

# THRIFTY OIL CO.

April 23, 2002

APR 30 2002

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O.26742

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

Local #3871  
RWQCB #01-1479  
Global ID #T0600101366  
Confirmation #9118991971

RE: **Former Thrifty Oil Co. Station #063**  
**ARCO Products Company Station 39542**  
6125 Telegraph Avenue  
Oakland, CA 94609  
***1st Quarter 2002, Status Report and Amendment  
to the Remediation System***

Dear Ms. Hugo:

Presented herewith is the First Quarter 2002, Status Report for former Thrifty Oil Co. Station #063 located at 6125 Telegraph Avenue, Oakland, California.

*Thrifty proposes to connect well MW-4 to the existing remediation system to enhance the reduction of petroleum hydrocarbons in the groundwater. Once approval is received from the ACHCS, Thrifty will complete the work.*

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

Sincerely,



Chris Panaitescu  
General Manager  
Environmental Affairs

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



# THRIFTY OIL CO.

April 19, 2002

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

Local #3871  
RWQCB #01-1479  
Global ID #T0600101366  
Confirmation #9118991971

RE: **Former Thrifty Oil Co. Station #063**  
**ARCO Products Company Station #9542**  
6125 Telegraph Avenue  
Oakland, CA  
*1st Quarter 2002, Status Report*

Dear Ms. Hugo:

Presented herein is the First Quarter 2002, Status Report prepared for former Thrifty Oil Co. (Thrifty) Station #063 located at 6125 Telegraph Avenue, Oakland, California (**Figure 1**). Presented in this report are the results of the site monitoring and remedial efforts in the First Quarter 2002. Thrifty has retained the services of Earth Management Company (EMC) to conduct quarterly monitoring and sampling, and remedial system monitoring activities at this site.

## **Groundwater Monitoring**

Depth to groundwater is measured in each monitoring well on a quarterly basis. In general, groundwater occurred beneath the station at depths ranging from 12.28 feet below surface grade (bsg) in monitoring well MW-4 to 15.23 feet bsg in monitoring well MW-1 on January 23, 2002. A groundwater elevation contour map based on the January 23, 2002 data is presented in **Figure 2**. The groundwater flow is generally towards the south with a gradient ranging from approximately 0.06 to 0.12 feet/foot.

## **Quarterly Groundwater Sampling**

As part of the ongoing groundwater monitoring program, groundwater samples were obtained from monitoring wells MW-1, MW-4, MW-5, and MW-6 on January 23, 2002. Recovery well MW-3 was sampled on January 14, 2002 as an influent stream into the groundwater remediation system. Groundwater samples were obtained by EMC and delivered in a chilled state following strict Chain-of-Custody procedures to a state-certified laboratory. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA methods 8015M and 8021B. Samples with detectable MTBE were confirmed using EPA method 8260B. A summary of historical analytical sampling results are provided in **Table 1**. Copies of the EMC Field Status Reports are presented in **Appendix A**, and copies of the laboratory analytical reports are contained in **Appendix B**.

TPH-g, BTEX, and MTBE concentrations appear in **Table 1**, and **Appendix B**. TPH-g, benzene, and MTBE isoconcentration maps results are presented in **Figures 3, 4, and 5**, respectively. Laboratory results indicate



the highest concentrations of TPH-g, benzene, and MTBE were in monitoring well MW-4, with concentrations of 12,100 ug/L, 196 ug/L, and 738 ug/L, respectively. The isoconcentration maps did not incorporate data from the treatment system influent, even though the groundwater is pumped solely from well MW-3, because it was not sampled on the same day as the other wells.

### Remediation Status

Site remedial activities were initiated in April 1991. Presently, the remediation system consists of a Groundwater Treatment System that extracts groundwater from monitoring well MW-3 with treatment utilizing activated carbon. System operational data is included in **Table 2** and **Appendix C**. During this reporting period, the groundwater treatment system processed approximately 140,490 gallons of groundwater (from January 1, through March 25, 2002), and has treated approximately 1,660,469 gallons of groundwater since start up (April 1991) through March 2002. The system operated throughout the first quarter 2002.

Inlet, intermediate 1, intermediate 2, intermediate 3, and outlet water samples were collected on January 14, 2002. The samples collected by EMC were sent to a state certified laboratory for analysis. The samples were analyzed for TPH-g, BTEX, and MTBE by EPA methods 8015 and 8021B. The outlet laboratory sample results for TPH-g, BTEX, and MTBE were below the laboratory detection limits. A copy of the laboratory analytical reports are included in **Appendix D**.

### Other Activities

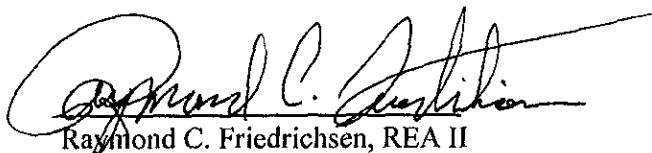
With the high concentration of petroleum hydrocarbons in well MW-4, Thrifty proposes to connect well MW-4 to the existing remediation system to enhance the reduction of the petroleum hydrocarbons in the groundwater. Once approval is received from the ACHCS, Thrifty will complete this work.

The groundwater monitoring wells and the treatment unit 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 2002 monitoring report.

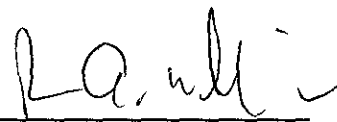
All interpretations expressed in this report are based solely upon the review of data collected by EMC, and Associated Laboratories.

