

# THRIFTY OIL CO.

✓ Ro 4

March 31, 2005

O.55713

Mr. Amir Gholami  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, CA 94502

Local #4057  
RWQCB #01-1478  
Global ID #T0600101365  
Confirmation #4819784820

RE: **Former Thrifty Oil Co. Station #049**  
3400 San Pablo Avenue  
Oakland, CA 94612  
*1st Quarter 2005, Status Report*

APR 6 2005  
EARTH MANAGEMENT  
ADVANCED ENVIRONMENTAL

Dear Mr. Gholami:

Presented herein is the 1st Quarter 2005, 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 first quarter of 2005. 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 4.32 feet below top of casing (btc) in monitoring/extraction well MW-4R to 5.74 feet btc in monitoring well MW-3 (**Appendix A**). A groundwater elevation contour map based on the January 19, 2005, monitoring data is presented in **Figure 2**. Groundwater elevation data indicates that groundwater flow to the southwest under at an approximate gradient of 0.0625 feet/foot.

### Quarterly Groundwater Sampling

As part of the ongoing groundwater-monitoring program, EMC obtained groundwater samples from monitoring wells MW-1, MW-2R, MW-3, MW-4R, MW-5, MW-6, MW-7, and RW-1R on January 19, 2005. Groundwater wells MW-2 and MW-4 and recovery well RW-1 were abandoned by Advanced GeoEnvironmental (AGE) in January 2004, and replacement wells MW-2R, MW-4R, and RW-1R were installed as part of an upgrade to the groundwater recovery system. 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 in micrograms per liter (ug/L) were prepared using data from the January 19, 2005, sampling event and are presented in **Figures 3, 4, and 5**, respectively. Laboratory results indicate the highest concentrations of TPHg, benzene, and MTBE were detected in well MW-2R (18,900 ug/L, 537 ug/L, and 3,340 ug/L, respectively).



Concentrations of TPHg, benzene, and MTBE all decreased in well MW-3 from the sample collected on October 20, 2003. However, elevated concentrations of TPHg and MTBE were detected in upgradient well MW-5. The groundwater flow direction and TPHg, benzene, and MTBE contour maps suggest that an upgradient source is likely.

### **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**. On April 4, 2003, the system was shut 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).

The upgraded remediation system was restarted by Advance GeoEnvironmental (AGE) for continuous operation on June 21, 2004. The primary components of the upgraded system within the treatment compound consist of an air compressor, 500 gallon Poly settling tank, control panel, and three 200 pound granular activated carbon canisters (**Figures 6 and 7**). The upgraded system is removing groundwater from extraction wells MW-2R, MW-4R, and RW-1R that are each equipped with downhole submersible pumps.

On November 2, 2004, AGE reported that the pump had been stolen from well MW-4R. Due to the fact that well MW-4R produced more water than well MW-2R, the pump from well MW-2R was removed and installed in well MW-4R. On February 25, 2005, a new pump was installed in well MW-4R and the pump was replaced in well MW-2R.

On January 12, 2005, system operations and maintenance duties were assumed by EMC from AGE. According to EMC, as of March 23, 2005, the system produced and treated 70,454 gallons of water (**Table 3**). A quarterly effluent water sample from the PSP-1 sampling port was collected on January 27, 2005, and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B. BTEX compounds were not detected above their respective detection limits with the exception of toluene at 1.1 ug/L. The regulatory limit for toluene is 5 ug/L so Thrifty remains in compliance. A carbon change-out was begun on January 19, 2005. Copies of the Field Reports prepared by EMC are provided in **Appendix C** and the system effluent analytical results are provided in **Appendix D**.

### **Other Activities**

Thrifty selected AGE to conduct remedial system upgrade activities including installation of a new treatment compound, installation of new piping, connection of piping to the replacement well network, and the operation and maintenance of the upgraded groundwater pump and treat system. In January 2004, AGE abandoned wells MW-2, MW-4, and RW-1 and replaced them with wells MW-2R, MW-4R, and RW-1R. AGE also completed four (4) offsite soil borings (B-1 through B-4). In a transmittal letter dated March 11, 2004, Thrifty submitted preliminary soil and groundwater data from the offsite soil borings and onsite well replacement activities. On March 18, 2004, Thrifty, AGE, and the Alameda Health Care Agency (ACHCA) met at the site to discuss the location of offsite well MW-8 and the soil and

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1st Quarter 2005  
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groundwater data provided by Thrifty. In a letter dated March 19, 2004, the ACHCA requested that Thrifty prepare a workplan to address the offsite contamination detected during the January 2004 site assessment conducted by AGE. After further discussing the scope of work with the ACHCA in e-mail dated April 27, 2004, Thrifty submitted a workplan to install one onsite and two offsite wells downgradient of the site. The ACHCA responded in an e-mail dated May 4, 2004, requesting additional borings to delineate the plume to the west and southwest of the site. Thrifty submitted a revised Workplan for Additional Offsite Assessment dated May 7, 2004 that included two additional borings to the southwest of the site. In a letter dated May 17, 2004, the ACHCA approved the May 7, 2004, workplan with the request that additional borings be considered if soil and groundwater samples indicate significant hydrocarbon contamination. The ACHCA also suggested moving the location of onsite well MW-10 slightly to the west or installing a second boring along the northern boundary of the site. Thrifty has selected GeoHydrologic Consultants, Inc. (GHC) to conduct site assessment activities. GHC has obtained well permits and is in the process of obtaining an encroachment permit from the City of Oakland Public Works Department (COPWD).

#### Planned Activities

The encroachment permit is currently being reviewed by the COPWD following comments by Thrifty. Thrifty will complete field activities and submit a site assessment report within 75 days following approval of the encroachment permit.

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 Second Quarter 2005 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



Chris Panaitescu  
General Manager  
Environmental Affairs

cc: BP West Coast Products LLC; Mr. Jack Oman

File

**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)	EthyBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)										
<b>MONITORING WELL #MW-1</b>																
Screen Interval - 5 to 25 feet																
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					
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5	4.00	NP	0.00	98.03	94.03					
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.53	NP	0.00	98.03	92.50					
01/17/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.97	NP	0.00	98.03	94.06					
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.98	NP	0.00	98.03	94.05					
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.51	NP	0.00	98.03	92.52					
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.97	NP	0.00	98.03	94.06					
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.95	NP	0.00	98.03	94.08					
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	2.42	NP	0.00	98.03	95.61					
07/31/02	<50	<0.18	1.3	<0.18	<0.26	<0.24	5.49	NP	0.00	98.03	92.54					
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	16	6.13	NP	0.00	98.03	91.90					
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	2.45	NP	0.00	98.03	95.58					
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	7.02	NP	0.00	98.03	91.01					

**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 ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )					
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.15	NP	0.00	98.03	92.88
10/20/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.13	NP	0.00	98.03	92.90
01/14/04	<15	<0.04	<0.02	<0.02	<0.06	<0.03	3.92	NP	0.00	98.03	94.11
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	4.54	NP	0.00	98.03	93.49
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	7.01	NP	0.00	98.03	91.02
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.46	NP	0.00	98.03	92.57
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.48	NP	0.00	98.03	92.55
<b>MONITORING WELL #MW-2</b>		<i>Screen Interval = 5 to 25 feet</i>									
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
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
07/19/00	130	<0.3	<0.3	<0.3	<0.6	*9,620 / 6,520	5.40	NP	0.00	97.44	92.04
10/18/00	150	<0.18	<0.14	<0.18	<0.26	*9,090 / 6,560	6.91	NP	0.00	97.44	90.53
01/17/01	75	<0.18	2.0	2.0	3.0	*8,650 / 9,710	5.41	NP	0.00	97.44	92.03

**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)					
04/19/01	4,380	<0.18	<0.14	<0.18	<0.26	8,890	5.40	NP	0.00	97.44
07/18/01	3,260	<0.18	<0.14	<0.18	2.0	*7960 / 1,710	6.92	NP	0.00	97.44
10/10/01	1,760	<0.18	<0.14	<0.18	<0.26	*2,980 / 2,600	3.87	NP	0.00	97.44
01/30/02	1,770	<0.18	1.0	1.0	2.0	*2,560 / 1,590	8.45	NP	0.00	93.57
04/17/02	1,470	1.0	<0.14	<0.18	<0.26	*2,460 / 2,080	8.45	NP	0.00	97.44
07/31/02	3,910	<0.18	1.2	<0.18	2.1	*2,090 / 1,740	9.98	NP	0.00	97.44
11/14/02	39,400	1,680	728	173	5,120	8,270	5.40	NP	0.00	97.44
01/29/03	22,100	746	76	<1.0	2,840	8,220	8.43	NP	0.00	97.44
04/23/03	19,500	<0.8	<0.4	<0.4	<1.2	9,580	5.38	NP	0.00	97.44
07/10/03	29,900	<2.2	<3.2	<3.1	<4.0	6,690	5.10	NP	0.00	97.44
10/20/03	13,000	4.79	<0.02	<0.02	<0.06	*6,330 / 5,980	5.10	NP	0.00	97.44
01/14/04	WELL ABANDONED 01/2004									
<b>MONITORING WELL #MW-2R</b>										
04/08/04	11,600	304	16 J	55	427	4,170	4.58	NP	0.00	-
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	6.72	NP	0.00	-
10/20/04	20,900	3,180	2,970	259	1,240	92	3.72	NP	0.00	-
01/19/05	18,900	537	250	866	2,290	3,340	4.50	NP	0.00	-
<b>MONITORING WELL #MW-3</b>										
Screen Interval = 5 to 25 feet										
01/09/92	-	-	-	-	-	-	17.60	NP	0.00	97.69
04/13/92	-	-	-	-	-	-	17.40	NP	0.00	97.69
10/05/92	-	-	-	-	-	-	17.35	NP	0.00	97.69
01/06/93	-	-	-	-	-	-	17.40	NP	0.00	97.69
04/26/93	-	-	-	-	-	-	17.90	NP	0.00	97.69
01/04/94	-	-	-	-	-	-	17.60	NP	0.00	97.69
04/05/94	-	-	-	-	-	-	16.25	NP	0.00	97.69
01/08/96	-	-	-	-	-	-	7.11	NP	0.00	97.69
04/08/96	8,800	610	31	530	900	-	7.20	NP	0.00	97.69
07/22/96	38,000	4,100	1,500	1,600	5,400	2,600	6.82	NP	0.00	97.69
10/16/96	2,400	<0.3	<0.3	<0.3	<0.5	3,800	6.84	NP	0.00	97.69
01/22/97	2,200	<0.3	<0.3	<0.3	<0.5	5,500	4.80	NP	0.00	97.69
04/21/97	15,000	1,500	36	260	710	11,000	9.40	NP	0.00	97.69
07/14/97	5,400	0.45	<0.3	<0.3	<0.5	14,000	10.92	NP	0.00	86.77
10/07/97	8,800	0.39	<0.3	<0.3	0.88	-	11.95	NP	0.00	97.69
01/19/98	22,000	1,300	15	20	310	-	7.85	NP	0.00	97.69
04/23/98	9,200	3.9	3.1	5.7	9.8	16,000	11.20	NP	0.00	89.84
07/20/98	750	0.41	1.4	0.47	1.8	2,800	7.36	NP	0.00	86.49
										90.33

**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)	MBE (ug/L)					
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
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
10/20/03	13,700	4.13	<0.02	<0.02	<0.06	* 6,570 / 4,920	5.61	NP	0.00	97.69	92.08
01/14/04	1,160	2.0	2.2	6.1	7.8	* 1,510 / 767	4.23	NP	0.00	97.69	93.46
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.48	NP	0.00	97.69	92.21
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	6.66	NP	0.00	97.69	91.03
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	4.20	NP	0.00	97.69	93.49
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.74	NP	0.00	97.69	91.95
<b>MONITORING WELL #MW-1</b>											
<i>Screen Interval = 4 to 14 feet</i>											
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

**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)					
07/22/96	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
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
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	92.04
10/18/00	34,900	698	1,010	607	4,130	* 27,800 / 15,900	6.02	NP	0.00	97.33	91.31
01/17/01	29,100	799	930	614	3,400	* 24,300 / 31,400	4.88	NP	0.00	97.33	92.45
04/19/01	103,000	4,880	3,980	3,260	11,800	66,900	4.89	NP	0.00	97.33	92.44
07/18/01	52,200	3,320	2,090	440	5,520	* 55,500 / 16,800	6.04	NP	0.00	97.33	91.29
10/10/01	8,580	6.1	14	5.3	70	* 40,100 / 30,000	4.51	NP	0.00	97.33	92.82
01/30/02	36,500	<0.18	3.0	1.0	3.0	* 43,000 / 24,900	4.51	NP	0.00	97.33	92.82
04/17/02	12,900	8.0	1.0	<0.18	1.0	16,000 / 13,600	4.51	NP	0.00	97.33	92.82
07/31/02	19,300	<0.18	1.2	1.5	2.6	* 13,200 / 10,100	5.26	NP	0.00	97.33	92.07
11/14/02	36,200	1,720	940	235	6,190	8,280	5.27	NP	0.00	97.33	92.06
01/29/03	13,000	444	39	<0.4	1,200	8,160	4.50	NP	0.00	97.33	92.83
04/23/03	7,430	130	5.7	<0.2	387	5,830	4.80	NP	0.00	97.33	92.53
07/10/03	16,200	<2.2	<3.2	<3.1	<4.0	3,930	4.55	NP	0.00	97.33	92.78
10/20/03	6,040	672	384	3.4	444	* 3,780 / 3,220	4.56	NP	0.00	97.33	92.77
01/14/04	WELL ABANDONED 01/2004										

