<1	-	-	6,100	2,800	200	5,600	-
11/11/91	4,700	3,390	11	1 327	-	<0 5	<0 5	<1	<1	-	-	6,500	2,300	<30	4,900	-
11/18/91	4,887	3,577	27	1 400	-	<0 5	<0 5	<1	<1	-	-	5,600	2,500	300	4,600	-
11/25/91	5,042	3,732	22	1 461	-	<0 5	<0 5	<1	<1	-	-	5,400	2,800	230	5,700	-
12/03/91	5,263	3,953	28	1 547	-	<0 5	<0 5	<1	<1	-	-	7,200	3,300	490	5,500	-
12/09/91	5,362	4,052	17	1 586	-	<0 5	<0 5	<1	<1	-	-	4,400	1,700	140	3,900	-
12/16/91	5,486	4,176	18	1 635	-	<0 5	<0 5	<0.5	<0.5	<0.5	-	4,700	2,300	310	4,600	-
12/23/91	5,516	4,206	4	1 646	-	<0 5	<0 5	<0.5	<0.5	<0.5	-	4,000	2,200	290	5,900	-
12/30/91	5,575	4,265	8	1 669	-	<0 5	<0 5	<0.5	<0.5	<0.5	-	5,200	2,500	350	5,800	-
01/15/92	5,720	4,410	9	1 726	-	<0 5	<0 5	<0.5	<0.5	<0.5	-	3,400	1,900	300	6,300	-

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)	Total H-C Removed (lbs)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
					TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
02/10/92	6,264	4,954	21	1,939	-	<0.5	<0.5	<0.5	<0.5	-	-	5,800	2,800	320	7,200	-
03/09/92	8,520	7,210	81	2,822	<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	7,369	<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	7,800	<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	8,368	<200	<0.5	<0.5	<0.5	<0.5	-	18,000	3,400	1,500	660	4,200	-
07/13/92	72,675	27,020	-	8,368	-	<0.5	<0.5	<0.5	<0.5	-	-	1,800	750	150	5,600	-
07/13/92	72,675	27,020	-	8,368	The system pumped air and flowmeter jumped from 30,000 gallons to 70,000 gallons	-	-	-	-	-	-	-	-	-	-	-
08/17/92	75,046	29,391	68	8,724	-	<0.5	<0.5	<0.5	<0.5	-	-	1,100	350	200	1,100	-
09/14/92	75,582	29,927	19	8,804	-	<0.5	<0.5	<0.5	<1	-	-	2,100	520	<25	3,500	-
10/05/92	75,680	30,025	5	8,819	<200	<0.5	<0.5	<0.5	<1	-	19,000	1,700	270	<25	4,000	-
11/09/92	77,280	31,625	46	9,072	-	<0.5	<0.5	<0.5	<0.5	-	-	4,000	1,400	120	5,800	-
12/14/92	79,420	33,765	61	9,411	-	<0.5	<0.5	<0.5	<1	-	-	7,300	4,900	1,800	16,000	-
01/04/93	84,720	39,065	252	10,250	-	<0.5	<0.5	<0.5	<1	-	-	5,400	2,100	450	7,800	-
02/15/93	102,689	57,034	428	14,739	<200	<0.5	<0.5	<0.5	<1	-	41,000	6,600	3,200	260	9,600	-
02/22/93	146,430	57,034	-	14,739	The system pumped air and flowmeter jumped from 102,689 gallons to 146,430 gallons	-	-	-	-	-	-	-	-	-	-	-
03/08/93	147,500	58,104	76	15,104	-	<0.5	<0.5	<0.5	<1	-	-	7,400	3,400	56	11,000	-
04/26/93	151,200	61,804	76	16,291	<100	<0.5	<0.5	<0.5	<1	-	36,000	4,300	2,200	420	8,300	-
04/26/93	151,200	61,804	-	16,291	Shut down system for repair	-	-	-	-	-	-	-	-	-	-	-
07/21/93	151,240	61,844	0	16,303	Restart the system	-	-	-	-	-	-	-	-	-	-	-
08/11/93	151,650	62,254	20	16,426	-	<0.5	<0.5	<0.5	<1	-	-	6,500	2,300	390	6,200	-
09/16/93	154,005	64,609	65	17,200	<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	17,482	<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	17,989	<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	18,233	<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	19,181	-	<0.3	<0.3	<0.3	<0.5	-	-	3,800	730	<13	1,200	-
02/03/94	170,720	81,324	153	19,752	-	<0.3	<0.3	<0.3	<0.5	-	-	3,600	610	<4.4	4,800	-
03/03/94	178,168	88,772	266	20,744	-	<0.3	<0.3	<0.3	<0.5	-	-	2,800	2,000	270	3,400	-
04/07/94	185,670	96,274	214	22,056	<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	22,460	<50	<0.3	<0.3	<0.3	<0.5	-	4,600	100	10	8.4	280	-
06/16/94	194,680	105,284	167	22,684	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.5	-	-
07/11/94	199,135	109,739	178	22,832	<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	22,919	<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	23,036	<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	23,069	<50	<0.3	<0.3	<0.3	<0.5	-	1,300	8.6	1.5	11	15	-
11/07/94	206,060	116,664	30	23,074	<50	<0.3	<0.3	<0.3	<0.5	-	170	1.5	<0.3	<0.5	0.5	-
12/05/94	207,093	117,697	37	23,075	<50	<0.3	<0.3	<0.3	<0.5	-	75	1.3	<0.3	<0.5	<0.5	-
01/09/95	207,293	117,897	6	23,075	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.5	<0.5	-
02/01/95	207,650	118,254	16	23,075	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.5	<0.5	-
02/06/95	207,810	118,414	32	23,075	<50	<0.3	<0.3	<0.3	<0.5	-	<50	2.7	<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)	Total H-C Removed (lbs)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
					TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
03/10/95	208,430	119,034	19	23,076	<100	<0.5	<0.5	<0.5	<1	-	<100	<0.5	<0.5	<0.5	<1	-
04/10/95	208,564	119,168	4	23,079	<100	<0.5	<0.5	<0.5	<1	-	3,300	180	7.6	2.1	150	-
05/08/95	208,608	119,212	2	23,082	<100	<0.5	<0.5	<0.5	<1	-	11,000	640	9.2	<5	1,100	-
06/05/95	208,926	119,530	11	23,103	<100	<0.5	<0.5	<0.5	<1	-	5,100	270	2.2	<0.5	49	-
07/10/95	214,182	124,786	150	23,500	<100	<0.5	<0.5	<0.5	<1	-	13,000	1,600	120	24	1,300	-
08/07/95	221,876	132,480	275	24,332	Shut down system for repair						-	-	-	-	-	-
08/28/95	221,997	132,601	6	24,346	Restart the system						-	-	-	-	-	-
09/06/95	222,003	132,607	1	24,346	<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	24,352	<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	24,360	<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	24,387	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	0.96	-
01/08/96	224,661	135,265	31	24,400	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	24,467	<50	10	0.37	<0.3	0.53	-	3,300	190	<7.5	<7.5	20	-
03/12/96	229,301	139,905	51	24,504	<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	24,704	<50	<0.3	<0.3	<0.3	<0.5	-	1,000	90	5	<0.3	67	-
05/06/96	247,840	158,444	197	25,072	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	25,145	Shut down system for carbon change						-	-	-	-	-	-
08/08/96	248,423	159,027	-	25,145	Start-up system						-	-	-	-	-	-
08/20/96	248,630	159,234	17	25,149	<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	25,417	<50	<0.3	<0.3	<0.3	<0.5	-	4,100	260	<3	<3	34	-
10/16/96	263,610	174,214	199	25,547	<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	25,553	<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	25,581	<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	26,393	<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	26,794	<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	26,911	<50	<0.3	<0.3	<0.3	<0.5	-	89,000	<6	11	<6	14	-
04/21/97	267,415	178,019	5	27,026	<50	<0.3	<0.3	<0.3	<0.5	-	61,000	730	18	130	360	-
05/22/97	276,535	187,139	294	29,375	<50	<0.3	<0.3	<0.3	<0.5	-	850	13	<0.3	0.4	4.6	-
06/23/97	281,214	191,818	146	29,408	-	-	-	-	-	-	-	-	-	-	-	-
07/14/97	284,210	194,814	143	29,501	<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	30,293	-	-	-	-	-	-	-	-	-	-	-	-
09/15/97	301,043	211,647	87	30,427	-	-	-	-	-	-	-	-	-	-	-	-
10/07/97	333,480	244,084	1,474	44,014	<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	44,645	-	-	-	-	-	-	-	-	-	-	-	-
12/08/97	334,382	244,986	5	44,720	-	-	-	-	-	-	-	-	-	-	-	-
12/12/97	334,382	244,986	-	44,720	Shut down system due to stolen equipment						-	-	-	-	-	-
04/08/98	334,382	244,986	-	44,720	<50	<0.3	<0.3	<0.3	<0.5	<20	3,100	12	1	<0.3	490	2,600
05/11/98	334,382	244,986	-	44,720	-	-	-	-	-	-	-	-	-	-	-	-
06/22/98	334,382	244,986	-	44,720	-	-	-	-	-	-	-	-	-	-	-	-