Written by:

Reviewed by:



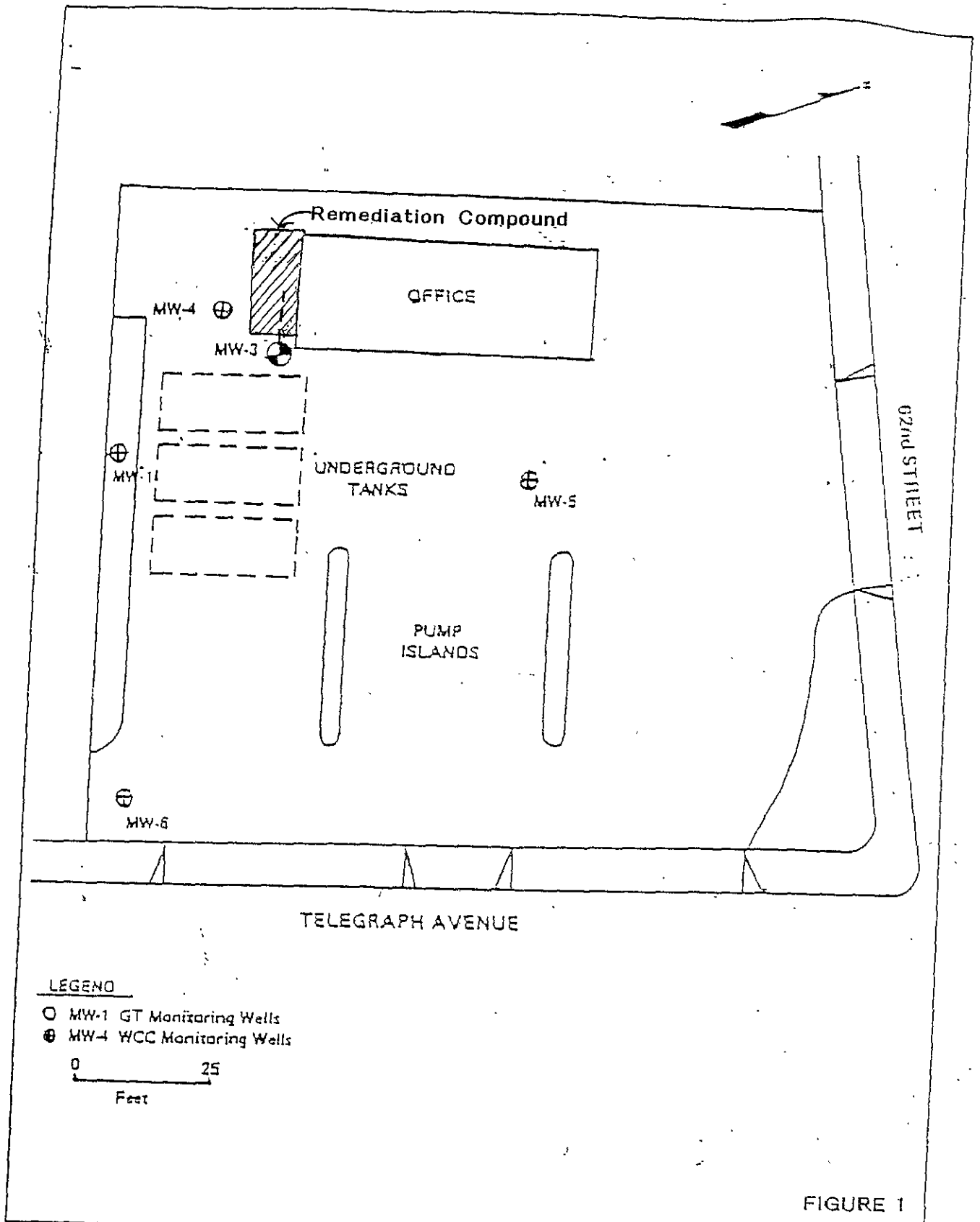
Raymond C. Friedrichsen, REA II  
Project Manager, MBA  
Senior Hydrogeologist