**MONITORING WELL #MW-4R**

04/08/04	37,900	819	424	159	3,190	18,400	4.96	NP	0.00	-	-
07/21/04	14,500	<2.2	<3.2	<3.1	39 J	18,900	6.60	NP	0.00	-	-
10/20/04	66,000	6,390	6,560	672	3,290	13,300	3.38	NP	0.00	-	-
01/19/05	17,600	513 0	240	855	2,230	3,310	4.32	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)	MIBP (ug/L)					
<b>MONITORING WELL #MW-5</b>											
<i>Screen Interval = 4 to 14 feet</i>											
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	90.73
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

**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 ( $\mu\text{g/L}$ )					
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	7.9	3.03	NP	0.00	98.85
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	7.4	5.25	NP	0.00	98.85
10/20/03	<15	<0.04	<0.02	<0.02	<0.06	*9.11 / 9.2	5.25	NP	0.00	98.85
01/14/04	<15	<0.04	<0.02	<0.02	<0.06	*8.2 / 4.1	3.03	NP	0.00	98.85
04/08/04	797	<0.22	<0.32	<0.31	<0.4	635	4.35	NP	0.00	98.85
07/21/04	548	<0.22	<0.32	<0.31	<0.4	788	5.56	NP	0.00	98.85
10/20/04	901	<0.22	<0.32	<0.31	<0.4	734	4.15	NP	0.00	98.85
01/19/05	350	<0.22	<0.32	<0.31	<0.4	860	4.57	NP	0.00	98.85

MONITORING WELL #MW-6										
Screen Interval = 4 to 14 feet										
01/09/92	-	-	-	-	-	-	6.30	NP	0.00	99.67
04/13/92	-	-	-	-	-	-	5.47	NP	0.00	99.67
10/05/92	-	-	-	-	-	-	9.85	NP	0.00	99.67
01/06/93	-	-	-	-	-	-	4.16	NP	0.00	99.67
04/26/93	-	-	-	-	-	-	5.75	NP	0.00	99.67
01/14/94	-	-	-	-	-	-	7.20	NP	0.00	99.67
04/05/94	-	-	-	-	-	-	6.76	NP	0.00	99.67
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
04/08/96	230	4.6	4.7	3.2	33	-	4.60	NP	0.00	99.67
07/22/96	<50	<0.3	<0.3	<0.3	<0.5	<20	7.30	NP	0.00	99.67
10/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.82	NP	0.00	99.67
01/22/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.40	NP	0.00	99.67
04/21/97	130	<0.3	<0.3	<0.3	<0.5	<20	7.10	NP	0.00	99.67
07/14/97	<50	<0.3	<0.3	<0.3	0.70	<20	7.35	NP	0.00	99.67
10/07/97	<50	0.78	0.3	<0.3	<0.5	-	6.98	NP	0.00	99.67
01/23/98	<50	<0.3	<0.3	<0.3	<0.5	-	2.35	NP	0.00	99.67
04/23/98	<50	<0.3	<0.3	<0.3	<0.5	<20	6.90	NP	0.00	99.67
07/20/98	<50	<0.3	1.1	<0.3	1.4	<5	5.45	NP	0.00	99.67
10/14/98	<50	<0.3	<0.3	<0.3	<0.5	<5	4.95	NP	0.00	99.67
01/21/99	<50	0.35	0.62	<0.3	<0.5	<5	3.90	NP	0.00	99.67
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	2.35	NP	0.00	99.67
07/26/99	1,000	<0.3	<0.3	<0.3	<0.5	*2,300 / 3,900	3.93	NP	0.00	99.67
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.15	NP	0.00	99.67
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	*42 / 41	5.84	NP	0.00	99.67
04/05/00	4,600	338	2.8	1.2	55.2	*282 / 230	3.89	NP	0.00	99.67
07/19/00	60	1.0	2.0	<0.3	<0.6	*87 / 76	3.07	NP	0.00	99.67
										96.60

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

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER	DEPTH TO PRODUCT	PRODUCT THICKNESS	CASING ELEVATION	GROUNDWATER ELEVATION
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)	(feet)	(feet)	(feet)	(feet)	(feet)
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	95.81
11/14/02	140	3.2	<0.18	5.2	<0.4	111	5.42	NP	0.00	99.67	94.27
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
10/20/03	1,320	<0.04	<0.02	<0.02	<0.06	*656 / 662	5.30	NP	0.00	99.67	94.37
01/14/04	272	<0.04	<0.02	<0.02	<0.06	*304 / 180	3.82	NP	0.00	99.67	95.85
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.18	NP	0.00	99.67	94.49
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	6.42	NP	0.00	99.67	93.25
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.62	NP	0.00	99.67	94.05
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.40	NP	0.00	99.67	94.27

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

**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)					
07/20/98	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
07/19/00	1,350	14	<3	<3	10	*237 / 120	7.10	NP	0.00	99.02	91.92
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	*63 / 41.1	5.28	NP	0.00	99.02	93.74
01/17/01	<50	<0.18	<0.14	<0.18	3.0	*57 / 81	5.27	NP	0.00	99.02	93.75
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	66	7.86	NP	0.00	99.02	91.16
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	*9 / 3.5	6.30	NP	0.00	99.02	92.72
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	*9.4 / 7.9	8.23	NP	0.00	99.02	90.79
01/30/02	2,590	40	9.0	8.0	6.0	*45 / 22	5.14	NP	0.00	99.02	93.88
04/17/02	51	<0.18	<0.14	<0.18	<0.26	*58 / 45	5.53	NP	0.00	99.02	93.49
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	*39 / 33	5.93	NP	0.00	99.02	93.09
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	6.8	5.92	NP	0.00	99.02	93.10
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.51	NP	0.00	99.02	93.51
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.14	NP	0.00	99.02	93.88
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.03	NP	0.00	99.02	93.99
10/20/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.01	NP	0.00	99.02	94.01
01/14/04	<15	<0.04	<0.02	<0.02	<0.06	<0.03	4.38	NP	0.00	99.02	94.64
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	4.86	NP	0.00	99.02	94.16
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	6.82	NP	0.00	99.02	92.20
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.71	NP	0.00	99.02	93.31
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	4.77	NP	0.00	99.02	94.25

**MONITORING WELL #RW-1**

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	-	-

**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)					
07/22/96	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	14	32	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	-	-
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	-	-	-	-
10/20/03	-	-	-	-	-	-	No Access	-	-	-	-
01/14/04	WELL ABANDONED 01/2004										
<b>MONITORING WELL # RW-1R</b>											
04/08/04	6,740	42	32 J	<3.1	1,160	239	4.76	NP	0.00	-	-
07/21/04	118	<0.22	<0.32	<0.31	<0.4	107	6.85	NP	0.00	-	-
10/20/04	29,900	3,850	4,010	381	1,920	103	4.28	NP	0.00	-	-
01/19/05	13,400	272	243	24 J	2,230	2,110	4.54	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)					

**NOTE:**

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

Benzene, toluene, ethlybenzene, 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  
 On 7/21/04, 4/08/04, 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 ( $\mu\text{g/L}$ )
	Di-isopropyl Ether (DIPE) ( $\mu\text{g/L}$ )	Ethyl-Tert-Butyl Ether (ETBE) ( $\mu\text{g/L}$ )	Tert-Amyl Methyl Ether (TAME) ( $\mu\text{g/L}$ )	Tert-Butyl Alcohol (TBA) ( $\mu\text{g/L}$ )	
<b>MONITORING WELL # MW-1</b>					
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	-
<b>MONITORING WELL # MW-2</b>					
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	-
<b>MONITORING WELL # MW-3</b>					
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	-
<b>MONITORING WELL # MW-4</b>					
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	-
<b>MONITORING WELL # MW-5</b>					
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	-
<b>MONITORING WELL # MW-6</b>					
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	-
<b>MONITORING WELL # MW-7</b>					
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	-

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

**TABLE 3**  
**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-B	B	T	E	X	MTBE	TPH-B	B	T	E	X	MTBE
4/8/1991	1,310	0	-	0.000	-	<0.3	<0.3	<0.3	<0.9	-	-	910	2000	160	2000	-
4/15/1991	1,434	124	18	0.049	-	<0.3	<0.3	<0.3	<0.3	-	-	2800	4600	310	5000	-
4/22/1991	1,510	200	11	0.078	-	<15	<15	<15	<45	-	-	3100	3300	<15	2800	-
4/29/1991	1,650	350	21	0.137	-	<0.3	<0.3	<0.3	<0.9	-	-	3600	4500	300	5000	-
5/6/1991	1,740	430	11	0.168	-	<0.3	<0.3	<0.3	<0.9	-	-	3600	3500	300	3800	-
5/13/1991	1,880	570	20	0.223	-	<0.3	<0.3	<0.3	<0.9	-	-	3300	3200	230	3900	-
5/20/1991	2,010	700	19	0.274	-	<0.3	<0.3	<0.3	<0.9	-	-	3300	3400	260	5100	-
5/28/1991	2,050	740	5	0.290	-	<0.3	<0.3	<0.3	<0.9	-	-	2900	3000	230	4200	-
6/3/1991	2,110	800	10	0.313	-	<0.3	<0.3	<0.3	<0.9	-	-	2500	2100	110	2800	-
6/10/1991	2,160	850	7	0.333	-	<0.3	<0.3	<0.3	<0.9	-	-	1800	1700	120	2100	-
6/17/1991	2,219	909	8	0.356	-	<0.3	<0.3	<0.3	<0.9	-	-	2100	1900	170	2700	-
6/24/1991	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	-	-	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	-	-	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	-	-	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	-	-	3,400	1,900	300	6,300	-
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	1.6	<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	-

**TABLE 3**  
**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
06/01/92	28,330	27,020	-	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	<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	5,900	-
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	78	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	-	-	3,600	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	1.1	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	-
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	-

**TABLE 3**  
**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	
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	1.3	<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	244,064	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	-	-	-	-	-	-	-	-	-	-	-	-	
07/20/98	334,382	244,986	-	44,720	<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	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	<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	No reading, meter broken	-	-	-	-	-	-	-	-	-	-	-	
12/24/98	-	280,056	-	54,633	Replaced Flowmeter started at 0	-	-	-	-	-	-	-	-	-	-	-	
01/15/99	0	280,056	-	54,633	Replaced Flowmeter started at 0	-	-	-	-	-	-	-	-	-	-	-	
01/21/99	986	281,042	164	54,636	57	<0.3	<0.3	<0.3	<0.3	0.76	-	380	6.2	1	<0.3	9.1	-
02/12/99	1,971	282,027	45	54,639	-	-	-	-	-	-	-	-	-	-	-	-	
03/12/99	4,390	284,446	86	54,647	-	-	-	-	-	-	-	-	-	-	-	-	