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)	Total H-C Removed (lbs)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
					TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
07/20/98	334,382	244,986	-	44,720	<50	<0.3	<0.3	<0.3	<0.5	-	52,000	8	0.52	0.63	1.5	-
08/03/98	346,521	257,125	867	49,977	Shut down system for carbon canisters replacement											
09/17/98	354,985	265,589	188	53,642	-	-	-	-	-	-	-	-	-	-	-	-
10/14/98	358,015	268,619	112	54,338	<50	<0.3	<0.3	<0.3	1.6	-	3,100	45	13	3.5	350	-
11/05/98	359,600	270,204	72	54,378	System shut down due to vandalism and stolen equipment											
11/20/98	359,600	270,204	-	54,378	Restart											
12/11/98	369,452	280,056	469	54,633	-	-	-	-	-	-	-	-	-	-	-	-
12/24/98	-	280,056	-	54,633	No reading, meter broken											
01/15/99	0	280,056	-	54,633	Replaced Flowmeter started at 0											
01/21/99	985.5	281,042	164	54,636	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	54,639	-	-	-	-	-	-	-	-	-	-	-	-
03/12/99	4,390.0	284,446	86	54,647	-	-	-	-	-	-	-	-	-	-	-	-
04/15/99	8,595.0	288,651	124	54,661	<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	54,663	-	-	-	-	-	-	-	-	-	-	-	-
05/18/99	9,410.0	289,466	-	54,663	Shut down system for pump controller repair by manufacturer											
09/20/99	9,411.0	289,467	0	54,663	Restart the system											
09/24/99	9,412.4	289,468	0	54,663	-	-	-	-	-	-	-	-	-	-	-	-
10/13/99	9,509.8	289,566	5	54,666	<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	54,676	-	-	-	-	-	-	-	-	-	-	-	-
12/17/99	9,893.7	289,950	5	54,685	-	-	-	-	-	-	-	-	-	-	-	-
01/20/00	10,052.1	290,108	5	54,693	<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	54,698	-	-	-	-	-	-	-	-	-	-	-	-
03/13/00	10,354.7	290,411	8	54,708	-	-	-	-	-	-	-	-	-	-	-	-
04/05/00	10,545.7	290,602	8	54,897	72.7	1.8	4.1	0.7	6.7	-	119,000	2,360	6,440	6,240	25,200	*30,800 / 21,800
05/19/00	11,071.7	291,128	12	55,419	Shut down system for carbon drum replacement											
06/05/00	11,075.4	291,131	0	55,419	Restart the system											
06/14/00	11,131.6	291,188	6	55,474	<50	<0.3	<0.3	<0.3	<0.6	<5	<1,000	<6	<6	<6	14	24,500
07/06/00	11,362.0	291,418	10	55,703	Shut down system for carbon replacement											
07/17/00	0.0	291,418	-	55,703	Restart the system after carbon change, repipe and flowmeter change (starting at 0)											
07/24/00	411.0	291,829	59	55,907	<50	<0.3	<0.3	<0.3	<0.6	<5	205	<0.3	1	<0.3	<0.6	*99 / 104
08/21/00	8,193.0	299,611	278	55,920	-	-	-	-	-	-	-	-	-	-	-	-
09/18/00	27,251.0	318,669	681	55,953	-	-	-	-	-	-	-	-	-	-	-	-
10/18/00	54,280.0	345,698	901	96,155	<50	<0.18	<0.14	<0.18	<0.28	<0.24	357,000	2,380	2,960	1,290	6,850	9,630
10/30/00	64,610.0	366,028	861	126,867	-	-	-	-	-	-	-	-	-	-	-	-
11/27/00	79,870.0	371,288	545	172,235	-	-	-	-	-	-	-	-	-	-	-	-
12/22/00	99,240.0	390,658	775	229,823	-	-	-	-	-	-	-	-	-	-	-	-
01/17/01	101,250.0	392,668	77	233,018	<50	<0.18	<0.14	<0.18	<0.26	<0.24	24,700	783	373	2	3,480	15,000
02/23/01	144,120.0	435,538	1,159	241,836	-	-	-	-	-	-	-	-	-	-	-	-
03/30/01	195,400.0	486,818	1,465	252,385	-	-	-	-	-	-	-	-	-	-	-	-

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)	Total H-C Removed (lbs)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
					TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
04/06/01	199,090.0	490,508	527	253 144	System shut down for carbon replacement. Replaced on 4/11/01, restart on 4/13/01											
04/20/01	207,050.0	498,468	569	255 172	88	<0.18	<0.14	<0.18	<0.26	93	36,500	855	716	659	1,570	11,400
04/27/01	210,640.0	502,058	513	256 263	System shut down for repair/replacement of compressor's pressure switch and exhaust valve											
04/30/01	210,640.0	502,058	-	256,263	320	<0.18	<0.14	<0.18	<0.26	337 / 60	7,620	268	22	10	124	*13,600 / 9,130
05/11/01	210,640.0	502,058	-	256,263	Replaced pressure switch on 5/7/01, system still off for carbon replacement											
05/21/01	210,640.0	502,058	-	256,263	Restart the system											
05/30/01	226,830.0	518,248	1,799	263 289	<50	<0.18	<0.14	<0.18	<0.26	<0.24	96,600	4,980	1,660	2,770	11,300	*53,600 / 41,600
06/29/01	267,230.0	558,648	1,347	295 790	-	-	-	-	-	-	-	-	-	-	-	-
07/11/01	310,010.0	601,428	3,565	341 855	<50	<0.18	<0.14	<0.18	<0.26	<0.24	162,000	<0.18	4,140	4,760	24,000	<0.24
08/17/01	441,270.0	732,688	3,548	518 940	-	-	-	-	-	-	-	-	-	-	-	-
09/28/01	498,310.0	789,728	1,358	595 894	-	-	-	-	-	-	-	-	-	-	-	-
10/03/01	503,930.0	795,348	1,124	600 424	<50	<0.18	<0.14	<0.18	<0.26	<0.24	31,600	<1.8	150	294	5,280	<2.4
11/12/01	664,700.0	956,118	4,019	642 733	-	-	-	-	-	-	-	-	-	-	-	-
12/28/01	706,300.0	997,718	904	653 680	-	-	-	-	-	-	-	-	-	-	-	-
01/11/02	721,050.0	1,012,468	1,054	657 562	System shut down for carbon replacement											
01/21/02	721,050.0	1,012,468	-	657 562	Restart the system											
02/01/02	731,320.0	1,022,738	934	658 963	<100	<0.3	<0.3	<0.3	<0.6	<5	1,172	1	1	1	6	<5
02/22/02	751,340.0	1,042,758	953	659 159	-	-	-	-	-	-	-	-	-	-	-	-
03/27/02	813,240.0	1,104,658	1,876	659 763	-	-	-	-	-	-	-	-	-	-	-	-
04/12/02	835,170.0	1,126,588	1,371	660 975	<50	<0.18	<0.14	<0.18	<0.26	<0.24	12,100	5	1	<0.18	<0.26	18,400
04/26/02	918,670.0	1,210,088	5,964	669 389	System shut down											
05/10/02	918,680.0	1,210,098	1	669 390	Restart											
05/17/02	928,670.0	1,220,088	1,427	670 397	-	-	-	-	-	-	-	-	-	-	-	-
06/03/02	-	-	-	-	-	<0.5	<0.7	<0.8	<3.3	-	-	-	-	-	-	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)
06/03/02	-	-	-	-	-	<50	<0.18	<0.14	<0.18	<0.26	<0.24	-	-	-	-	Split-sample results (sample collected by us)
06/07/02	971,240.0	1,262,658	2,027	674 686	-	-	-	-	-	-	-	-	-	-	-	-
06/28/02	1,012,150.0	1,303,568	1,948	678 809	-	-	-	-	-	-	-	-	-	-	-	-
07/15/02	1,045,670.0	1,337,088	1,972	681 977	<50	<0.18	<0.14	<0.18	<0.26	3.3 J	10,600	<0.18	<0.14	<0.18	<0.26	10,000
07/31/02	1,052,380.0	1,343,798	419	682 569	System shut down for carbon replacement											
08/16/02	1,052,390.0	1,343,808	1	682 569	Restart											
08/30/02	1,057,310.0	1,348,728	351	683 004	-	-	-	-	-	-	-	-	-	-	-	-
09/20/02	-	-	-	-	Sample results from EBMUD nor received yet											Outlet sampling results from EBMUD (sample collected by EBMUD inspector)
09/20/02	1,061,730.0	1,353,148	210	683 394	<50	<0.1	<0.15	<0.06	-	-	-	-	-	-	-	Split-sample results (sample collected by us, analysis by EPA 624 & 8015M)
09/27/02	1,064,020.0	1,355,438	327	683 596	-	-	-	-	-	-	-	-	-	-	-	-
10/04/02	1,069,130.0	1,360,548	730	683 787	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4,500 J	<0.18	<0.14	<0.18	<0.26	2,570
10/25/02	1,082,500.0	1,373,918	637	684 289	-	-	-	-	-	-	-	-	-	-	-	-
11/29/02	1,108,680.0	1,400,098	748	685 270	-	-	-	-	-	-	-	-	-	-	-	-
12/27/02	1,123,890.0	1,415,308	543	685 840	-	-	-	-	-	-	-	-	-	-	-	-
01/03/03	1,128,910.0	1,420,328	717	686 028	System shut down for carbon replacement											