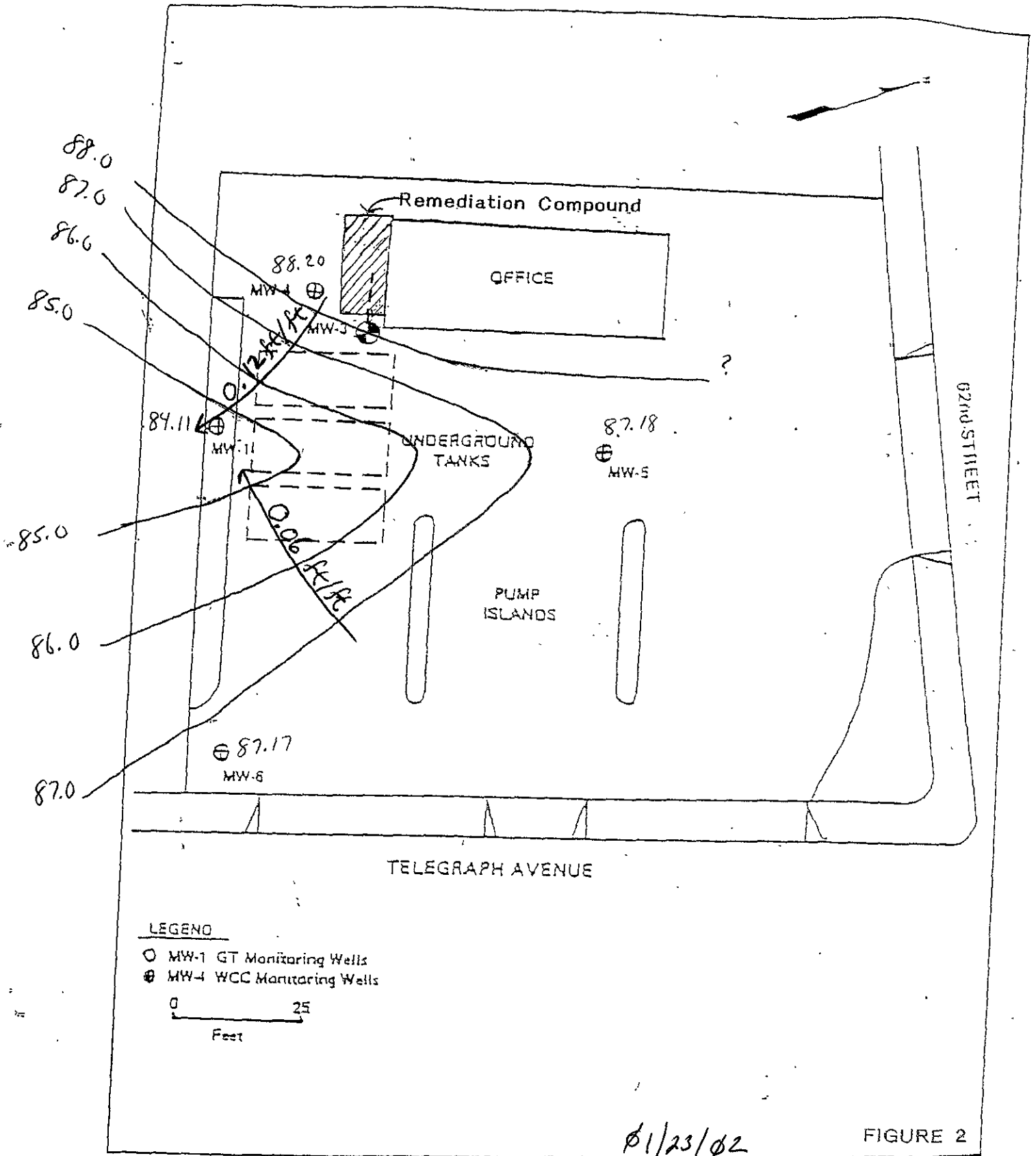
Ross A. Williams  
Registered Geologist #6327



# FIGURES



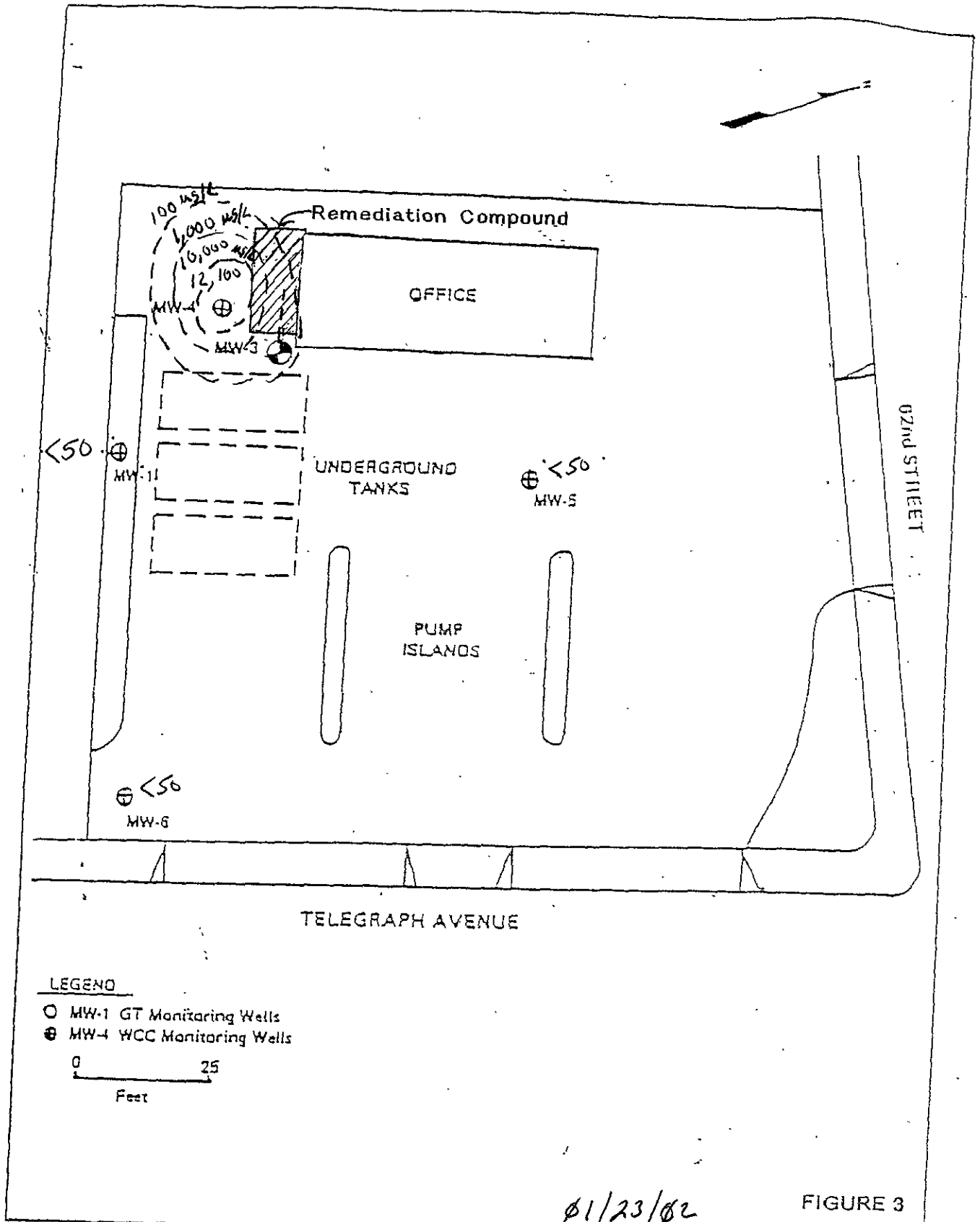
SITE PLAN AND RECOVERY SYSTEM  
 THRIFTY SERVICE STATION NO. 63  
 6125 TELEGRAPH AVE.  
 OAKLAND, CA