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 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
04/15/99	8,595	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	289,466	43	54,663	-	-	-	-	-	-	-	-	-	-	-	-
05/18/99	9,410	289,466	-	54,663	Shut down system for pump controller repair by manufacturer						-	-	-	-	-	-
09/20/99	9,411	289,467	0	54,663	Restart the system						-	-	-	-	-	-
09/24/99	9,412	289,468	0	54,663	-	-	-	-	-	-	-	-	-	-	-	-
10/13/99	9,510	289,566	5	54,665	<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	9,702	289,758	6	54,676	-	-	-	-	-	-	-	-	-	-	-	-
12/17/99	9,894	289,950	5	54,685	-	-	-	-	-	-	-	-	-	-	-	-
01/20/00	10,052	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	10,157	290,213	4	54,698	-	-	-	-	-	-	-	-	-	-	-	-
03/13/00	10,355	290,411	8	54,708	-	-	-	-	-	-	-	-	-	-	-	-
04/05/00	10,546	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	11,072	291,128	12	55,419	Shut down system for carbon drum replacement						-	-	-	-	-	-
06/05/00	11,075	291,131	0	55,419	Restart the system						-	-	-	-	-	-
06/14/00	11,132	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	291,418	10	55,703	Shut down system for carbon replacement						-	-	-	-	-	-
07/17/00	0	291,418	-	55,703	Restart the system after carbon change, repipe and flowmeter change (starting at 0 0)						-	-	-	-	-	-
07/24/00	411	291,829	59	55,907	<50	<0.3	<0.3	<0.3	<0.6	<6	205	<0.3	1	<0.3	<0.6	*99 / 104
08/21/00	8,193	299,611	278	55,920	-	-	-	-	-	-	-	-	-	-	-	-
09/18/00	27,251	318,669	681	55,953	-	-	-	-	-	-	-	-	-	-	-	-
10/18/00	54,280	345,698	901	96,155	<50	<0.18	<0.14	<0.18	<0.26	<0.24	357,000	2,380	2,960	1,290	6,850	9,630
10/30/00	64,610	356,028	861	126,867	-	-	-	-	-	-	-	-	-	-	-	-
11/27/00	79,870	371,288	545	172,235	-	-	-	-	-	-	-	-	-	-	-	-
12/22/00	99,240	390,658	775	229,823	-	-	-	-	-	-	-	-	-	-	-	-
01/17/01	101,250	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	435,538	1,159	241,836	-	-	-	-	-	-	-	-	-	-	-	-
03/30/01	195,400	486,818	1,465	252,385	-	-	-	-	-	-	-	-	-	-	-	-
04/06/01	199,090	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	498,468	569	255,172	88	<0.18	<0.14	<0.18	<0.26	<0.24	36,500	855	716	659	1,570	11,400
04/27/01	210,640	502,058	513	256,263	System shut down for repair/replacement of compressor's pressure switch and exhaust valve						-	-	-	-	-	-
04/30/01	210,640	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	502,058	-	256,263	Replaced pressure switch on 5/7/01, system still off for carbon replacement						-	-	-	-	-	-
05/21/01	210,640	502,058	-	256,263	Restart the system						-	-	-	-	-	-
05/30/01	226,830	518,248	1,799	263,289	<50	<0.18	<0.14	<0.18	<0.25	<0.24	96,600	4,980	1,660	2,770	11,300	*53,600 / 41,600
06/29/01	267,230	558,648	1,347	295,790	-	-	-	-	-	-	-	-	-	-	-	-
07/11/01	310,010	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	732,688	3,548	518,940	-	-	-	-	-	-	-	-	-	-	-	-
09/28/01	498,310	789,728	1,358	595,994	-	-	-	-	-	-	-	-	-	-	-	-
10/03/01	503,930	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	956,118	4,019	642,733	-	-	-	-	-	-	-	-	-	-	-	-
12/28/01	706,300	997,718	904	653,680	-	-	-	-	-	-	-	-	-	-	-	-
01/11/02	721,050	1,012,468	1,054	657,562	System shut down for carbon replacement						-	-	-	-	-	-
01/21/02	721,050	1,012,468	-	657,562	Restart the system						-	-	-	-	-	-

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 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
02/01/02	731,320	1,022,738	934	658 963	<100	<0.3	<0.3	<0.3	<0.6	<5	1,172	1	1	1	5	<5
02/22/02	751,340	1,042,758	953	659 159	-	-	-	-	-	-	-	-	-	-	-	-
03/27/02	813,240	1,104,658	1,876	659 763	-	-	-	-	-	-	-	-	-	-	-	-
04/12/02	835,170	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	1,210,088	5,964	669 389	System shut down	-	-	-	-	-	-	-	-	-	-	-
05/10/02	918,680	1,210,098	1	669 390	Restart	-	-	-	-	-	-	-	-	-	-	-
05/17/02	928,670	1,220,088	1,427	670 397	-	-	-	-	-	-	-	-	-	-	-	-
06/03/02	-	-	-	-	<50	<0.18	<0.14	<0.18	<0.26	<0.24	Split-sample results during EBMUD inspection & sampling					
06/07/02	971,240	1,262,658	2,027	674 686	-	-	-	-	-	-	-	-	-	-	-	-
06/28/02	1,012,150	1,303,568	1,948	678,809	-	-	-	-	-	-	-	-	-	-	-	-
07/15/02	1,045,670	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	1,343,798	419	682 569	System shut down for carbon replacement	-	-	-	-	-	-	-	-	-	-	-
08/16/02	1,052,390	1,343,808	1	682 569	Restart	-	-	-	-	-	-	-	-	-	-	-
08/30/02	1,057,310	1,348,728	351	683 004	-	-	-	-	-	-	-	-	-	-	-	-
09/20/02	1,061,730	1,353,148	210	683 394	<50	<0.1	<0.15	<0.06	-	-	Split-sample results during EBMUD inspection & sampling					
09/27/02	1,064,020	1,355,438	327	683 596	-	-	-	-	-	-	-	-	-	-	-	-
10/04/02	1,069,130	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	1,373,918	637	684 289	-	-	-	-	-	-	-	-	-	-	-	-
11/29/02	1,108,680	1,400,098	748	685,270	-	-	-	-	-	-	-	-	-	-	-	-
12/27/02	1,123,890	1,415,308	543	685,840	-	-	-	-	-	-	-	-	-	-	-	-
01/03/03	1,128,910	1,420,328	717	686 028	System shut down for carbon replacement	-	-	-	-	-	-	-	-	-	-	-
01/10/03	1,128,970	1,420,388	9	686 030	Restart	-	-	-	-	-	-	-	-	-	-	-
01/17/03	1,132,560	1,423,978	513	686 999	<50	<0.14	<0.07	<0.08	1 1	<2.0	32,400	11	64	<0.8	6,050	706
01/31/03	1,143,290	1,434,708	766	689 460	<15	<0.04	0.58	<0.02	1 1	<0.03	22,700	14	34	18	5,160	550
02/14/03	1,153,670	1,445,088	741	691 423	System shut down for carbon replacement	-	-	-	-	-	-	-	-	-	-	-
04/04/03	1,153,670	1,445,088	-	691 423	System kept off and dismantled for upgrade	-	-	-	-	-	-	-	-	-	-	-
06/18/04	0 0	1,445,088	-	691 423	Startup of upgraded system	-	-	-	-	-	-	-	-	-	-	-
06/21/04	2,322 2	1,447,410	774	691 945	-	<0.22	<0.32	<0.31	<0.4	-	-	-	-	-	-	-
06/23/04	3,361 0	1,448,449	519	692 178	-	<0.14	<0.16	<0.18	<0.45	-	-	-	-	-	-	-
06/25/04	4,398 0	1,449,486	519	692 412	-	<0.14	<0.16	<0.18	<0.45	-	-	-	-	-	-	-
07/01/04	6,395 7	1,451,484	333	692 861	-	-	-	-	-	-	-	-	-	-	-	-
07/09/04	8,606 5	1,453,695	276	693 358	-	-	-	-	-	-	-	-	-	-	-	-
07/19/04	11,130 0	1,456,218	252	693 925	-	-	-	-	-	-	-	-	-	-	-	-
07/29/04	11,346 0	1,456,434	22	693 974	-	-	-	-	-	-	27,000	201	247	<0.18	2,060	11,300
08/09/04	12,511 0	1,457,599	106	694,236	-	-	-	-	-	-	-	-	-	-	-	-
08/30/04	19,294 0	1,464,382	323	695 761	-	-	-	-	-	-	24,100	221	151	74	3,100	11,800
09/03/04	20,211 0	1,465,299	229	695 936	-	<0.14	<0.16	<0.18	<0.45	-	18,900	280	290	27	3,600	9,810
09/21/04	24,766 0	1,469,854	253	696 653	-	-	-	-	-	-	-	-	-	-	-	-
10/07/04	28,244 9	1,473,333	217	697 276	-	<0.14	<0.16	<0.18	<0.45	-	-	-	-	-	-	-
10/18/04	28,285 1	1,473,376	4	697 285	-	<0.14	<0.16	<0.18	<0.45	-	-	-	-	-	-	-
10/21/04	28,463 5	1,473,552	58	697 320	-	-	-	-	-	-	-	-	-	-	-	-
10/28/04	34,435 8	1,479,524	853	698 519	-	-	-	-	-	-	-	-	-	-	-	-

Split-sample results during EBMUD inspection & sampling

**TABLE 3**  
**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
11/02/04	37,200 4	1,482,288	553	699,074	-	-	-	-	-	-	-	-	-	-	-	-
11/09/04	39,902 6	1,484,991	386	699,677	-	-	-	-	-	-	29,500	564	628	173	4,550	11,800
11/17/04	43,165.9	1,488,254	408	700,478	-	-	-	-	-	-	-	-	-	-	-	-
11/22/04	43,760 3	1,488,848	119	700,624	-	-	-	-	-	-	-	-	-	-	-	-
12/03/04	43,827.9	1,488,916	6	700,641	-	-	-	-	-	-	-	-	-	-	-	-
12/09/04	43,862.7	1,488,951	6	700,650	-	-	-	-	-	-	-	-	-	-	-	-
12/17/04	44,034 6	1,489,123	21	700,692	-	-	-	-	-	-	-	-	-	-	-	-
12/23/04	45,408.0	1,490,496	229	700,993	-	<0.14	<0.16	<0.18	1.2	-	23,200	473	256	488	2,100	6,080
12/23/04	47,405 4	1,492,493	333	701,379	-	-	-	-	-	-	-	-	-	-	-	-
01/07/05	54,048 5	1,499,137	738	702,663	-	-	-	-	-	-	-	-	-	-	-	-
01/12/05	56,143.5	1,501,232	419	703,067	EMC took over operation and maintenance of system						-	-	-	-	-	-
01/14/05	56,307 2	1,501,395	82	703,099	Carbon change						-	-	-	-	-	-
01/19/05	56,307.2	1,501,395	-	703,099	Restarted after carbon change						-	-	-	-	-	-
01/27/05	57,610 1	1,502,698	163	703,251	<15	<0.14	1.1	<0.18	<0.45	-	4,850	189	205	255	1,450	966
02/03/05	63,253.1	1,508,341	806	703,479	-	-	-	-	-	-	-	-	-	-	-	-
02/11/05	65,739 0	1,510,827	311	703,579	-	-	-	-	-	-	-	-	-	-	-	-
02/18/05	67,326.3	1,512,414	227	703,644	-	-	-	-	-	-	-	-	-	-	-	-
02/24/05	67,392 1	1,512,480	11	703,646	-	-	-	-	-	-	-	-	-	-	-	-
03/09/05	67,984 2	1,513,072	46	703,670	-	-	-	-	-	-	-	-	-	-	-	-
03/17/05	69,219.3	1,514,307	154	703,720	-	-	-	-	-	-	-	-	-	-	-	-
03/23/05	70,454 2	1,515,542	206	703,770	-	-	-	-	-	-	-	-	-	-	-	-

**WD PERMIT LIMITS:**

NE	5.0	5.0	5.0	5.0	NE
----	-----	-----	-----	-----	----

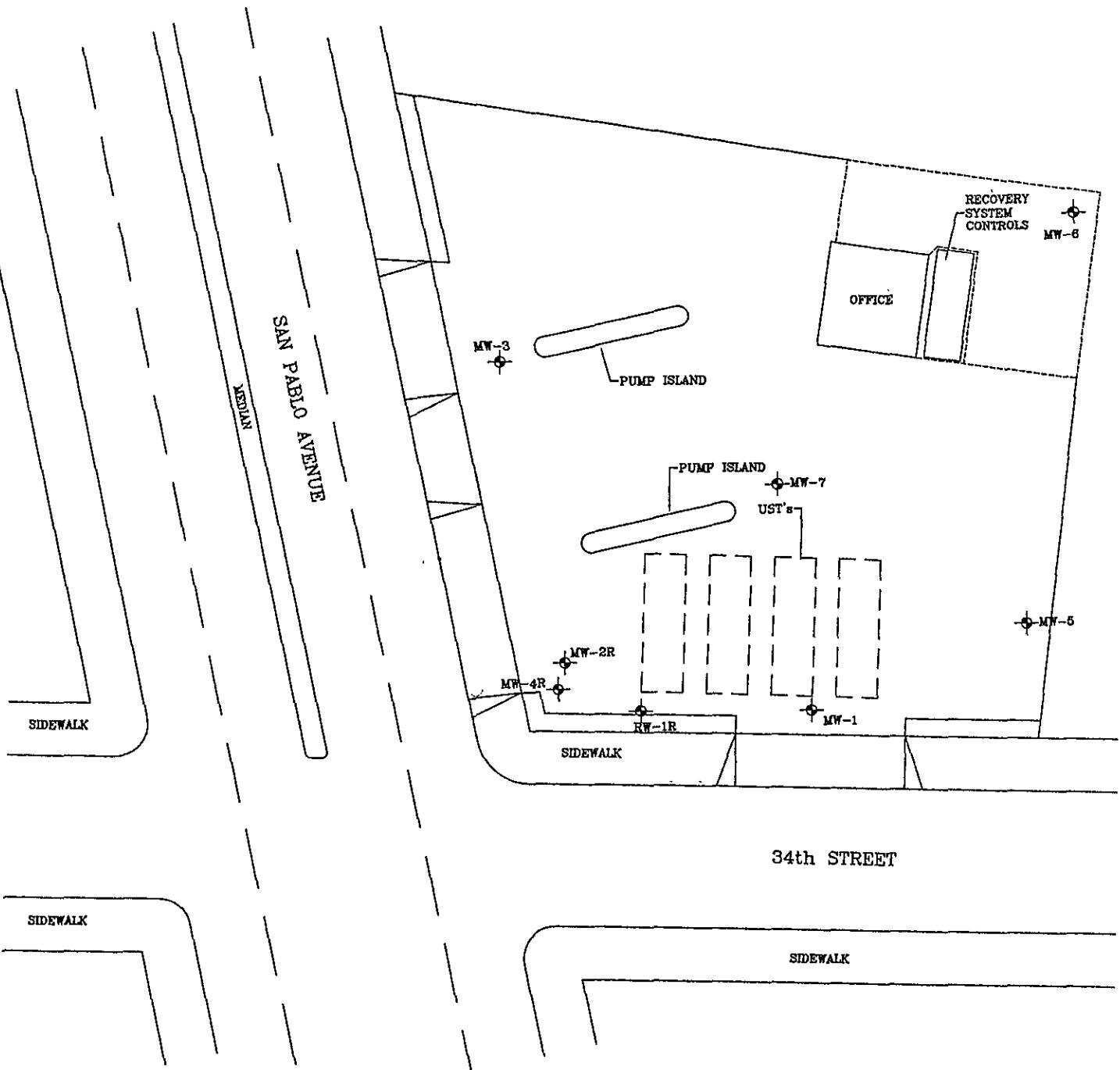
TPH is analyzed by EPA Method 8015 M

BTEX is analyzed by EPA Method 602/8020 or 8021

\*MTBE 8021/8260

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***



#### LEGEND

MW-4R - RECOVERY WELL LOCATION

MW-1 - MONITORING WELL LOCATION

## SITE PLAN

THRIFTY OIL #049  
3400 SAN PABLO AVE  
OAKLAND, CALIFORNIA

FIGURE:

1

N

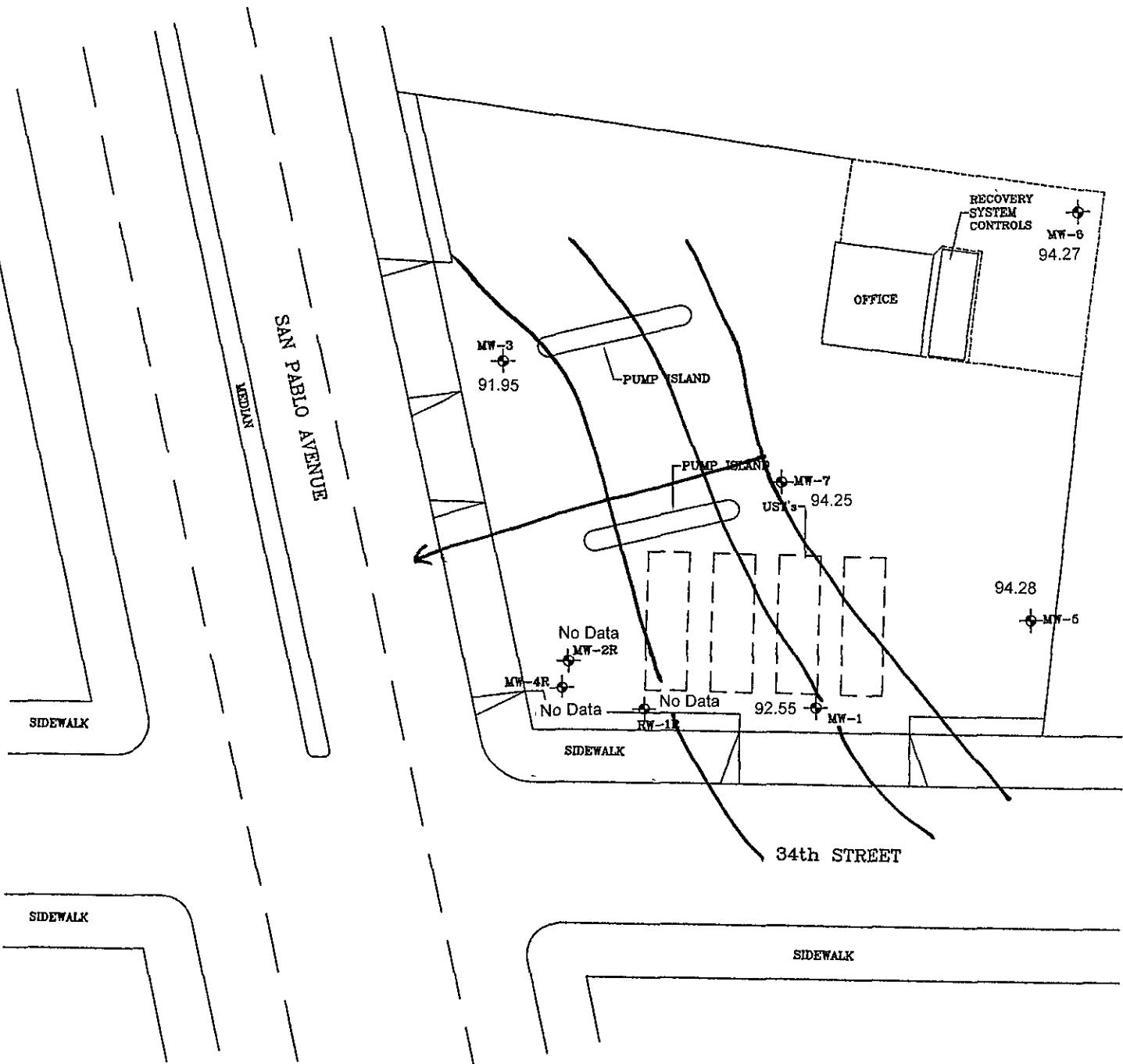
SCALE

30

0

60

FEET



#### LEGEND

MW-4R -○- RECOVERY WELL LOCATION

MW-1 -○- MONITORING WELL LOCATION

Data Collected 1/19/2005

Datum is Mean Sea Level

## GROUNDWATER CONTOURS

THRIFTY OIL #049  
3400 SAN PABLO AVE  
OAKLAND, CALIFORNIA

FIGURE:

2

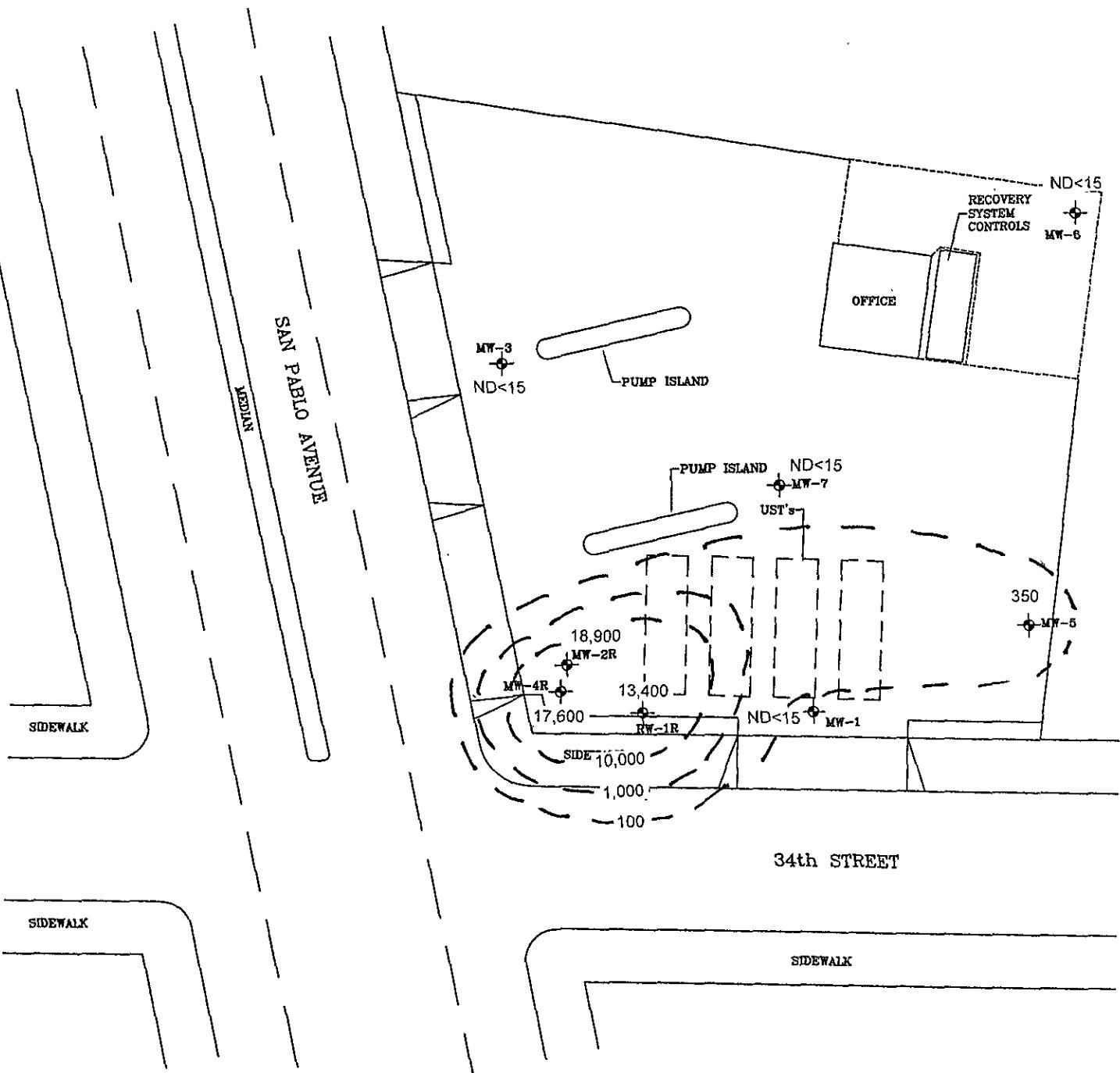
N

SCALE

30

60

FEET



## TPHg in GROUNDWATER

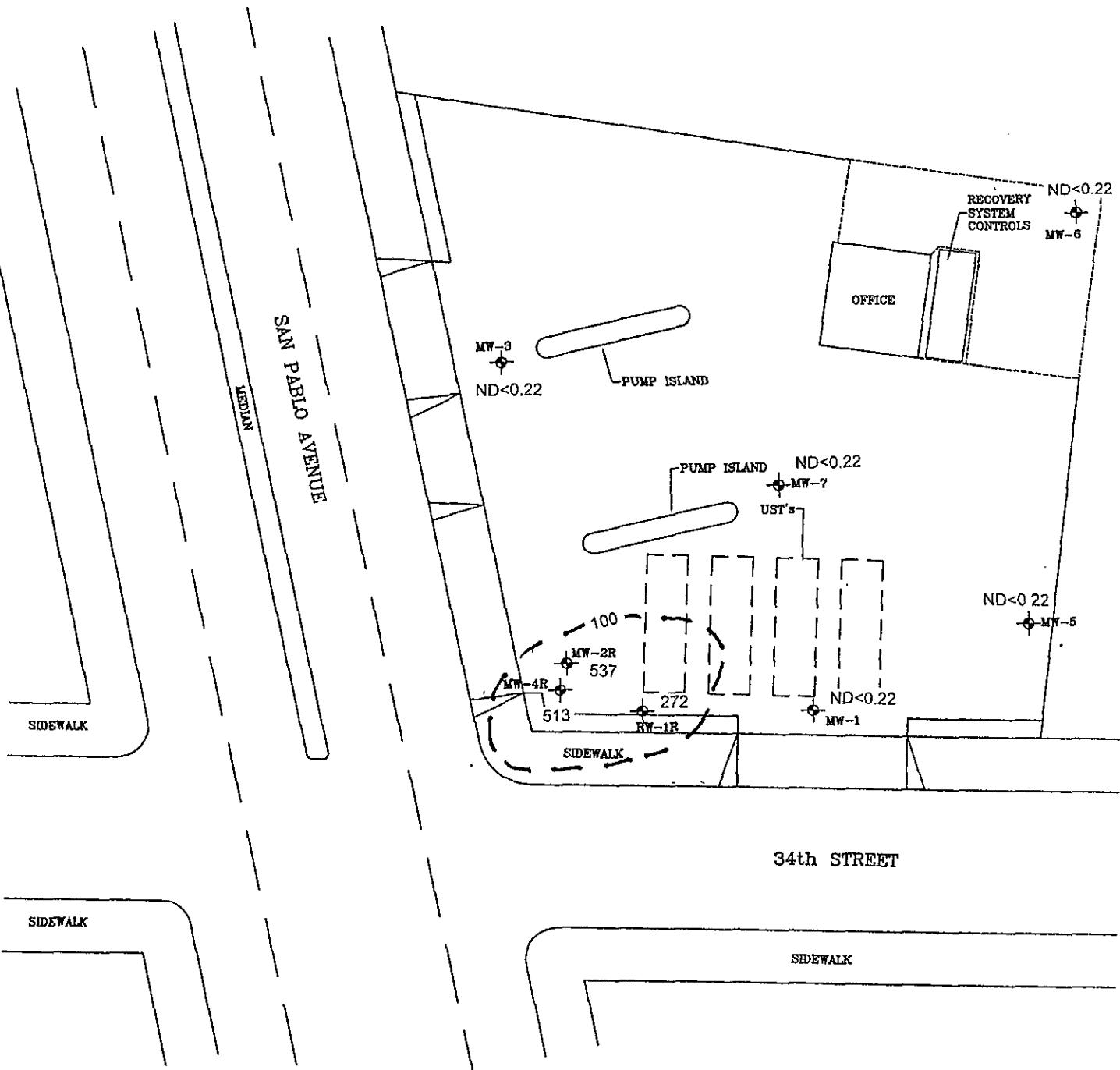
THRIFTY OIL #049  
3400 SAN PABLO AVE  
OAKLAND, CALIFORNIA