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)	Total H-C Removed (lbs)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
					TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
01/10/03	1,128,970.0	1,420,388	9	686,030	Restart											
01/17/03	1,132,560.0	1,423,978	513	686,999	<50	<0.14	<0.07	<0.08	11	<2.0	32,400	11	64	<0.8	6,050	706
01/31/03	1,143,290.0	1,434,708	766	689,460	<15	<0.04	0.58	<0.02	11	<0.03	22,700	14	34	18	5,160	550
02/14/03	1,153,670.0	1,445,088	741	691,423	System shut down for carbon replacement											
04/04/03	1,153,670.0	1,445,088	-	691,423	System shut down for upgrade											
WD PERMIT LIMITS:					NE	5.0	5.0	5.0	5.0	NE						

Note: < = less than laboratory detection level indicated

- = no sample / not analyzed

NE = Permit Limit not established

TPH is analyzed by EPA Method 8015 M

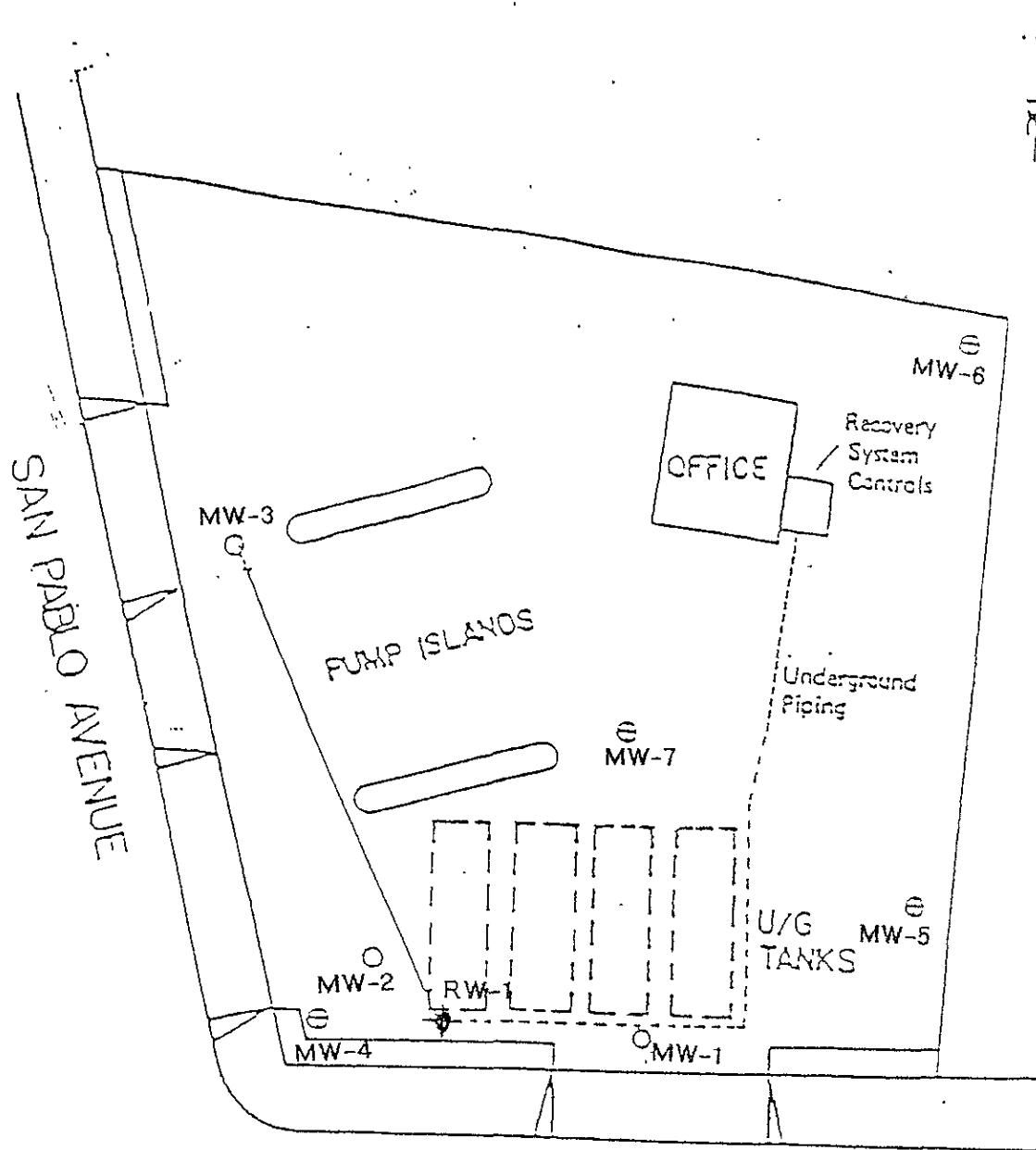
BTEX is analyzed by EPA Method 602 or 8020

*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.