01/23/02

FIGURE 2

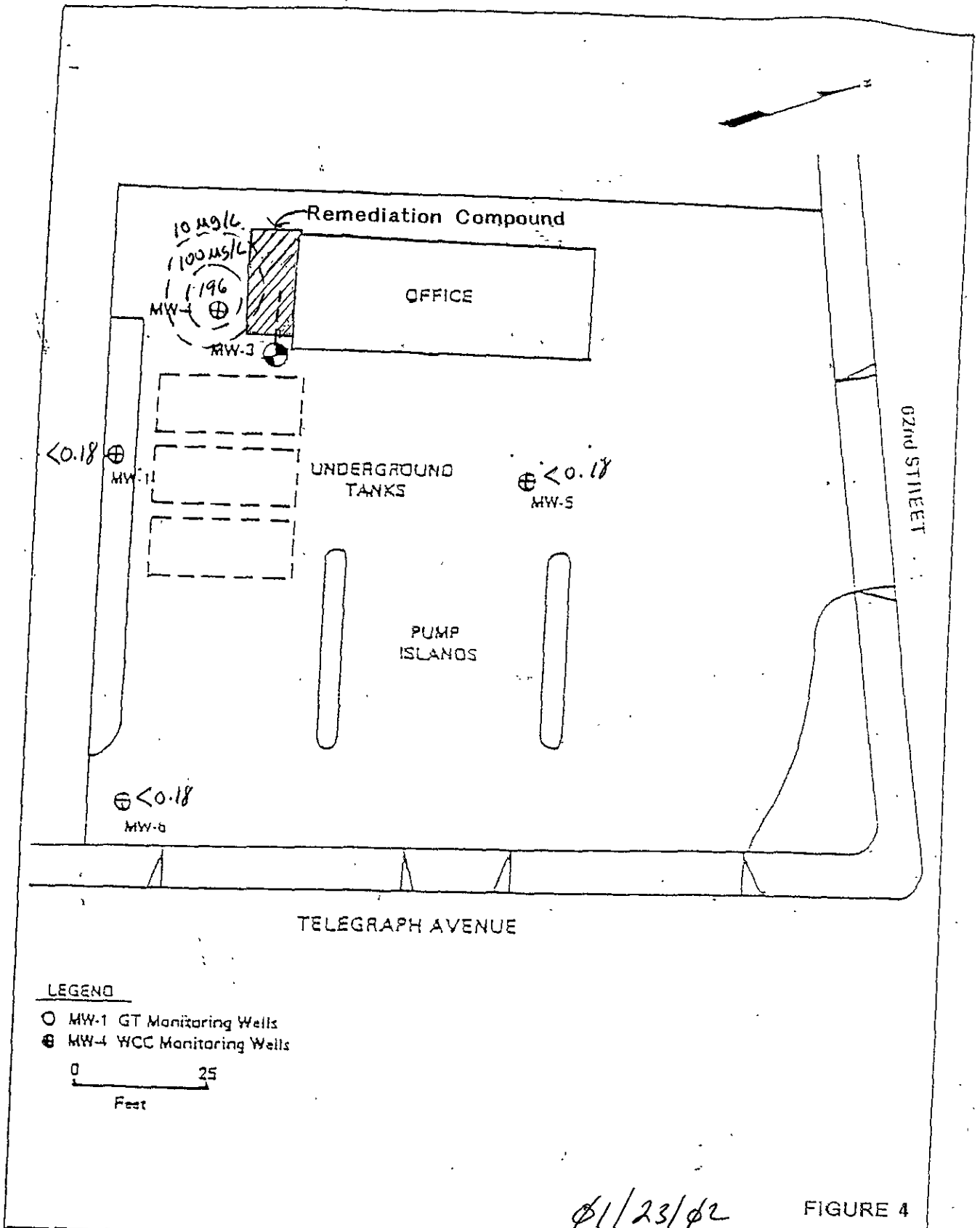
Groundwater Contour Map  
 THRIFTY SERVICE STATION NO. 63  
 6125 TELEGRAPH AVE.  
 OAKLAND, CA