FIGURE:

3

N

SCALE  
0 30 60  
FEET



#### LEGEND

MW-4R - RECOVERY WELL LOCATION

MW-1 - MONITORING WELL LOCATION

Samples Collected 1/19/2005

Results in ug/L

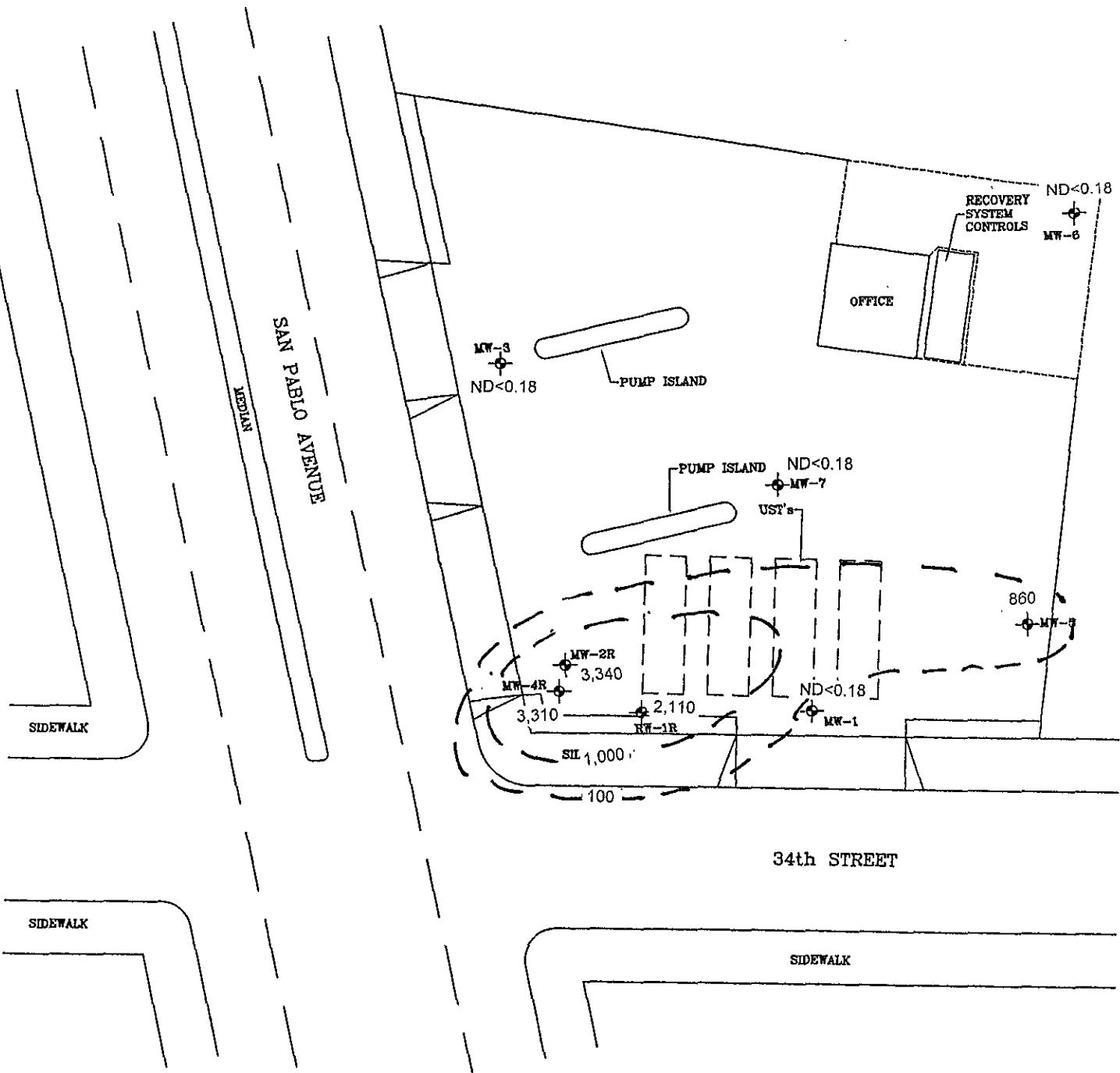
Benzene in GROUNDWATER  
THRIFTY OIL #049  
3400 SAN PABLO AVE  
OAKLAND, CALIFORNIA

FIGURE:

4

N

0 30 60  
SCALE FEET



#### LEGEND

MW-4R - RECOVERY WELL LOCATION

MW-1 - MONITORING WELL LOCATION

Samples Collected 1/19/2005

Results in ug/L

## MTBE in GROUNDWATER

THRIFTY OIL #049  
3400 SAN PABLO AVE  
OAKLAND, CALIFORNIA

FIGURE:

5

N

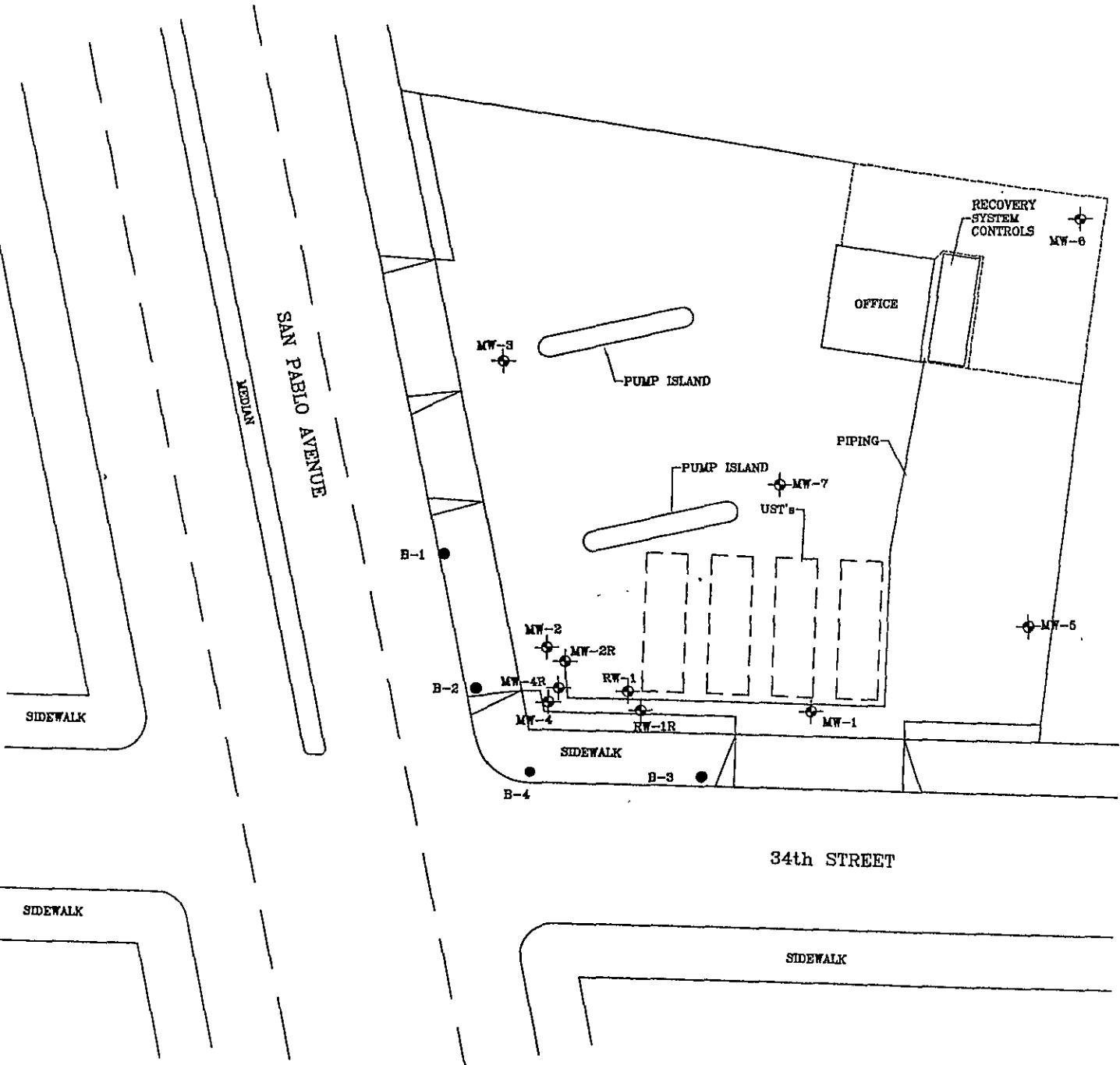
SCALE

30

0

60

FEET



LEGEND

- RECOVERY SYSTEM PIPING
- MW-4R • RECOVERY WELL LOCATION
- MW-1 • MONITORING WELL LOCATION
- SB-1 ● SOIL BORING LOCATION
- MW-4 • ABANDONED MONITORING WELL LOCATION

0 SCALE  
30 FEET

REMEDIATION SYSTEM LAYOUT

Thrifty Oil #49  
3400 San Pablo Avenue  
Oakland, California



*Advanced*  
GeoEnvironmental, Inc.

PROJECT NO. AGE-NC-03-1049

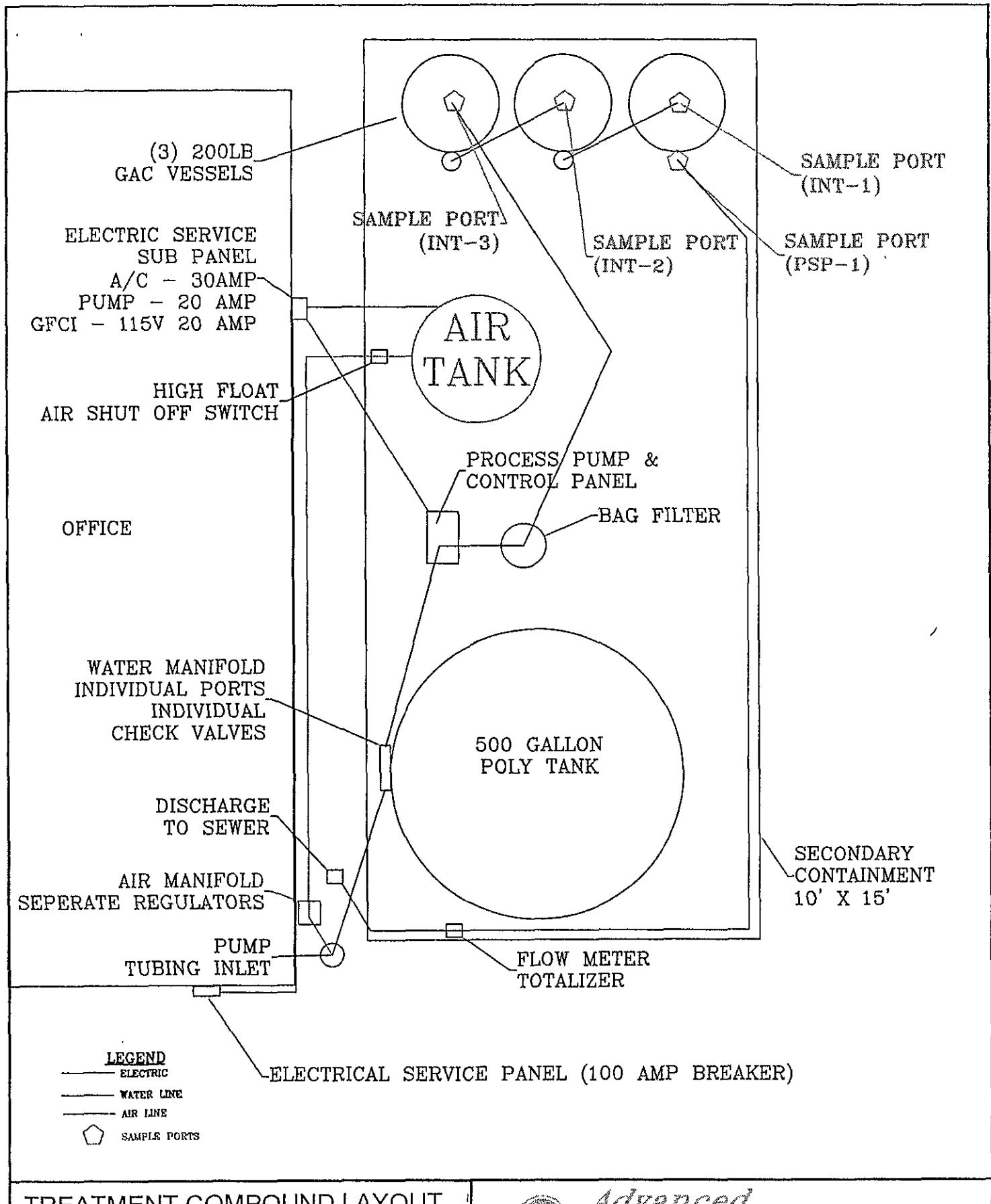
FILE: Thrifty49-2

DATE: 19 April 2004

FIGURE:

6

DRAWN BY: CRM



TREATMENT COMPOUND LAYOUT  
THRIFTY OIL STATION #049  
3400 SAN PABLO AVENUE  
OAKLAND, CALIFORNIA



*Advanced*  
GeoEnvironmental, Inc.