Total Hydrocarbons Removed = From 4/8/91 to 2/10/92, the influent TPHg is assumed to be 47,000 (3/9/92)

FIGURES



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

LEGEND

OMW1 - GT MONITORING WELLS
MW-4 - WCC MONITORING WELLS

RW-1 - PROPOSED RECOVERY WELL

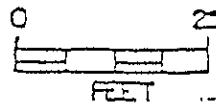
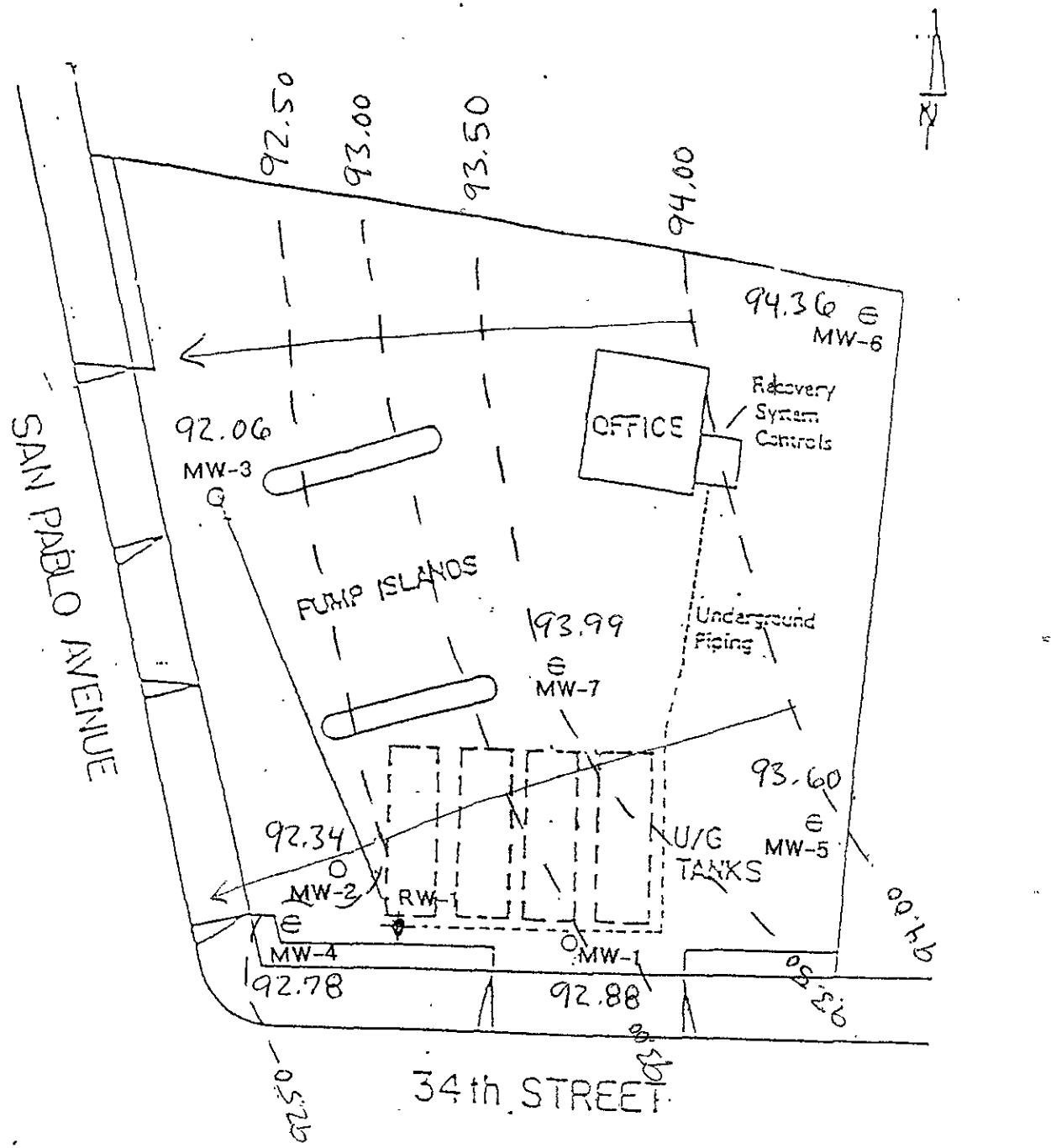


FIGURE 1



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

LEGEND

- OMW1 - GT MONITORING WELLS
- SMW4 - WCC MONITORING WELLS
- RW-1 - PROPOSED RECOVERY WELL

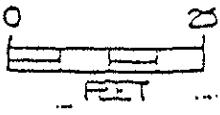
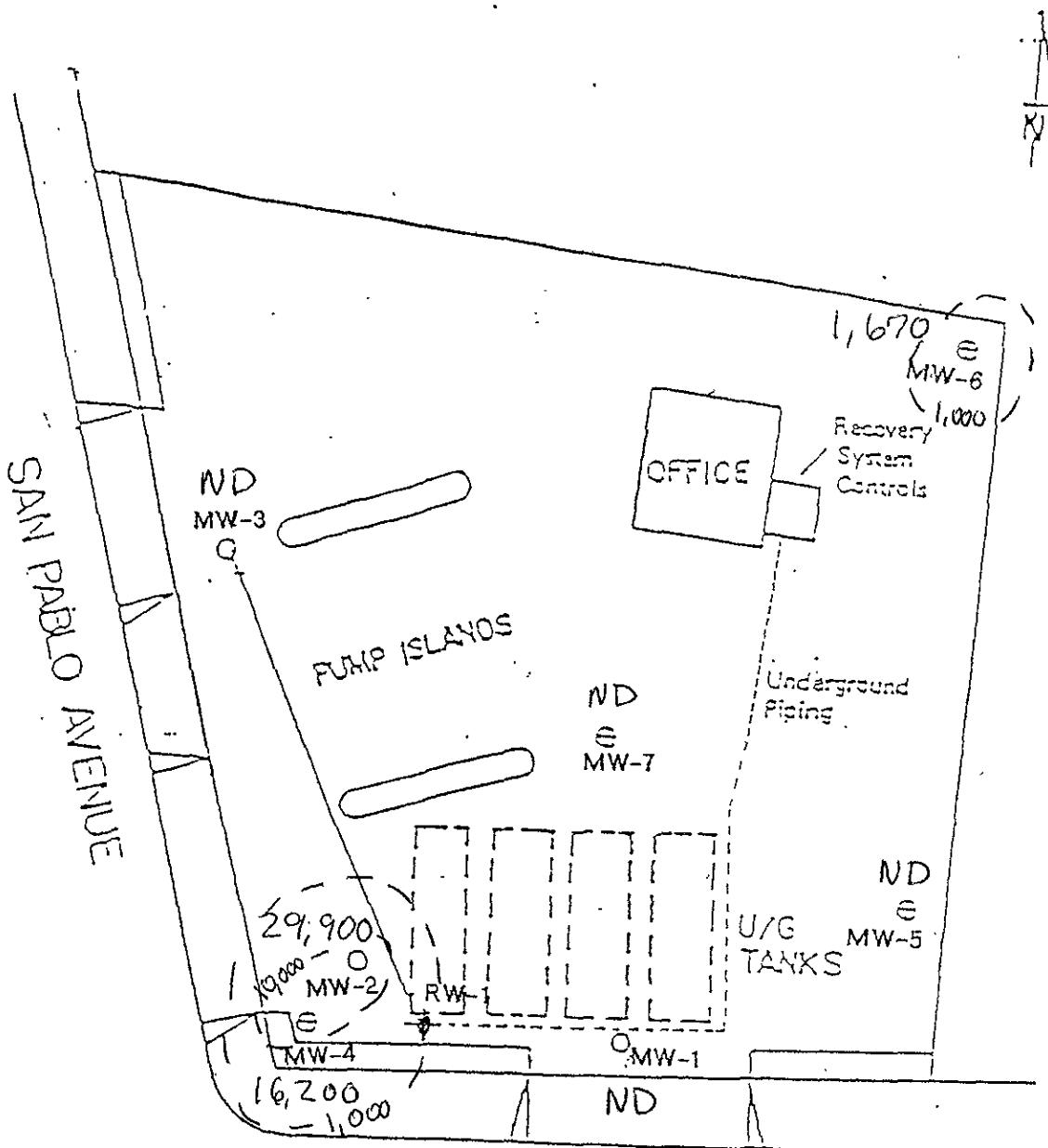