01/23/02

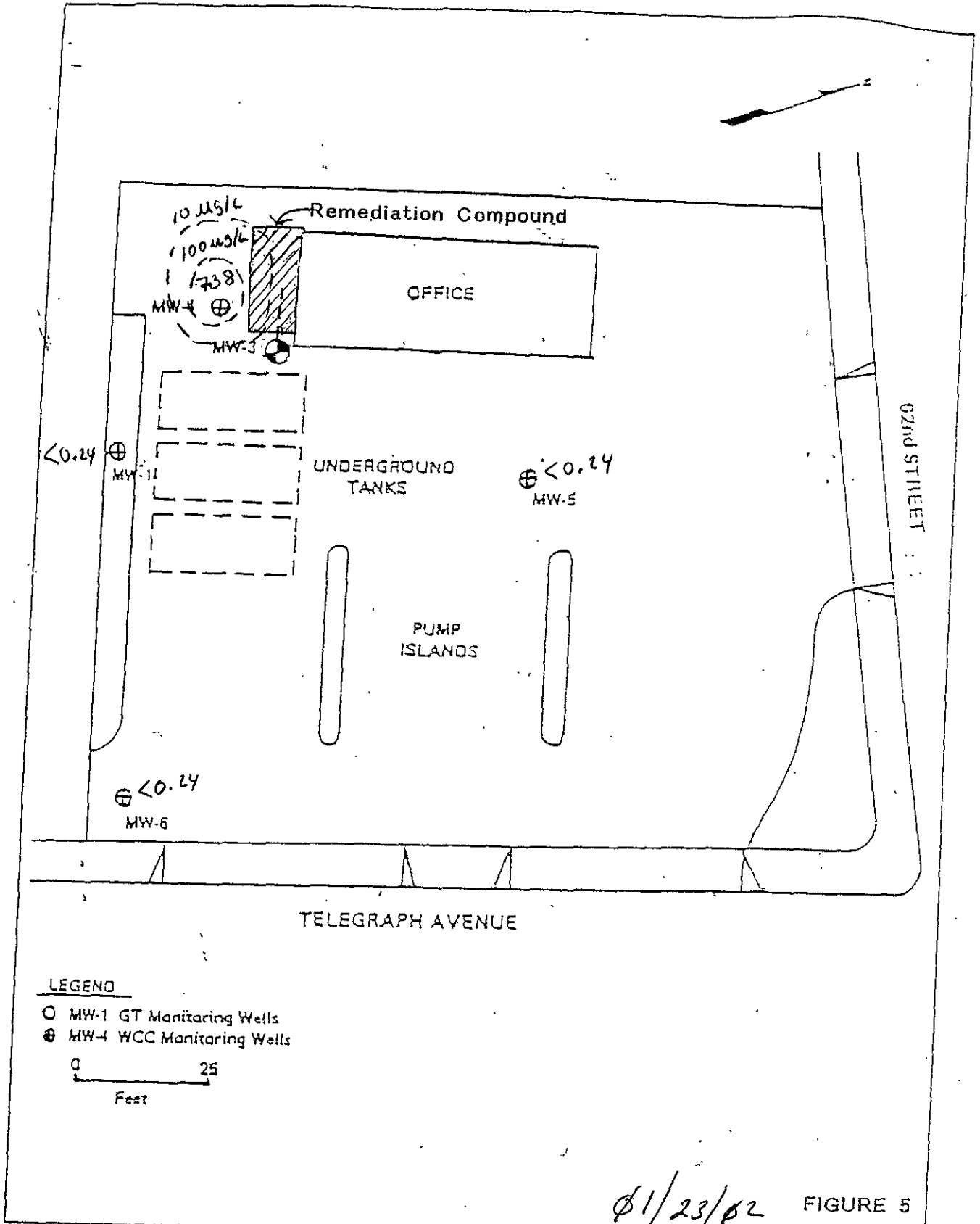
FIGURE 3

TPH-g Isoconcentration Map ug/L  
 THRIFTY SERVICE STATION NO. 63  
 6125 TELEGRAPH AVE.  
 OAKLAND, CA



6/23/02  
 FIGURE 4  
 Benzene Isoconcentration Map ug/L  
 THRIFTY SERVICE STATION NO. 63  
 6125 TELEGRAPH AVE.  
 OAKLAND, CA





MTBE Isoconcentration Map ug/L  
 THRIFTY SERVICE STATION NO. 63  
 6125 TELEGRAPH AVE.  
 OAKLAND, CA