PROJECT NO. AGE-NC-03-1049

FILE: Thrifty49-6

DATE: 26 MAY 2004

DRAWN BY: MAC

FIGURE:

## ***APPENDIX A***



**EARTH MANAGEMENT CO.**

Environmental Remediation

## **PROJECT STATUS REPORT**

SITE: **THRIFTY OIL CO.** #049  
ADDRESS: 3400 SAN PABLO AVE.  
OAKLAND, CA.94612

DATE: 01-19-05

PERSONNEL: SERRAH

---

***EXPLANATION:***

---

REV: 6/30/2004

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:	2049	Date:	01-19-05
Address:			
Personnel:	SERBAN	Weather:	SUNNY DAY
Well No:	MW-1	Equip:	BAPIER

**Before Purging:**

Total Well Depth (ft)	17.73	Well Diameter	2"
Depth to Water (ft)	5.48	Est. Perc. Volume:	8

**Sampling Data:**

**Initial Turbidity:**

Time	10:28	10:31	10:34	10:37	10:40		
EC	1290	1310	1340	1320	1320		
pH	6.04	5.83	6.81	5.63	5.61		
Temp	71.2	70.9	71.1	71.3	71.5		
Gal.	1	3	4	6	8		

**Final Turbidity:**

Time							
EC							
pH							
Temp							
Gal.							

**After Purging/Before Sample Collection**

Depth to Water (ft)	4.24	Total Well Depth (ft)	17.73
---------------------	------	-----------------------	-------

**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	#049	Date:	01-19-05
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW-2R	Equip:	BAPIVER

**Before Purging:**

Total Well Depth: (ft)	16.74	Well Diameter	44
Depth to Water (ft)	4.50	Est. Purge Volume:	32

**Sampling Data:**

**Initial Turbidity:**

**Final Turbidity:**

Time	11:44	11:52	12:00	12:04	12:15		
EC	1440	1480	1500	1530	1510		
pH	6.04	6.93	6.91	5.94	6.91		
Temp	71.3	71.6	71.4	71.2	71.2		
Gal.	6	12	19	26	32		

Time							
EC							
pH							
Temp							
Gal.							

**After Purging/Before Sample Collection**

Depth to Water (ft)	6.11	Total Well Depth (ft)	16.74
---------------------	------	-----------------------	-------

**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	# 049	Date:	01-19-08
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW-3	Equip:	BAPIER

**Before Purging:**

Total Well Depth: (ft)	24.13	Well Diameter	24
Depth to Water (ft)	5.74	Est. Purge Volume:	12

**Sampling Data:**

**Initial Turbidity:**

Time	11:17	11:20	11:23	11:26	11:30		
EC	1590	1610	1630	1640	1620		
pH	5.87	6.07	5.97	5.83	5.81		
Temp	73.1	72.4	72.4	72.2	71.9		
Gal.	2	4	4	9	12		

**Final Turbidity:**

Time							
EC							
pH							
Temp							
Gal.							

**After Purging/Before Sample Collection**

Depth to Water (ft)	7.20	Total Well Depth(ft)	24.13
---------------------	------	----------------------	-------

**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	EL 049	Date:	01-19-05
Address:			
Personnel:	SERBAN	Weather:	SUNNY DAY
Well No:	MW-4R	Equip:	BAPIER

<u>Before Purging:</u>			
Total Well Depth: (ft)	19.62	Well Diameter	4"
Depth to Water (ft)	4.32	Est. Porec Volume:	40

<u>Sampling Data:</u>					
Initial Turbidity:			Final Turbidity:		
Time	12:24	12:33	12:42	12:51	13:00
EC	1560	1480	1460	1440	1460
pH	5.83	5.92	5.87	5.94	6.87
Temp	71.1	71.5	71.3	71.1	71.1
Gal.	8	16	24	32	40
Time					
EC					
pH					
Temp					
Gal.					

<u>After Purging/Before Sample Collection</u>	
Depth to Water (ft)	5.73
Total Well Depth(ft)	19.62

**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	# 049	Date:	01-19-05
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW-5	Equip:	BAILER

**Before Purging:**

Total Well Depth (ft)	13.77	Well Diameter	2"
Depth to Water (ft)	4.57	Est. Perce Volume:	6

**Sampling Data:**

**Initial Turbidity:**

Time	10:08	10:11	10:14	10:17	10:20		
EC	1680	1650	1630	1620	1630		
pH	6.92	6.04	6.01	5.83	5.81		
Temp	71.4	71.6	71.3	71.1	71.2		
Gal.	1	2	3	4	6		

**Final Turbidity:**

Time							
EC							
pH							
Temp							
Gal.							

**After Purging/Before Sample Collection**

Depth to Water (ft)	6.11	Total Well Depth (ft)	13.77
---------------------	------	-----------------------	-------

**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	2049	Date:	01-19-05
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW-6	Equip:	BAILER

**Before Purging:**

Total Well Depth: (ft)	13.06	Well Diameter	2"
Depth to Water (ft)	6.40	Est. Perc Volume:	5

**Sampling Data:**

**Initial Turbidity:**

Time	9:52	9:54	9:56	9:58	10:00		
EC	1340	1310	1290	1310	1310		
pH	6.04	5.97	5.93	5.91	5.93		
Temp	71.4	71.2	70.9	70.7	70.7		
Gal.	1	2	3	4	5		

**Final Turbidity:**

Time							
EC							
pH							
Temp							
Gal.							

**After Purging/Before Sample Collection**

Depth to Water (ft)	7.20	Total Well Depth (ft)	13.06
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**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	H 019	Date:	01-19-05
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW-7	Equip:	BARRIER

**Before Purging:**

Total Well Depth: (ft)	13.56	Well Diameter	4"
Depth to Water (ft)	4.74	Est. Purge Volume:	23

**Sampling Data:**

**Initial Turbidity:**

Time	10:46	10:52	10:58	11:04	11:10		
EC	1670	1640	1620	1630	1620		
pH	5.83	5.94	5.96	6.04	6.01		
Temp	72.3	71.9	71.7	71.8	71.6		
Gal.	4	9	13	18	23		

Time							
EC							
pH							
Temp							
Gal.							

**After Purging/Before Sample Collection**

Depth to Water (ft)	7.04	Total Well Depth (ft)	13.56
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**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

IC:	EL 049	Date:	01-19-05
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	RW-1R	Equip:	BATISTER

**Before Purging:**

Total Well Depth (ft.)	19.07	Well Diameter	4"
Depth to Water (ft)	4.54	Est. Puree Volume:	38

**Sampling Data:**

**Initial Turbidity:**

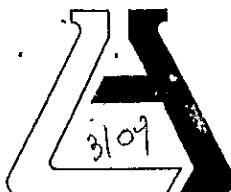
Time	13:13	13:21	13:29	13:37	13:45	
EC	1320	1310	1340	1320	1310	
pH	6.03	6.01	5.87	5.82	5.80	
Temp	71.4	71.6	71.4	71.2	71.2	
Gal.	8	16	22	30	38	

Time						
EC						
pH						
Temp						
Gal.						

**After Purging/Before Sample Collection**

Depth to Water (ft.)	6.14	Total Well Depth (ft.)	19.07
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## ***APPENDIX B***



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

FAX 714/538-1209

CLIENT Thrifty Oil Company (8871)

ATTN: Jeff Suryakusuma  
13116 Imperial Hwy.  
P.O. Box 2128  
Santa Fe Springs, CA 90670

LAB REQUEST 143917 ✓

REPORTED 01/25/2005

RECEIVED 01/20/2005

PROJECT Station #049  
3400 San Pablo Ave., 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.

Order No.	Client Sample Identification
589598	TOC #049 MW-6
589599	TOC #049 MW-5
589600	TOC #049 MW-1
589601	TOC #049 MW-7
589602	TOC #049 MW-3
589603	TOC #049 MW-2R
589604	TOC #049 MW-4R
589605	TOC #049 RW-1R
589606	TOC #049 Trip Blank
589607	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 #: 589598  
Matrix: WATER

Client Sample ID: TOC #049 MW-6  
Date Sampled: 01/19/2005 Time Sampled: 13:50

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/22/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/22/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	106			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	113			%	70 - 130	
Surr3 - Toluene-d8	104			%	70 - 130	
Surr4 - p-Bromofluorobenzene	102			%	70 - 130	
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/21/05 LZ
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	83			%	55 - 200	

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



Order #: 589599  
Matrix: WATER

Client Sample ID: TOC #049 MW-5  
Date Sampled: 01/19/2005 Time Sampled: 14:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/24/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/24/05 LB
Methyl-tert-butylether (MTBE)	860	10	10.0	0.18	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/24/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/24/05 LB
<b>Surrogates</b>						<b>Units</b>
Surr1 - Dibromofluoromethane	105				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	108				%	70 - 130
Surr3 - Toluene-d8	102				%	70 - 130
Surr4 - p-Bromofluorobenzene	102				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	350	1	50	15	ug/L	01/21/05 LZ
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	92				%	55 - 200

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



Order #: 589600  
Matrix: WATER

Client Sample ID: TOC #049 MW-1  
Date Sampled: 01/19/2005 Time Sampled: 14:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/22/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/22/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	104			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	111			%	70 - 130	
Surr3 - Toluene-d8	103			%	70 - 130	
Surr4 - p-Bromofluorobenzene	101			%	70 - 130	
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/21/05 LZ
<b>Surrogates</b>						
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



Order #: 589601  
Matrix: WATER

Client Sample ID: TOC #049 MW-7  
Date Sampled: 01/19/2005 Time Sampled: 14:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/22/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/22/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						<b>Units</b>
Surr1 - Dibromofluoromethane	109				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	113				%	70 - 130
Surr3 - Toluene-d8	105				%	70 - 130
Surr4 - p-Bromofluorobenzene	102				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/21/05 LZ
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	68				%	55 - 200

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



Order #: 589602  
Matrix: WATER

Client Sample ID: TOC #049 MW-3  
Date Sampled: 01/19/2005 Time Sampled: 14:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/22/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/22/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						<b>Units</b>
Surr1 - Dibromofluoromethane	103				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	111				%	70 - 130
Surr3 - Toluene-d8	105				%	70 - 130
Surr4 - p-Bromofluorobenzene	101				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/21/05 LZ
<b>Surrogates</b>						<b>Units</b>
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



Order #: 589603  
Matrix: WATER

Client Sample ID: TOC #049 MW-2R  
Date Sampled: 01/19/2005 Time Sampled: 14:35

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	537	10	10.0	0.22	ug/L	01/22/05 LB
Ethyl benzene	866	10	50.0	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	3340	10	10.0	0.18	ug/L	01/22/05 LB
Toluene	250	10	50.0	0.32	ug/L	01/22/05 LB
Xylenes, total	2290	10	50.0	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	102			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	94			%	70 - 130	
Surr3 - Toluene-d8	105			%	70 - 130	
Surr4 - p-Bromofluorobenzene	108			%	70 - 130	
<b>8015M - Gasoline</b>						
Gasoline	18900	5	250.0	15	ug/L	01/22/05 LZ
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	377			%	55 - 200	

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



Order #: 589604  
Matrix: WATER

Client Sample ID: TOC #049 MW-4R  
Date Sampled: 01/19/2005 Time Sampled: 15:05

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	513	10	10.0	0.22	ug/L	01/22/05 LB
Ethyl benzene	855	10	50.0	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	3310	10	10.0	0.18	ug/L	01/22/05 LB
Toluene	240	10	50.0	0.32	ug/L	01/22/05 LB
Xylenes, total	2230	10	50.0	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	104			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	94			%	70 - 130	
Surr3 - Toluene-d8	102			%	70 - 130	
Surr4 - p-Bromofluorobenzene	108			%	70 - 130	
<b>8015M - Gasoline</b>						
Gasoline	17600	10	500.0	15	ug/L	01/22/05 LZ
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	201			%	55 - 200	

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



Order #: 589605  
Matrix: WATER

Client Sample ID: TOC #049 RW-1R  
Date Sampled: 01/19/2005 Time Sampled: 15:45

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	272	10	10.0	0.22	ug/L	01/22/05 LB
Ethyl benzene	24 J	10	50.0	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	2110	10	10.0	0.18	ug/L	01/22/05 LB
Toluene	243	10	50.0	0.32	ug/L	01/22/05 LB
Xylenes, total	2230	10	50.0	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	105			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	96			%	70 - 130	
Surr3 - Toluene-d8	101			%	70 - 130	
Surr4 - p-Bromofluorobenzene	106			%	70 - 130	
<b>8015M - Gasoline</b>						
Gasoline	13400	20	1000.0	15	ug/L	01/21/05 LZ
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	117			%	55 - 200	