FIGURE 2



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

LEGEND

OMW1 - GT MONITORING WELLS
 @ MW4 - WCC MONITORING WELLS

RW-1 - PROPOSED RECOVERY WELL

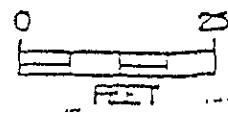
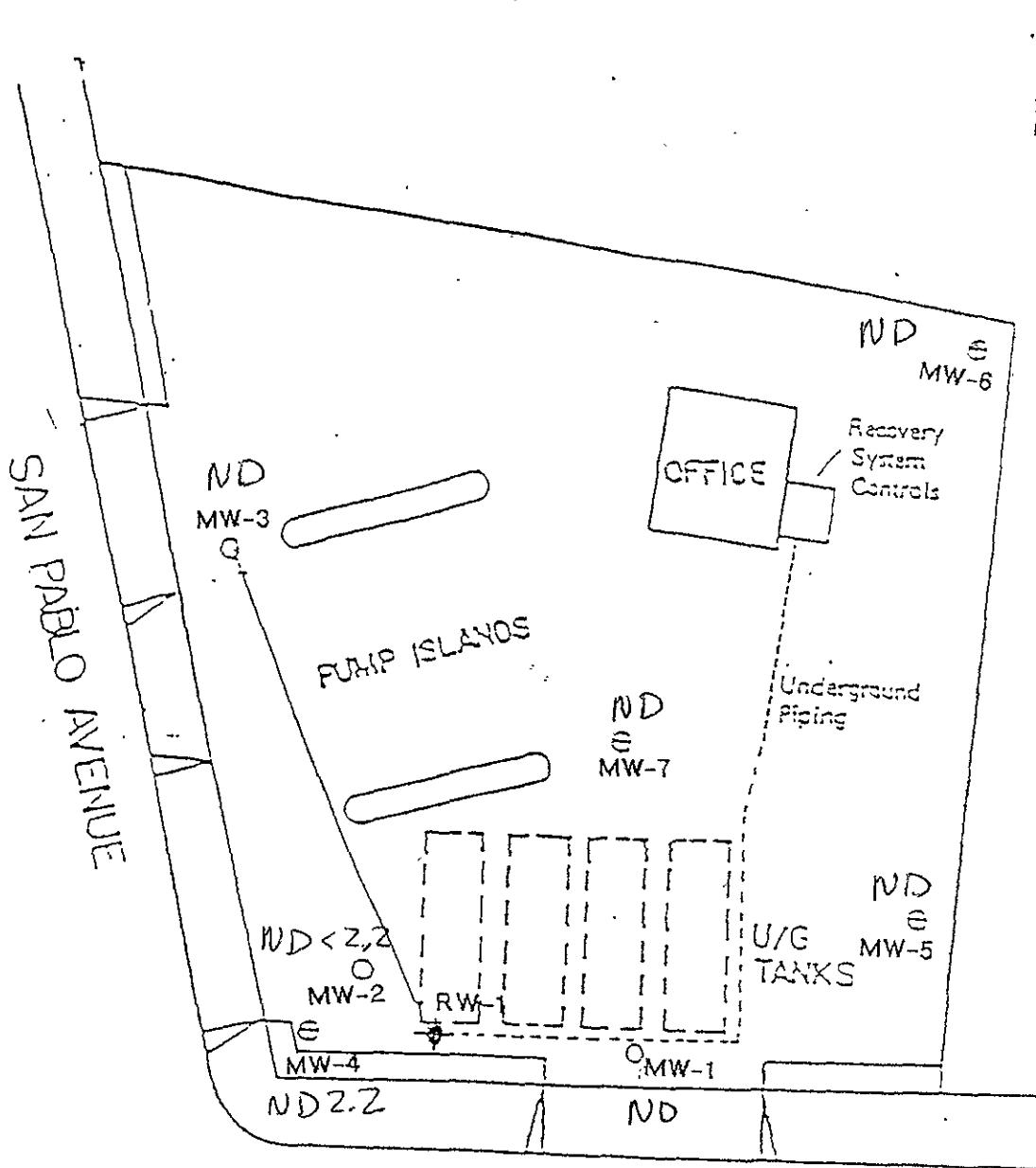


FIGURE 3



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

LEGEND

O MW1 - GT MONITORING WELLS
@ MW-4 - WCC MONITORING WELLS

-> RW-1 - PROPOSED RECOVERY WELL

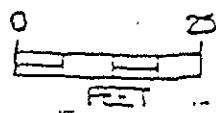
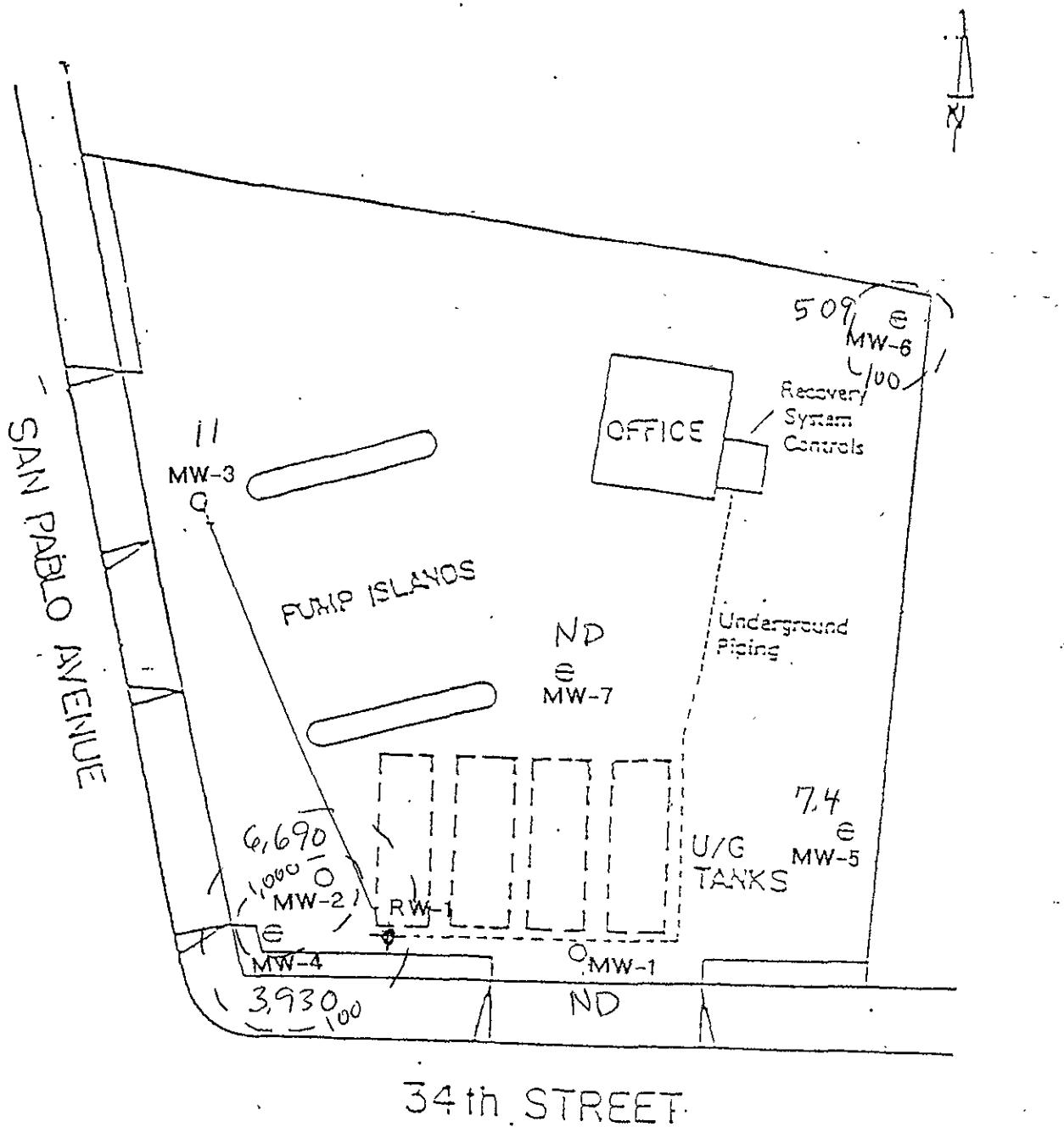


FIGURE 4



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

LEGEND

- MW1 - GT MONITORING WELLS
- MW4 - WCC MONITORING WELLS
- ∅ RW-1 - PROPOSED RECOVERY WELL

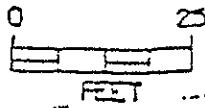


FIGURE 5

APPENDIX A



EARTH MANAGEMENT CO.
Environmental Remediation

Environmental Remediation

PROJECT STATUS REPORT

SITE:
ADDRESS:

THRIFTY OIL CO. #049
3400 SAN PABLO AVE.
OAKLAND, CA. 94612

DATE:

07.10.03

PERSONNEL:

SERBAN

EXPLANATION:

REV: 8/28/02

DTP= DEPTH TO PRODUCT, DTW= DEPTH TO WATER, DTB= DEPTH TO BOTTOM: ALL MEASURED FROM TOP OF CASING

PT= PRODUCT THICKNESS, WC= WATER COLUMN, DIA= DIAMETER, EST=ESTIMATE, ACT=ACTUAL, FT= FEET, GAL=GALLONS

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	1049	Date:	02-10-03
Address:			
Personnel:	SERRAH	Weather:	SUNNY DAY
Well No:	MW-1	Equip:	PURIFIER

Before Purging:			
Total Well Depth: (ft.)	17.74	Well Diameter	24
Depth to Water (ft)	5.15	Est. Purge Volume:	8

Sampling Data:						
Initial Turbidity:					Final Turbidity:	
Time	9:48	9:50	9:52	9:54	9:56	9:58
EC	1210	1730	1720	1690	1710	1730
pH	5.59	5.56	5.66	5.60	5.56	5.59
Temp	72.1	71.8	72.7	72.8	71.6	71.5
Gal.	1	2	3	4	5	6
						8

Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection		
Depth to Water (ft.)	7.32	Total Well Depth(ft.) 12.74

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	21049	Date:	07-10-03
Address:			
Personnel:	SERBOD	Weather:	SUNNY DAY
Well No:	MW-2	Equip:	BARRIER

Before Purging:			
Total Well Depth: (ft.)	23.76	Well Diameter	
Depth to Water (ft)	5.10	Est. Purge Volume:	

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	11:38	11:40	11:42	11:44	11:46	11:48	11:50
EC	1810	1820	1810	1830	1840	1860	1840
pH	6.11	6.13	6.10	6.09	6.11	6.13	6.12
Temp	21.3	21.3	21.1	20.8	20.7	20.8	20.6
Gal.	1	3	5	6	8	10	12
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection	
Depth to Water (ft.)	9.60
Total Well Depth(ft.)	23.76

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	1049	Date:	07-10-03
Address:			
Personnel:	SERBAS	Weather:	SUNNY Day
Well No:	MW-3	Equip:	BAILER

Before Purging:			
Total Well Depth (ft.)	24.16	Well Diameter	24
Depth to Water (ft)	5.63	Est. Purge Volume:	12

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	10:13	10:15	10:17	10:19	10:21	10:23	10:25
EC	1780	1720	1790	1810	1820	1840	1820
pH	6.56	6.51	6.50	6.52	6.51	6.50	6.52
Temp	71.3	71.1	70.8	70.9	70.8	70.7	70.7
Gal.	1	3	5	6	8	10	12
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection			
Depth to Water (ft.)	10.53	Total Well Depth (ft.)	24.16

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	H 049	Date:	07-10-03
Address:			
Personnel:	SERBAG	Weather:	SUNNY DAY
Well No:	MW-4	Equip:	BAILER

Before Purging:			
Total Well Depth: (ft.)	13.60	Well Diameter	4"
Depth to Water (ft)	4.55	Est. Purge Volume:	23

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	11:18	11:20	11:22	11:24	11:26	11:28	11:30
EC	1680	1700	1710	1690	1680	1680	1680
pH	5.82	5.83	5.82	5.84	5.81	5.83	5.81
Temp	72.2	72.1	71.9	71.9	71.7	71.6	71.4
Gal.	3	6	9	13	16	19	23
Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection	
Depth to Water (ft.)	6.21
Total Well Depth(ft.)	13.60

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	H-049	Date:	07-10-03
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW-5	Equip:	BAIWER

Before Purging:			
Total Well Depth: (ft.)	13.76	Well Diameter	2"
Depth to Water (ft)	5.25	Est. Purge Volume:	5

Sampling Data:								
Initial Turbidity:	Final Turbidity:							
Time	9:28	9:30	9:32	9:34	9:36	9:38	9:40	
EC	1920	1940	1950	1970	1950	1970	1950	
pH	6.12	6.13	6.10	6.09	6.12	6.10	6.12	
Temp	72.3	72.1	71.8	71.9	71.7	71.6	71.5	
Gal.	0.5	1	2	2.5	3	4	5	
Time								
EC								
pH								
Temp								
Gal.								

After Purging/Before Sample Collection			
Depth to Water (ft.)	6.92	Total Well Depth(ft.)	13.76

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	AL 049	Date:	07-10-03
Address:			
Personnel:	SERBAA	Weather:	SUNNY DAY
Well No:	MW - 6	Equip:	BARRIER

Before Purging:

Total Well Depth: (ft)	13.04	Well Diameter	24
Depth to Water (ft)	5.31	Est. Purge Volume:	5

Sampling Data:

Initial Turbidity:

Time	10:56	10:58	11:01	11:03	11:05	11:08	11:10
EC	1870	1890	1870	1830	1860	1750	1830
pH	6.37	6.38	6.36	6.38	6.39	6.36	6.36
Temp	71.3	71.1	70.9	70.9	70.7	70.6	70.8
Gal.	0.5	1	2	2.5	3	4	5

Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection

Depth to Water (ft.)	7.12	Total Well Depth(ft.)	13.04
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FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	# 049	Date:	07-10-03
Address:			
Personnel:	SERBAGI	Weather:	SUNNY DRY
Well No:	MW-2	Equip:	BAILER

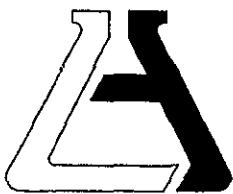
Before Purging:			
Total Well Depth: (ft.)	13.56	Well Diameter	4"
Depth to Water (ft)	5.03	Est. Purge Volume:	22

Sampling Data:							
Initial Turbidity:		Final Turbidity:					
Time	10:33	10:35	10:37	10:39	10:41	10:43	10:45
EC	1730	1740	1690	1710	1730	1760	1730
pH	6.30	6.36	6.31	6.30	6.31	6.32	6.30
Temp	71.3	71.1	71.1	70.9	70.8	70.6	70.5
Gal.	3	6	9	12	15	18	22

Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection			
Depth to Water (ft.)	6.13	Total Well Depth(ft.)	13.56

APPENDIX B



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

FAX 714/538-1209

CLIENT Thrifty Oil Co. (8871) LAB REQUEST 113571
ATTN: Jeff Suryakusuma
13116 Imperial Hwy.
P.O. Box 2128
Santa Fe Springs, CA 90670

REPORTED 07/21/2003
RECEIVED 07/12/2003

PROJECT Station #049
3400 San Pablo, Oakland

SUBMITTER Client

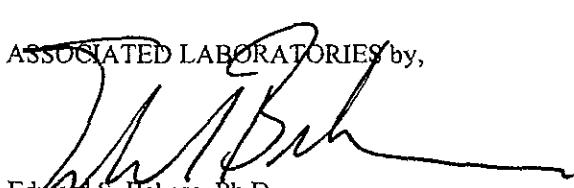
COMMENTS Global ID: T0600101365

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>
445424	TOC #049, MW-5
445425	TOC #049, MW-1
445426	TOC #049, MW-3
445427	TOC #049, MW-7
445428	TOC #049, MW-6
445429	TOC #049, MW-4
445430	TOC #049, MW-2
445431	TOC #049, Trip Blank
445432	Laboratory Method Blank

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.