# **TABLES**

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #063, OAKLAND, CA**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
<b>MONITORING WELL #MW-1</b>											
11/21/86	-	-	-	-	-	-	15.42	NP	0.00	99.34	83.92
07/22/91	-	-	-	-	-	-	20.41	FILM	0.00	99.34	78.93
10/24/91	-	-	-	-	-	-	19.06	SHEEN	0.00	99.34	80.28
01/22/92	-	-	-	-	-	-	18.78	SHEEN	0.00	99.34	80.56
03/24/92	-	-	-	-	-	-	13.55	SHEEN	0.00	99.34	85.79
07/15/92	-	-	-	-	-	-	18.90	FILM	0.00	99.34	80.44
10/05/92	-	-	-	-	-	-	20.50	FILM	0.00	99.34	78.84
01/06/93	-	-	-	-	-	-	14.93	FILM	0.00	99.34	84.41
07/13/93	-	-	-	-	-	-	15.44	FILM	0.00	99.34	83.90
10/11/93	-	-	-	-	-	-	20.36	FILM	0.00	99.34	78.98
01/11/94	-	-	-	-	-	-	19.50	FILM	0.00	99.34	79.84
04/12/94	-	-	-	-	-	-	18.10	FILM	0.00	99.34	81.24
07/14/94	-	-	-	-	-	-	20.03	FILM	0.00	99.34	79.31
01/15/96	11,000	2,800	150	780	770	-	19.02	NP	0.00	99.34	80.32
04/15/96	17,000	3,600	330	1,500	3,400	-	18.82	NP	0.00	99.34	80.52
07/15/96	12,000	1,300	200	1,200	4,600	250	-	NP	-	-	-
10/09/96	-	-	-	-	-	-	14.87	NP	0.00	99.34	84.47
01/13/97	27,000	810	6,000	570	4,100	2,700	10.20	NP	0.00	99.34	89.14
04/14/97	2,900	3.0	2.9	<0.3	1.7	9,900	-	NP	-	-	-
07/07/97	5,200	0.57	0.57	<0.3	0.71	16,000	18.75	NP	0.00	99.34	80.59
10/16/97	680	<0.3	0.55	<0.3	<0.5	-	17.92	NP	0.00	99.34	81.42
01/07/98	42,000	980	2,800	1,200	5,200	1.3	9.80	NP	0.00	99.34	89.54
04/06/98	7,100	700	340	170	2,600	1,000	9.60	NP	0.00	99.34	89.74
07/14/98	19,000	2,100	400	890	5,800	1,600	13.70	NP	0.00	99.34	85.64
10/15/98	490	<0.3	<0.3	<0.3	<0.5	1,300	15.25	NP	0.00	99.34	84.09
01/20/99	350	<0.3	<0.3	<0.3	<0.5	* 670 / 820	12.20	NP	0.00	99.34	87.14
04/16/99	320	<0.3	<0.3	<0.3	<0.5	* 540 / 630	12.20	NP	0.00	99.34	87.14
07/14/99	290	<0.3	<0.3	<0.3	<0.5	*590 / 580	13.75	NP	0.00	99.34	85.59
10/07/99	130	<0.3	<0.3	<0.3	<0.5	270	12.15	NP	0.00	99.34	87.19
01/26/00	13,000	460	54	290	3,700	940	13.14	NP	0.00	99.34	86.20
04/19/00	546	<0.25	<0.25	<0.25	<0.5	*430 / 606	10.63	NP	0.00	99.34	88.71
05/26/00	<50	<0.3	<0.3	<0.3	<0.6	<5	9.11	NP	0.00	99.34	90.23
07/26/00	<50	<0.3	<0.3	<0.3	<0.6	<5	9.10	NP	0.00	99.34	90.24
10/25/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.08	NP	0.00	99.34	90.26
01/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	12.16	NP	0.00	99.34	87.18

**TABLE 1  
GROUNDWATER DATA  
THRIFTY OIL STATION #063, OAKLAND, CA**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
04/23/01	18.100	740	55	650	4,000	*1,850 / 842	10.60	NP	0.00	99.34	88.74
07/16/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.07	NP	0.00	99.34	90.27
10/17/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	12.16	NP	0.00	99.34	87.18
01/23/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	15.23	NP	0.00	99.34	84.11
<b>MONITORING WELL #MW-2</b>											
11/21/86	-	-	-	-	-	-	14.90	0.11	14.79	100.01	96.28
07/22/91	-	-	-	-	-	-	17.84	0.38	17.46	100.01	95.35
10/24/91	-	-	-	-	-	-	17.00	16.97	0.03	100.01	83.03
01/22/92	-	-	-	-	-	-	16.72	FILM	0.00	100.01	83.29
03/24/92	-	-	-	-	-	-	15.81	11.98	3.83	100.01	87.09
07/15/92	-	-	-	-	-	-	16.37	FILM	0.00	100.01	83.64
10/05/92	-	-	-	-	-	-	18.41	18.09	0.32	100.01	81.84
01/06/93	-	-	-	-	-	-	12.37	FILM	0.00	100.01	87.64
07/13/93	-	-	-	-	-	-	15.19	FILM	0.00	100.01	84.82
10/11/93	-	-	-	-	-	-	18.05	0.10	17.95	100.01	95.51
01/11/94	-	-	-	-	-	-	16.98	0.03	16.95	100.01	95.83
04/12/94	-	-	-	-	-	-	15.54	FILM	0.00	100.01	84.47
07/14/94	-	-	-	-	-	-	17.93	FILM	0.00	100.01	82.08
01/15/96	7,100	720	280	48	660	-	17.20	NP	0.00	100.01	82.81
04/15/96	11,000	600	59	420	870	-	17.26	NP	0.00	100.01	82.75
07/15/96	19,000	360	51	610	1,600	<250	-	-	-	-	-
10/09/96	-	-	-	-	-	-	14.42	NP	0.00	100.01	85.59
01/13/97	11,000	230	30	91	700	56	10.25	NP	0.00	100.01	89.76
04/14/97	141	1.2	0.33	0.44	<0.5	20	-	-	-	-	-
07/07/97	<50	<0.3	<0.3	<0.3	<0.5	<20	17.20	NP	0.00	100.01	82.81
10/16/97	<50	<0.3	<0.3	<0.3	<0.5	-	16.20	NP	0.00	100.01	83.81
01/07/98	-	-	-	-	-	-	16.26	16.18	0.08	100.01	83.81
Well Abandoned 1/30/98											
<b>MONITORING WELL #MW-3</b>											
11/21/86	-	100	5.1	<1.0	25	-	16.25	0.10	16.15	99.76	95.70
07/22/91	-	-	-	-	-	-	24.00	NP	0.00	99.76	75.76
10/24/91	-	-	-	-	-	-	18.10	NP	0.00	99.76	81.66
01/22/92	-	-	-	-	-	-	25.80	SHEEN	0.00	99.76	73.96