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



Order #: 589606  
Matrix: WATER

Client Sample ID: TOC #049 Trip Blank  
Date Sampled: 01/19/2005

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/22/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/22/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/22/05 LB
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/22/05 LZ
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	80			%		55 - 200

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



Order #: 589607

## Client Sample ID: Laboratory Method Blank

Matrix: WATER

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	01/22/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	01/22/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	01/22/05 LB
Toluene	ND	1	5	0.32	ug/L	01/22/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	01/22/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	106			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	114			%	70 - 130	
Surr3 - Toluene-d8	106			%	70 - 130	
Surr4 - p-Bromofluorobenzene	104			%	70 - 130	
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/22/05 LZ
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	79			%	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 - METHOD 8260 / 624 / 524.2**

QC Sample: MS / MSD - Water Samples 143933-665

Analysis Date: January 24, 2005 1:41 AM

Applies to: LR 143816, 143917, 143933, 143934

Reporting Units = ug/L

**Matrix Spike / Matrix Spike Duplicate**

Test	Sample Result	Spike Added	Matrix Spike	Matrix Spk Dup.	%Rec MS	%Rec MSD	RPD	QC Limits	
								RPD	%REC
1,1-Dichloroethene	ND	25	26.44	25.66	106	103	3	22	59-172
MTBE	ND	25	22.24	21.66	89	87	3	24	62-137
Benzene	5.56	25	32.14	29.80	106	97	8	24	62-137
Trichloroethene	ND	25	26.44	25.73	106	103	3	21	66-142
Toluene	1.20	25	29.66	28.57	114	109	4	21	59-139
Chlorobenzene	ND	25	27.86	27.86	111	111	0	21	60-133

QC Sample: LCS/LCSD 7:34 PM

Analysis Date: January 23, 2005

**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	49.40	49.87	99	100	1	22	59-172
MTBE	ND	50	49.04	48.10	98	96	2	24	62-137
Benzene	ND	50	50.28	49.87	101	100	1	24	62-137
Trichloroethene	ND	50	53.38	51.80	107	104	3	21	66-142
Toluene	ND	50	55.94	55.05	112	110	2	21	59-139
Chlorobenzene	ND	50	56.94	55.36	114	111	3	21	60-133
Gasoline	ND	1,000	827	831	83	83	0	20	NA

Method Blank = All ND

**SURROGATE ( QC Limits : 70-135 )**

Compound	MB 1	MB 2	MS	MSD	LCS	LCSD
DBFM	105	102	105	103	107	106
1,2-DCA	110	108	89	92	102	101
Tol-d8	104	103	102	100	99	98
p-BFB	103	104	102	104	103	101

**ASSOCIATED LABORATORIES**  
**QA REPORT FORM - METHOD 8260 / 624 / 524.2**

QC Sample: MS / MSD - Water Samples 143917-601  
 Analysis Date: January 22, 2005 1:33 PM  
 Applies to: LR 143917, 143341, 143812, 143814  
 Reporting Units = ug/L

**Matrix Spike / Matrix Spike Duplicate**

Test	Sample Result	Spike Added	Matrix Spike	Matrix Spk Dup.	%Rec MS	%Rec MSD	RPD	QC Limits	
								RPD	%REC
1,1-Dichloroethene	ND	50	53.24	49.33	106	99	8	22	59-172
MTBE	ND	50	46.70	44.15	93	88	6	24	62-137
Benzene	ND	50	48.58	44.59	97	89	9	24	62-137
Trichloroethene	ND	50	50.40	46.71	101	93	8	21	66-142
Toluene	ND	50	53.82	50.78	108	102	6	21	59-139
Chlorobenzene	ND	50	54.22	50.47	108	101	7	21	60-133

QC Sample: LCS/LCSD 8:57 AM  
 Analysis Date: January 22, 2005

**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	54.21	53.11	108	106	2	22	59-172
MTBE	ND	50	46.91	48.09	94	96	2	24	62-137
Benzene	ND	50	48.72	49.22	97	98	1	24	62-137
Trichloroethene	ND	50	51.99	51.83	104	104	0	21	66-142
Toluene	ND	50	53.07	54.68	106	109	3	21	59-139
Chlorobenzene	ND	50	53.03	54.10	106	108	2	21	60-133

Method Blank = All ND

**SURROGATE ( QC Limits : 70-135 )**

Compound	MB 3	MB 4	MS	MSD	LCS	LCSD
DBFM	103	106	104	106	105	106
1,2-DCA	111	114	98	101	101	101
Tol-d8	102	106	103	104	100	103
p-BFB	104	104	104	105	106	104

**ASSOCIATED LABORATORIES**  
**LCS REPORT FORM**

QC Sample: LCS/LCSD  
 Matrix: WATER  
 Prep. Date: January 21, 2005  
 Analysis Date: January 21 - 22, 2005  
 ID#'s in Batch: LR 143886, 143917, 143889

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Reporting Units = mg/L

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	487	508	97	102	4

*ND = Not Detected*

*LCS Result = Lab Control Sample Result*

*%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate*

*RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate*

**%REC LIMITS = 70 - 130**

**RPD LIMITS = 30**

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	79
LCS	132
LCSD	124

*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: QWS

Date Cooler Received: 1/20/05 Date Cooler Opened: 1/20/05

Was cooler scanned for presence of radioactivity ?

Yes/No

If yes was radioactivity results above 25 cpm ?

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 ✓ Ice Packs \_\_\_\_\_ Bubble wrap \_\_\_\_\_  
Styrofoam \_\_\_\_\_ Paper \_\_\_\_\_ None \_\_\_\_\_ Other \_\_\_\_\_

Cooler Temperature: 2.6°C \*

\*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: PR Date: 1/20

# Chain of Custody Record

## ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868

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



Company THIRTY OIL CO. Phone (562) 921-3581  
 Project Manager JEFF SURYAKUSUMA Fax (562) 921-7510  
 Project Name Q.W.S. Project # #049V  
 Site Name and Address 3400 SAN PABLO AVE  
OAKLAND, CA 94612

A.L. Job No.

143917

Page 1 of 1

### Analysis Requested

### Test Instructions & Comments

F-0600101365

Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	TPH (80/15W)	BTEX (82B0B)	MTBE (82B0B)
1 MW-6		01-19-05	13:50	H <sub>2</sub> O	3-VOA	HCL	X	X	X
2 MW-5			14:00			↑	X	X	X
3 MW-1			14:10				X	X	X
4 MW-7			14:20				X	X	X
5 MW-3			14:30				X	X	X
6 MW-2R			14:35				X	X	X
7 MW-4R			15:05				X	X	X
8 RW-1R			15:45			↓	X	X	X
9 TRIP BLANK			00:00		2-VOA	HCL	X	X	
10									
11									
12									
13									
14									
15									

### Sample Receipt - To Be Filled By Laboratory

Total Number of Containers 26 Properly Cooled Y / N / NA  
 Custody Seals Y / N / NA Samples Intact Y / N / NA  
 Received in Good Condition Y / N Samples Accepted Y / N

Relinquished by  
Sampler: E.M.C.

Signature: Elton

Printed Name: SERIAL NUMBER

Date: 01-19-05 Time: 17:30

Relinquished by  
2. GOLDEN STATE

Signature: OVERNIGHT

Printed Name: OVERNIGHT

Date:  Time:

Relinquished by  
3.

Signature:

Printed Name:

Date:  Time:

Received By: GOLDEN STATE

Signature: OVERNIGHT

Printed Name: OVERNIGHT

Date: 1/20/05 Time: 12:20

Received By:

Signature: DWY

Printed Name: DWY

Date: 1/20/05 Time: 3:40

### Turn Around Time

Normal  Rush  Same Day  48 hrs.  
 24 hrs.  72 hrs.

## ***APPENDIX C***

dhq

THRIFTY OIL CO. SERVICE STATION #049

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATH POPESCU

DATE OF INSPECTION: 03-23-05

OBSERVATIONS AND  
COMMENTS: CHARGE OIL IN COMPRESSOR, CLEAR

WATER FILTER BAG, CARTRIDGE PRESSURE REGULATOR,  
CARTRIDGE HOSES AND PIPED FOR LEAKS

FLOW METER READING: 70454.2

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER:

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT:

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT:

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT:

INSPECTOR'S SIGNATURE: D. H. Popescu

Oka

THRIFTY OIL CO. SERVICE STATION #049

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCU

DATE OF INSPECTION: 03-17-04

OBSERVATIONS AND  
COMMENTS: CHECK BELT, OIL, CLEANER WATER FILTER  
BAG, CHECK HOSES AND PIPE FOR LEAKS, ADJUST  
PRESSURE REGULATOR AT 60PSI, PICKUP TRASH FROM  
INSIDE CLOSURE,

FLOW METER READING: 69219.3

SAMPLES OBTAINED: 11A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER:

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT:

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT:

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT:

INSPECTOR'S SIGNATURE: R. M. Popescu

OK9

THRIFTY OIL CO. SERVICE STATION #049

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCU

DATE OF INSPECTION: 03-09-05

OBSERVATIONS AND  
COMMENTS: CHANGE OIL IN COMPRESSOR, CHECK HOSES

AND DRUMS FOR LEAKS, REPLACE ALL BOLTS FROM  
3 WELLS LIDS WITH SPECIAL HEAD BOLT,

CHANGE FILTER BAG,

FLOW METER READING: 67984.2

SAMPLES OBTAINED: 1/10

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER:

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT:

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT:

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT:

INSPECTOR'S SIGNATURE: D. Stoyan

049

THRIFTY OIL CO. SERVICE STATION #049

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN DODDUS

DATE OF INSPECTION: 02-24-05

OBSERVATIONS AND  
COMMENTS: CLEAN WATER BAG FILTER, CARTRIDGE HOSE

AND DRUMS FOR WASTE, SYSTEM WAS ONLY FOR FEW  
HOURS RUN, ?? SWING BREAKER WAS SHUT DOWN

FLOW METER READING: 67392.1

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: \_\_\_\_\_

INSPECTOR'S SIGNATURE: S. Stoyan

OK

THRIFTY OIL CO. SERVICE STATION #049

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERRA POPESCU

DATE OF INSPECTION: 02-18-05

OBSERVATIONS AND  
COMMENTS: CHECK SYSTEM FOR LEAK, CLEAN AND

FLUSH WITH WATER HOUSING FILTER, ADJUST  
PRESSURE IN FILTER REGULATOR,

FLOW METER READING: 67326.3

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: \_\_\_\_\_

INSPECTOR'S SIGNATURE: S. Popescu

OK9

THRIFTY OIL CO. SERVICE STATION #064

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBONI POPEAU

DATE OF INSPECTION: 02-11-05

OBSERVATIONS AND  
COMMENTS: CHANGE OIL IN COMPRESSOR, CLEAN IT

WATER FILTER BAG, CHECK HOSES AND DRUMS  
FOR LEAK, ADJUST PRESSURE REGULATOR (60 PSI)

FLOW METER READING: 65739.0

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: \_\_\_\_\_

INSPECTOR'S SIGNATURE: I. Stoen

THRIFTY OIL CO. SERVICE STATION #049

## GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCUDATE OF INSPECTION: 02-03-05OBSERVATIONS AND  
COMMENTS: CHANGED OIL IN COMPRESSOR, CLEANED WATERBAG FILTER, CLEAN INSIDE COMPOUND, CHECKED MASSESAND DRUMS FOR LEAK,FLOW METER READING: - 63253.1 -SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: \_\_\_\_\_

INSPECTOR'S SIGNATURE: S. Popescu

619

THRIFTY OIL CO. SERVICE STATION #049

GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAH DOPPER

DATE OF INSPECTION: 01-28-05

OBSERVATIONS AND  
COMMENTS:

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FLOW METER READING: - 57610.1 -

SAMPLES OBTAINED: MONTHLY WATER SAMPLING

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: \_\_\_\_\_

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: \_\_\_\_\_

INSPECTOR'S SIGNATURE: Elton



**EARTH MANAGEMENT CO.**  
Environmental Remediation

# SYSTEM STARTUP / SI TDOWN REPORT

SITE: #049  
 ADDR: 3400 SAN PABLO AVE  
 OAKLAND, CA 94612  
 DATE: 01-19-05  
 PERSON: SERBAN,

Remediation System Type:  AS  SVE  DPE  GWT  FPR  Other:

System Type	Action		Hour Meter (hrs)	Totalizer (gal)	Purpose / Comments
	Startup	Shutdown			
AS Air Sparging					
SVE Soil Vapor Extraction					
DPE Dual-Phase Extraction					
GWT Groundwater Treatment	✓			56307.2	
FPR PP Recovery					
O Other:					

#### UTILITIES:

Electrical Meter: N/A  
 Nat. gas Meter: N/A  
 Propane Tank Level: N/A

#### OTHER NOTES:

RESTART AFTER CARBON CHARGED, THIS GWT USED 2 PUMPS IN MW-4R AND RW-1R, THE WELLS ARE 4 INCH DIAMETER AND PUMPS PUSIT WATER IN SEPARATE LINES TO A TANK = 2000 POUNDS, FROM STORAGE TANK WATER GO THROUGH 3 ACTIVATED CARBON CANISTERS (55G.) AND THE EFFLUENT WATER WILL THEN BE DISCHARGED TO THE SANITARY SEWER.