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TESTING & CONSULTING
*Chemical
Microbiological
Environmental*

Order #: 445424
Matrix: WATER

Client Sample ID: TOC #049, MW-5
Date Sampled: 07/10/2003 **Time Sampled:** 14:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.22	ug/L	07/23/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/23/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/23/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/23/03 LB
Methyl-tert-butylether (MTBE)	7.4	1	1	0.18	ug/L	07/23/03 LB
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	07/23/03 LB
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	07/23/03 LB
Toluene	ND	1	5	0.32	ug/L	07/23/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/23/03 LB
Surrogates						Units
Surr1 - Dibromofluoromethane	107				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	126				%	70 - 130
Surr3 - Toluene-d8	76				%	70 - 130
Surr4 - p-Bromofluorobenzene	103				%	70 - 130
8015M - Gasoline						
Gasoline	ND	1	100	15	ug/L	07/15/03 LZ
Surrogates						Units
a,a,a-Trifluorotoluene	100				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445425

Matrix: WATER

Client Sample ID: TOC #049, MW-1

Date Sampled: 07/10/2003 **Time Sampled:** 14:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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8260B BTEX/MTBE Only

Benzene	ND	1	1	0.22	ug/L	07/23/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/23/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/23/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/23/03 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	07/23/03 LB
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	07/23/03 LB
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	07/23/03 LB
Toluene	ND	1	5	0.32	ug/L	07/23/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/23/03 LB

Surrogates

		Units	Control Limits
Surr1 - Dibromofluoromethane	108	%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	114	%	70 - 130
Surr3 - Toluene-d8	71	%	70 - 130
Surr4 - p-Bromofluorobenzene	103	%	70 - 130

8015M - Gasoline

Gasoline	ND	1	50	15	ug/L	07/15/03 LZ
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Surrogates

		Units	Control Limits
a,a,a-Trifluorotoluene	94	%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445426
Matrix: WATER

Client Sample ID: TOC #049, MW-3
Date Sampled: 07/10/2003 **Time Sampled:** 14:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.22	ug/L	07/24/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/24/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/24/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/24/03 LB
Methyl-tert-butylether (MTBE)	11	1	1	0.18	ug/L	07/24/03 LB
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	07/24/03 LB
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	07/24/03 LB
Toluene	ND	1	5	0.32	ug/L	07/24/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/24/03 LB
Surrogates						Units
Surr1 - Dibromofluoromethane	100				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	96				%	70 - 130
Surr3 - Toluene-d8	108				%	70 - 130
Surr4 - p-Bromofluorobenzene	113				%	70 - 130
8015M - Gasoline						
Gasoline	ND	1	50	15	ug/L	07/15/03 LZ
Surrogates						Units
a,a,a-Trifluorotoluene	97				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445427
Matrix: WATER

Client Sample ID: TOC #049, MW-7
Date Sampled: 07/10/2003 **Time Sampled:** 14:25

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.22	ug/L	07/24/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/24/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/24/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/24/03 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	07/24/03 LB
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	07/24/03 LB
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	07/24/03 LB
Toluene	ND	1	5	0.32	ug/L	07/24/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/24/03 LB
Surrogates						Units
Surr1 - Dibromofluoromethane	99				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	124				%	70 - 130
Surr3 - Toluene-d8	108				%	70 - 130
Surr4 - p-Bromofluorobenzene	117				%	70 - 130
8015M ~ Gasoline						
Gasoline	ND	1	50	15	ug/L	07/15/03 LZ
Surrogates						Units
a,a,a-Trifluorotoluene	96				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445428
Matrix: WATER

Client Sample ID: TOC #049, MW-6
Date Sampled: 07/10/2003 **Time Sampled:** 14:35

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.22	ug/L	07/23/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/23/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/23/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/23/03 LB
Methyl-tert-butylether (MTBE)	509	1	1	0.18	ug/L	07/23/03 LB
Tert-amylmethylether (TAME)	2.1	1	1	0.28	ug/L	07/23/03 LB
Tertiary butyl alcohol (TBA)	38	1	10	10	ug/L	07/23/03 LB
Toluene	ND	1	5	0.32	ug/L	07/23/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/23/03 LB
Surrogates						
Surr1 - Dibromofluoromethane	103			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	118			%	70 - 130	
Surr3 - Toluene-d8	101			%	70 - 130	
Surr4 - p-Bromofluorobenzene	108			%	70 - 130	
8015M - Gasoline						
Gasoline	1670	20	1000.0	15	ug/L	07/15/03 LZ
Surrogates						
a,a,a-Trifluorotoluene	98			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445429
Matrix: WATER

Client Sample ID: TOC #049, MW-4
Date Sampled: 07/10/2003 **Time Sampled:** 14:45

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	10	10.0	0.22	ug/L	07/23/03 LB
Ethyl benzene	ND	10	50.0	0.31	ug/L	07/23/03 LB
Ethyl-tertbutylether (ETBE)	ND	10	10.0	0.17	ug/L	07/23/03 LB
Isopropyl ether (DIPE)	ND	10	10.0	0.29	ug/L	07/23/03 LB
Methyl-tert-butylether (MTBE)	3930	10	10.0	0.18	ug/L	07/23/03 LB
Tert-amylmethylether (TAME)	35	10	10.0	0.28	ug/L	07/23/03 LB
Tertiary butyl alcohol (TBA)	ND	10	100.0	10	ug/L	07/23/03 LB
Toluene	ND	10	50.0	0.32	ug/L	07/23/03 LB
Xylenes, total	ND	10	50.0	0.4	ug/L	07/23/03 LB
Surrogates						
Surr1 - Dibromofluoromethane	107			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	117			%	70 - 130	
Surr3 - Toluene-d8	100			%	70 - 130	
Surr4 - p-Bromofluorobenzene	108			%	70 - 130	
8015M - Gasoline						
Gasoline	16200	200	10000.0	15	ug/L	07/15/03 LZ
Surrogates						
a,a,a-Trifluorotoluene	104			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445430
Matrix: WATER

Client Sample ID: TOC #049, MW-2
Date Sampled: 07/10/2003 **Time Sampled:** 14:50

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	10	10.0	0.22	ug/L	07/23/03 LB
Ethyl benzene	ND	10	50.0	0.31	ug/L	07/23/03 LB
Ethyl-tertbutylether (ETBE)	ND	10	10.0	0.17	ug/L	07/23/03 LB
Isopropyl ether (DIPE)	ND	10	10.0	0.29	ug/L	07/23/03 LB
Methyl-tert-butylether (MTBE)	6690	10	10.0	0.18	ug/L	07/23/03 LB
Tert-amylmethylether (TAME)	59	10	10.0	0.28	ug/L	07/23/03 LB
Tertiary butyl alcohol (TBA)	449	10	100.0	10	ug/L	07/23/03 LB
Toluene	ND	10	50.0	0.32	ug/L	07/23/03 LB
Xylenes, total	ND	10	50.0	0.4	ug/L	07/23/03 LB
Surrogates						
Surr1 - Dibromofluoromethane	107			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	124			%	70 - 130	
Surr3 - Toluene-d8	100			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	
8015M - Gasoline						
Gasoline	29900	400	20000.0	15	ug/L	07/15/03 LZ
Surrogates						
a,a,a-Trifluorotoluene	101			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445431
Matrix: WATER

Client Sample ID: TOC #049, Trip Blank
Date Sampled: 07/10/2003 **Time Sampled:** 15:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.22	ug/L	07/24/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/24/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/24/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/24/03 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	07/24/03 LB
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	07/24/03 LB
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	07/24/03 LB
Toluene	ND	1	5	0.32	ug/L	07/24/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/24/03 LB
Surrogates						Units
Surr1 - Dibromofluoromethane	102				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	92				%	70 - 130
Surr3 - Toluene-d8	85				%	70 - 130
Surr4 - p-Bromofluorobenzene	112				%	70 - 130
8015M - Gasoline						
Gasoline	ND	1	50	15	ug/L	07/15/03 LZ
Surrogates						Units
a,a,a-Trifluorotoluene	96				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
ND = Not detected below indicated MDL, J=Trace



Order #: 445432**Client Sample ID:** Laboratory Method Blank**Matrix:** WATER

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.22	ug/L	07/23/03 LB
Ethyl benzene	ND	1	5	0.31	ug/L	07/23/03 LB
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	07/23/03 LB
Isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	07/23/03 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	07/23/03 LB
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	07/23/03 LB
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	07/23/03 LB
Toluene	ND	1	5	0.32	ug/L	07/23/03 LB
Xylenes, total	ND	1	5	0.4	ug/L	07/23/03 LB
Surrogates						
Surr1 - Dibromofluoromethane	108			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	88			%	70 - 130	
Surr3 - Toluene-d8	102			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	
8015M - Gasoline						
Gasoline	ND	1	50	15	ug/L	07/15/03 LZ
Surrogates						
a,a,a-Trifluorotoluene	78			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor
 ND = Not detected below indicated MDL, J=Trace