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #063, 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)					
03/24/92	-	-	-	-	-	-	15.60	NP	0.00	99.76	84.16
07/15/92	-	-	-	-	-	-	25.10	FILM	0.00	99.76	74.66
10/05/92	-	-	-	-	-	-	25.20	NP	0.00	99.76	74.56
01/06/93	-	-	-	-	-	-	25.45	NP	0.00	99.76	74.31
07/13/93	-	-	-	-	-	-	14.24	NP	0.00	99.76	85.52
10/11/93	-	-	-	-	-	-	25.60	NP	0.00	99.76	74.16
01/11/94	-	-	-	-	-	-	25.90	NP	0.00	99.76	73.86
04/12/94	-	-	-	-	-	-	25.70	NP	0.00	99.76	74.06
07/14/94	-	-	-	-	-	-	25.10	NP	0.00	99.76	74.66
01/15/96	-	-	-	-	-	-	26.04	NP	0.00	99.76	73.72
04/15/96	-	-	-	-	-	-	21.03	NP	0.00	99.76	78.73
07/15/96	5,900	240	30	270	730	780	-	-	-	-	-
10/09/96	-	-	-	-	-	-	21.43	NP	0.00	99.76	78.33
01/13/97	-	-	-	-	-	-	11.20	NP	0.00	99.76	88.56
07/07/97	-	-	-	-	-	-	23.40	NP	0.00	99.76	76.36
10/16/97	-	-	-	-	-	-	22.30	NP	0.00	99.76	77.46
01/07/98	-	-	-	-	-	-	20.10	NP	0.00	99.76	79.66
07/14/98	-	-	-	-	-	-	14.40	NP	0.00	99.76	85.36
10/15/98	-	-	-	-	-	-	-	-	-	-	-
01/20/99	-	-	-	-	-	-	-	-	-	-	-
04/16/99	-	-	-	-	-	-	11.20	NP	0.00	99.76	88.56
07/14/99	5,600	9.6	1.3	3.5	8.1	*14,000 / 14,000	25.87	NP	0.00	99.76	73.89
10/07/99	-	-	-	-	-	-	15.40	NP	0.00	99.76	84.36
01/26/00	-	-	-	-	-	-	14.25	NP	0.00	99.76	85.51
04/19/00	-	-	-	-	-	-	14.20	NP	0.00	99.76	85.56
05/26/00	-	-	-	-	-	-	15.12	NP	0.00	99.76	84.64
07/26/00	-	-	-	-	-	-	14.30	NP	0.00	99.76	85.46
10/25/00	-	-	-	-	-	-	14.32	NP	0.00	99.76	85.44
01/10/01	-	-	-	-	-	-	13.46	NP	0.00	99.76	86.30
04/23/01	-	-	-	-	-	-	-	-	-	-	-
07/16/01	-	-	-	-	-	-	12.80	NP	0.00	99.76	86.96
10/17/01	-	-	-	-	-	-	15.30	NP	0.00	99.76	84.46
01/23/02	-	-	-	-	-	-	-	-	-	-	-

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #063, OAKLAND, CA**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
<b>MONITORING WELL #MW-4</b>											
11/21/86	100,000	3,200	2,700	2,400	14,000	-	16.22	FILM	0.00	99.48	83.26
07/22/91	-	-	-	-	-	-	21.80	21.35	0.45	99.48	78.02
10/24/91	-	-	-	-	-	-	20.02	SHEEN	0.00	99.48	79.46
01/22/92	-	-	-	-	-	-	19.78	SHEEN	0.00	99.48	79.70
03/24/92	-	-	-	-	-	-	13.94	FILM	0.00	99.48	85.54
07/15/92	-	-	-	-	-	-	19.27	FILM	0.00	99.48	80.21
10/05/92	-	-	-	-	-	-	21.44	FILM	0.00	99.48	78.04
01/06/93	-	-	-	-	-	-	14.08	FILM	0.00	99.48	85.40
07/13/93	-	-	-	-	-	-	16.09	FILM	0.00	99.48	83.39
10/11/93	-	-	-	-	-	-	21.33	FILM	0.00	99.48	78.15
01/11/94	-	-	-	-	-	-	20.45	FILM	0.00	99.48	79.03
04/12/94	-	-	-	-	-	-	19.05	FILM	0.00	99.48	80.43
07/14/94	-	-	-	-	-	-	20.41	FILM	0.00	99.48	79.07
01/15/96	5,000	370	38	300	390	-	19.89	NP	0.00	99.48	79.59
04/15/96	38,000	300	78	540	470	-	19.62	NP	0.00	99.48	79.86
07/15/96	13,000	880	69	820	1,100	3,600	-	-	-	-	-
10/09/96	-	-	-	-	-	-	15.32	NP	0.00	99.48	84.16
01/13/97	47,000	2,500	2,500	1,100	2,800	70,000	10.80	NP	0.00	99.48	88.68
04/14/97	8,700	<0.3	0.45	<0.3	0.64	29,000	-	-	-	-	-
07/07/97	12,000	<0.3	<0.3	<0.3	<0.5	-	18.80	NP	0.00	99.48	80.68
10/16/97	770	<0.3	<0.3	<0.3	<0.5	-	17.76	NP	0.00	99.48	81.72
01/07/98	75,000	3,000	900	1,400	2,500	110	11.60	NP	0.00	99.48	87.88
04/08/98	18,000	1,200	130	710	1,400	22,000	10.10	NP	0.00	99.48	89.38
07/14/98	21,000	1,300	58	1,200	1,100	23,000	16.30	NP	0.00	99.48	83.18
10/15/98	9,100	1.1	0.62	<0.3	<0.5	30,000	16.90	NP	0.00	99.48	82.58
01/20/99	16,000	<0.3	0.91	0.72	1.4	* 43,000 / 42,000	15.35	NP	0.00	100.48	85.13
04/16/99	17,000	0.48	0.92	0.54	1.4	* 28,000 / 26,000	15.30	NP	0.00	100.48	85.18
07/14/99	8,500	<6	<6	<6	<10	*21,000 / 16,000	18.40	NP	0.00	100.48	82.08
10/07/99	2,500	<1.5	3.1	<1.5	<2.5	4,800	16.89	NP	0.00	100.48	83.59
01/26/00	9,900	350	9	460	460	2,800	12.62	NP	0.00	100.48	87.86
04/19/00	8,990	0.7	<0.25	<0.25	<0.5	*3,240 / 5,450	12.28	NP	0.00	100.48	88.20
05/26/00	94	<0.3	<0.3	<0.3	<0.6	*746 / 419	13.81	NP	0.00	100.48	86.67
07/26/00	<50	<0.3	<0.3	<0.3	<0.6	3,110 / 2,060	12.29	NP	0.00	100.48	88.19
10/25/00	2,480	<0.18	<0.14	<0.18	<0.26	*3,690 / 3,040	12.26	NP	0.00	100.48	88.22
01/10/01	<50	<0.18	2	<0.18	1	962	10.75	NP	0.00	100.48	89.73