**ALWAYS OBSERVE SAFETY PROCEDURES!**

049

- A) SS #: OHY SYSTEM TYPE:  
B) DEFICIENCY DESCRIPTION :  
**CARBON CHANGE**  
C) NAME OF REPORTING PARTY AND DATE:  
D) DATE SCHEDULED : 01-14-05

1) NAME: DATE/TIME  
2) FINDINGS:

3) HAS THE JOB BEEN COMPLETED? YES/NO  
IF "NO", PLEASE DESCRIBE WHY AND WHAT YOU NEED  
TO FINISH:

4) POST REPAIR TEST RESULTS:

5) THE CAUSE OF THE DEFICIENCY:

BRIEF INSTRUCTIONS FOR PREVENTIVE MAINTENANCE  
TO THE TECHNICIAN:

6) OTHER: REPLACE 3 CARBON DRUMS WITH 3 NEW  
ACTIVATED CARBON



# EARTH MANAGEMENT CO.

Environmental Remediation

## MAINTENANCE & REPAIR REPORT

(OK)

A) SS #: 049 SYSTEM TYPE:  
B) DEFICIENCY DESCRIPTION :

C) NAME OF REPORTING PARTY AND DATE:  
D) DATE SCHEDULED : 01-12-05

1) NAME: DATE/TIME  
2) FINDINGS:

3) HAS THE JOB BEEN COMPLETED? YES/NO  
IF "NO", PLEASE DESCRIBE WHY AND WHAT YOU NEED  
TO FINISH:

4) POST REPAIR TEST RESULTS:

5) THE CAUSE OF THE DEFICIENCY:

BRIEF INSTRUCTIONS FOR PREVENTIVE MAINTENANCE  
TO THE TECHNICIAN:

6) OTHER: TAKE OVER MAINTENANCE  
AND OPERATIONS AT THIS SITE.  
Hired PERMIT ??

## ***APPENDIX D***



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

FAX 714/538-1209

CLIENT Thrifty Oil Company (8871) LAB REQUEST 144370  
ATTN: Jeff Suryakusuma  
13116 Imperial Hwy.  
P.O. Box 2128  
Santa Fe Springs, CA 90670

REPORTED 02/07/2005  
RECEIVED 01/28/2005

PROJECT Station #049  
3400 San Pablo Ave., Oakland

SUBMITTER Client

COMMENTS Added TPH-Gasoline EPA 8015M to order #591817 on 2-18-05.

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>
591813	TOC #049 PSP-1 Outlet
591814	TOC #049 Int.-1
591815	TOC #049 Int.-2
591816	TOC #049 Int.-3
591817	TOC #049 Inlet
591818	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 #: 591813  
Matrix: WATER

Client Sample ID: TOC #049 PSP-1 Outlet  
Date Sampled: 01/27/2005 Time Sampled: 10:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX</b>						
Benzene	ND	1	0.3	0.14	ug/L	01/31/05 WL
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/31/05 WL
Toluene	1.1	1	0.3	0.16	ug/L	01/31/05 WL
Xylene (total)	ND	1	0.6	0.45	ug/L	01/31/05 WL
<b>Surrogates</b>						
Trifluorotoluene (sur)	ND			%		55 - 155
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/31/05 WL
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	93			%		55 - 200

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



Order #: 591814  
Matrix: WATER

Client Sample ID: TOC #049 Int.-1  
Date Sampled: 01/27/2005 Time Sampled: 10:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	02/02/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	02/02/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	02/02/05 LB
Toluene	ND	1	5	0.32	ug/L	02/02/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	02/02/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	110			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	111			%	70 - 130	
Surr3 - Toluene-d8	106			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	

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



Order #: 591815  
Matrix: WATER

Client Sample ID: TOC #049 Int.-2  
Date Sampled: 01/27/2005 Time Sampled: 10:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	140	10	10.0	0.22	ug/L	02/02/05 LB
Ethyl benzene	158	10	50.0	0.31	ug/L	02/02/05 LB
Methyl-tert-butylether (MTBE)	753	10	10.0	0.18	ug/L	02/02/05 LB
Toluene	146	10	50.0	0.32	ug/L	02/02/05 LB
Xylenes, total	892	10	50.0	0.4	ug/L	02/02/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	107			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	107			%	70 - 130	
Surr3 - Toluene-d8	103			%	70 - 130	
Surr4 - p-Bromofluorobenzene	105			%	70 - 130	

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



Order #: 591816  
Matrix: WATER

Client Sample ID: TOC #049 Int.-3  
Date Sampled: 01/27/2005 Time Sampled: 10:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	190	10	10.0	0.22	ug/L	02/03/05 LB
Ethyl benzene	234	10	50.0	0.31	ug/L	02/03/05 LB
Methyl-tert-butylether (MTBE)	993	10	10.0	0.18	ug/L	02/03/05 LB
Toluene	198	10	50.0	0.32	ug/L	02/03/05 LB
Xylenes, total	1330	10	50.0	0.4	ug/L	02/03/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	108			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	107			%	70 - 130	
Surr3 - Toluene-d8	103			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	

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



Order #: 591817  
Matrix: WATER

Client Sample ID: TOC #049 Inlet  
Date Sampled: 01/27/2005 Time Sampled: 10:40

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	189	10	10.0	0.22	ug/L	02/03/05 LB
Ethyl benzene	255	10	50.0	0.31	ug/L	02/03/05 LB
Methyl-tert-butylether (MTBE)	966	10	10.0	0.18	ug/L	02/03/05 LB
Toluene	205	10	50.0	0.32	ug/L	02/03/05 LB
Xylenes, total	1450	10	50.0	0.4	ug/L	02/03/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	109				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	102				%	70 - 130
Surr3 - Toluene-d8	98				%	70 - 130
Surr4 - p-Bromofluorobenzene	107				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	4850	10	500.0	15	ug/L	02/19/05 WL
<b>Surrogates</b>						
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 #: 591818  
Matrix: WATER

Client Sample ID . Laboratory Method Blank

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX</b>						
Benzene	ND	1	0.3	0.14	ug/L	01/31/05 WL
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/31/05 WL
Toluene	ND	1	0.3	0.16	ug/L	01/31/05 WL
Xylene (total)	ND	1	0.6	0.45	ug/L	01/31/05 WL
<b>Surrogates</b>						
Trifluorotoluene (sur)	92			%		55 - 155
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.22	ug/L	02/02/05 LB
Ethyl benzene	ND	1	5	0.31	ug/L	02/02/05 LB
Methyl-tert-butylether (MTBE)	ND	1	1	0.18	ug/L	02/02/05 LB
Toluene	ND	1	5	0.32	ug/L	02/02/05 LB
Xylenes, total	ND	1	5	0.4	ug/L	02/02/05 LB
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	108			%		70 - 130
Surr2 - 1,2-Dichloroethane-d4	110			%		70 - 130
Surr3 - Toluene-d8	102			%		70 - 130
Surr4 - p-Bromofluorobenzene	107			%		70 - 130
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	15	ug/L	01/31/05 WL
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	92			%		55 - 200

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



**ASSOCIATED LABORATORIES**  
**LCS REPORT FORM**

QC Sample: LCS/LCSD

Matrix: WATER

Prep. Date: January 31, 2005

Analysis Date: January 31, 2005

LAB ID#'s in Batch: LR 144370

REPORTING UNITS = ug/L

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Test	Method	Sample Result	Spike Added	Matrix LCS	Matrix LCSD	%Rec LCS	%Rec LCSD	RPD
Benzene	8021	ND	20	20.6	20.8	103	104	1
Toluene	8021	ND	20	20.8	20.5	104	103	1
Ethylbenzene	8021	ND	20	20.6	20.9	103	105	1
Xylenes	8021	ND	60	59.4	60.3	99	101	2

ND = Not Detected

RPD = Relative Percent Difference of Matrix LCS and Matrix LCSD

%REC-LCS & LCSD = Percent Recovery of LCS & LCSD

%REC LIMITS = 70 - 130
------------------------

RPD LIMITS = 30
-----------------

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	92
LCS	105
LCSD	108

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

**ASSOCIATED LABORATORIES  
LCS REPORT FORM**

QC Sample: LCS/LCSD

Matrix: WATER

Prep. Date: February 18, 2005

Analysis Date: February 19, 2005

ID#'s in Batch: LR 145224, 144370, 145376, 145521

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Reporting Units = mg/L

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	486	554	97	111	13

ND = Not Detected

LCS Result = Lab Control Sample Result

%REC LIMITS = 70 - 130
------------------------

%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate

RPD LIMITS = 30
-----------------

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

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	93
LCS	181
LCSD	185

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

**ASSOCIATED LABORATORIES**  
**QA REPORT FORM - METHOD 8260 / 624 / 524.2**

QC Sample: MS / MSD - Water Samples 144370-814  
 Analysis Date: February 2, 2005 8:23 PM  
 Applies to: LR 144481, 144385, 144370, 144376, 144556, 144337  
 Reporting Units = ug/L

**Matrix Spike / Matrix Spike Duplicate**

Test	Sample Result	Spike Added	Matrix Spike	Matrix Spk Dup.	%Rec MS	%Rec MSD	RPD	QC Limits	
								RPD	%REC
1,1-Dichloroethene	ND	50	57.52	57.37	115	115	0	22	59-172
MTBE	ND	50	50.33	49.19	101	98	2	24	62-137
Benzene	ND	50	50.56	51.30	101	103	1	24	62-137
Trichloroethene	ND	50	51.91	52.19	104	104	1	21	66-142
Toluene	ND	50	53.53	54.57	107	109	2	21	59-139
Chlorobenzene	ND	50	52.75	53.57	106	107	2	21	60-133

QC Sample: LCS/LCSD 1:25 PM  
 Analysis Date: February 2, 2005

**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	57.05	59.56	114	119	4	22	59-172
MTBE	ND	50	48.49	48.74	97	97	1	24	62-137
Benzene	ND	50	49.97	51.79	100	104	4	24	62-137
Trichloroethene	ND	50	53.84	56.50	108	113	5	21	66-142
Toluene	ND	50	53.97	58.22	108	116	8	21	59-139
Chlorobenzene	ND	50	52.57	56.67	105	113	8	21	60-133
Gasoline	ND	1,000	877	880	88	88	0	20	NA

Method Blank = All ND

**SURROGATE ( QC Limits : 70-135 )**

Compound	MB 1	MB 2	MS	MSD	LCS	LCSD
DBFM	108	109	110	109	106	106
1,2-DCA	110	113	105	104	103	102
Tol-d8	102	102	97	101	97	98
p-BFB	107	101	108	106	107	103

# Chain of Custody Record

## ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868  
Phone: (714) 771-6900 • Fax: (714) 538-1209



TPH gas  
added 8/18

Chow

144370

Company	THIRTY OIL CO.						Phone	6621921-3581		A.L. Job No.	Page _____ of _____	
Project Manager	MEFF SURYA KUSUMA						Fax	(562) 921-7540		Analysis Requested		
Project Name	SYSTEM WATER SAMPLE						Project #	049				
Site Name and Address	3400 SAN PABLO AVE OAKLAND, CA. 94612											
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	TPHgas + BTEX + SO <sub>2</sub> + NO <sub>2</sub> + PM <sub>2.5</sub>	Test Instructions & Comments				
1 PSP-1 OUTLET		01-27-05	10:00	H <sub>2</sub> O	3-VOA	HCl	X	1	1		GRAB SAMPLE	
2 INT-1			10:10	↓	3-VOA	↓	-	X	X			
3 INT-2			10:20	↓	3-VOA	↓	-	X	X			
4 INT-3			10:30	↓	3-VOA	↓	-	X	X			
5 INLET			10:40	↓	3-VOA	↓	*	X	X		← Add TPHg (8015) ✓	
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Sample Receipt - To Be Filled By Laboratory				Relinquished by Sampler:	1. E.M.C Signature: <i>Ortiz</i>	2. GOLDBECK STPTE Signature: <i>GOLDBECK STPTE</i>	3. Relinquished by
Total Number of Containers	15	Properly Cooled Y / N / NA		Printed Name: SPERBIL POPESCU	Date: 01- Time: 10:00	Printed Name: OVERSIGHT	Signature:
Custody Seals Y / N / NA		Samples Intact Y / N / NA		Received By: GOLDBECK STPTE	Date: Time:	Received By: 2	Received By: 3
Received in Good Condition Y / N		Samples Accepted Y / N		Signature: OVERSIGHT	Date: Time:	Received By: 2	Received By: 3
Turn Around Time				Printed Name: DUNIGAN JR	Date: 11/18/05 Time: 11:00	Printed Name: DUNIGAN JR	Signature: <i>Dunigan Jr</i>
<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Same Day	<input type="checkbox"/> 48 hrs.	Printed Name: DUNIGAN JR	Date: Time:	Printed Name: DUNIGAN JR	Signature: <i>Dunigan Jr</i>
		<input type="checkbox"/> 24 hrs.	<input type="checkbox"/> 72 hrs.	Received By: 1	Date: Time:	Received By: 2	Received By: 3