**ASSOCIATED LABORATORIES
QA REPORT FORM**

QC Sample: LCS / LCSD
 Matrix: WATER
 Prep. Date: 07/15/03
 Analysis Date: 07/15/03-07/16/03
 ID#'s in Batch: LR 113571, 113577
 Reporting Units = mg/L

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	LCS	PREP BLK					
			Value	Result	True	%Rec	L.Limit	H.Limit
TPH	8015M-G	LCSD	ND	543	500	109	80%	120%
			ND	544	500	109	80%	120%

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

SURROGATE RECOVERY

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	78
LCS	126
LCSD	156

AAA-TFT = α,α,α -Trifluorotoluene

ASSOCIATED LABORATORIES
LCS REPORT FORM - METHOD 8260 / 624 / 524.2

QC Sample: LCS/LCSD - Water Samples

Analysis Date: 07/24/03

Applies to: LR 113922, 113872, 113571

Reporting Units = ug/L

Lab Controlled Spike / Lab Controlled Spike Duplicate

Test	Sample Result	Spike Added	LCS Spike	LCS Spk. Dup	%Rec LCS	%Rec LCS D	RPD	QC Limits	
								RPD	%REC
1,1-Dichloroethene	ND	50	42.24	44.30	84	89	5	22	59-172
MTBE	ND	50	44.50	49.33	89	99	10	24	62-137
Benzene	ND	50	47.11	48.29	94	97	2	24	62-137
Trichloroethene	ND	50	54.03	54.75	108	110	1	21	66-142
Toluene	ND	50	49.80	50.89	100	102	2	21	59-139
Chlorobenzene	ND	50	47.74	47.56	95	95	0	21	60-133

Method Blank = All ND

SURROGATE (QC Limits : 70-130)

Compounds	DBFM	1,2-DCA	Tol-d8	p-BFB
LCS	98	86	106	109
LCSD	102	85	109	108
BLANK # 2	97	124	105	118

ASSOCIATED LABORATORIES
LCS REPORT FORM

QC Sample: LCS / LCSD
 Matrix: WATER
 Prep. Date: 07/15/03
 Analysis Date: 07/15/03-07/16/03
 LAB ID#'s in Batch: LR 113571, 113577

REPORTING UNITS = mg/L

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

Test	Method	PREP. BLK	LCS			LCSD	
		Value	Result	TRUE	%Rec	Result	%Rec
Benzene	8021	ND	17.4	20	87	19.8	99
Toluene	8021	ND	17.7	20	89	20.1	101
Ethylbenzene	8021	ND	18.3	20	92	20.4	102
Xylenes	8021	ND	52.4	60	87	61.4	102

LCS = Lab Control Sample Result

TRUE = True Value of *LCS*

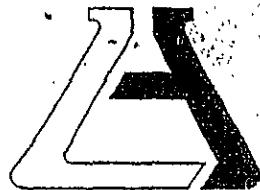
L.LIMIT / H.LIMIT = LCS Control Limits

<i>L.Limit</i>	<i>H.Limit</i>
80%	120%

SURROGATE RECOVERY

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	78
LCS	83
LCSD	103

AAA-TFT = *a,a,a*-Trifluorotoluene



ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92868-1225 - 714/771-6900 FAX 714/538-1209

Cooler Receipt Form

Client: Thrifty oil Project: _____

Date Cooler Received: 7/12/03 Date Cooler Opened: 7/12/03

Was cooler scanned for presence of radioactivity ?
If yes was radioactivity results above 25 cpm ?

Yes/No
Yes/No

Was a shipper's packing slip attached to the cooler ?

Yes/No

If the cooler had custody seal(s), were they signed and intact ?

Yes/No/Na

Was the cooler packed with: Ice X Ice Packs _____ Bubble wrap _____
Styrofoam _____ Paper _____ None _____ Other _____

Cooler Temperature: 3.0° *

*cooler needs to be received @ 4°C with an acceptable range of 2°- 6 °C

If samples were hand delivered do they meet the temp. criteria, which should be @ 4°C with
an acceptable range of 2°- 6 °C ?

Yes/No

If no explain: _____

Were all samples sealed in plastic bags ?

Yes/No

Did all samples arrive intact ? If no, indicate below.

Yes/No

Were all samples labeled correctly ? (ID's Dates, Times) If no, indicate below.

Yes/No

Can the tests required be ran with the provided containers. If no indicate below.

Yes/No

Was sufficient sample volume sent for all containers ?

Yes/No

Were any VOA vials received with head space ?

Yes/No/Na

Was the correct preservatives used ?

Yes/No/Na

If no, see the pH log for a list of samples containers regarding pH

Any other important information: _____

Receiving Department:

Date:

7/12/03

ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868

Phone: (714) 771-6900 • Fax: (714) 538-1209



Chain of Custody Record

Company	THRIFTY OIL CO	Phone	(562) 921-3581
Project Manager	JEFF SURYAKUSUMA	Fax	(562) 921-7510
Project Name	Q. W. S.	Project #	049
Site Name and Address	3400 SITE PABLO AVN. OAKLAND, CA. 94622		

Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	Analysis Requested			Test Instructions & Comments	
							T pH	D TEx	L TBE		
1 MW-5		07/20/03	14:00	H ₂ O	3VOA	HCL	X	X	X		
2 MW-1			14:10				X	X	X		
3 MW-3			14:20				X	X	X		
4 MW-7			14:25				X	X	X		
5 MW-6			14:35				X	X	X		
6 MW-4			14:45				X	X	X		
7 MW-2			14:50				X	X	X		
8 TRIP BLANK			14:00		2VOA		X	X			
9											
10											
11											
12											
13											
14											
15											

Sample Receipt - To Be Filled By Laboratory

Total Number of Containers		Property Cooled Y / N / NA		Relinquished by Sampler: SERBAGI	1.	Relinquished by GOLDBECK 2.	3.	
Custody Seals Y / N / NA		Samples Intact Y / N / NA		Signature: <i>R. J. Lewis</i>		Signature:	Signature:	
Received in Good Condition Y / N		Samples Accepted Y / N		Printed Name: SERBAGI		Printed Name:	Printed Name:	
Turn Around Time				Date: 07/20/03 Time: 17:30		Date: Time:	Date: Time:	
				Received By: GOLDBECK	2.	Received By: <i>R. J. Lewis</i>	3.	
				Signature: <i>R. J. Lewis</i>		Signature: <i>R. J. Lewis</i>	Signature: <i>R. J. Lewis</i>	
				Printed Name: R. J. Lewis		Printed Name: R. J. Lewis	Printed Name: R. J. Lewis	
				Date: 7/21/03 Time: 8:50		Date: 7/14/03 Time: 10:40	Date: 7/14/03 Time: 10:40	
<input checked="" type="checkbox"/> Normal		<input type="checkbox"/> Rush		<input type="checkbox"/> Same Day	<input type="checkbox"/> 48 hrs.	<input type="checkbox"/> Printed Name: R. J. Lewis	<input type="checkbox"/> Printed Name: R. J. Lewis	<input type="checkbox"/> Printed Name: R. J. Lewis
				<input type="checkbox"/> 24 hrs.	<input type="checkbox"/> 72 hrs.			

APPENDIX C



ARTH MANAGEMENT CO.

Environmental Services

DATE:

04.04.03

OK9

START-UP/SHUT DOWN REPORT

STATION NO.: 049

SYSTEM TYPE: G.W.C.

START-UP REPORT:

SHUT DOWN REPORT:

System shut down for upgrade
Performed complete system check up and observed
that several mechanical and pneumatic components need
to be replaced. (Solenoid valves inside pulsing panel,
bubbler, diaphragm pumps, shut off valves etc.)

SIGNATURE: C. Vitec Strongly recommend replacement of the entire

system with a newer type.