**TABLE 1  
GROUNDWATER DATA  
THRIFTY OIL STATION #063, OAKLAND, CA**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
04/23/01	482	<0.18	<0.14	<0.18	<0.26	*875 / 453	12.26	NP	0.00	100.48	88.22
07/16/01	71,700	9,440	12,600	514	8,980	*1,330 / 389	13.80	NP	0.00	100.48	86.68
10/17/01	13,500	1,950	425	<5.94	1,110	*829 / 329	16.87	NP	0.00	100.48	83.61
01/23/02	12,100	196	57	68	2,090	*688/738	12.28	NP	0.00	100.48	88.20
<b>MONITORING WELL #MW-5</b>											
11/21/86	<1,000	4.8	2.1	<0.5	7.4	-	16.10	NP	0.00	100.98	84.88
07/22/91	-	<0.5	1.6	<1.0	2.0	-	18.20	NP	0.00	100.98	82.78
10/24/91	-	-	-	-	-	-	17.67	NP	0.00	100.98	83.31
01/22/92	600	21.0	8.0	2.0	17.0	-	-	-	-	-	-
03/24/92	-	-	-	-	-	-	12.98	NP	0.00	100.98	88.00
07/15/92	<200	<0.5	<0.5	<0.5	<0.5	-	17.29	NP	0.00	100.98	83.69
10/05/92	-	-	-	-	-	-	18.92	NP	0.00	100.98	82.06
01/06/93	300	2.7	<0.5	1.3	26.0	-	13.12	NP	0.00	100.98	87.86
07/13/93	<100	1.1	0.5	1.0	1.5	-	16.15	NP	0.00	100.98	84.83
10/11/93	130	1.2	<0.3	<0.3	<0.6	-	18.75	NP	0.00	100.98	82.23
01/11/94	<50	1.5	<0.3	<0.3	<0.5	-	17.80	NP	0.00	100.98	83.18
04/12/94	<50	<0.3	<0.3	<0.3	<0.5	-	13.59	NP	0.00	100.98	87.39
07/14/94	<50	0.42	<0.3	<0.3	<0.5	-	18.26	NP	0.00	100.98	82.72
07/15/95	100	1.2	<0.5	0.8	<1	-	-	-	-	-	-
01/15/96	1,900	21	13	6.2	6.8	-	13.09	NP	0.00	100.98	87.89
04/15/96	250	5.1	2.7	1.7	1.1	-	13.16	NP	0.00	100.98	87.82
07/15/96	270	6.5	1.4	1.8	1.4	230	-	NP	-	-	-
10/09/96	-	-	-	-	-	-	15.37	NP	0.00	100.98	85.61
01/13/97	25,000	780	5,700	560	4,000	24,000	10.90	NP	0.00	100.98	90.08
04/14/97	6,300	260	1,600	28	550	9,000	-	-	-	-	-
07/07/97	7,500	300	1,500	12	110	16,000	14.70	NP	0.00	100.98	86.28
10/16/97	4,600	<0.3	0.65	<0.3	<0.5	-	13.60	NP	0.00	100.98	87.38
01/07/98	2,700	33	11	37	580	7.3	10.97	NP	0.00	100.98	90.01
04/08/98	300	9.1	<0.3	<0.3	<0.5	650	10.90	NP	0.00	100.98	90.08
07/14/98	670	5.9	<0.3	<0.3	0.53	2,300	15.20	NP	0.00	100.98	85.78
10/15/98	<50	<0.3	<0.3	<0.3	<0.5	19	15.90	NP	0.00	100.98	85.08
01/20/99	<50	<0.3	<0.3	<0.3	<0.5	<5	15.20	NP	0.00	101.98	86.78
04/16/99	<50	<0.3	<0.3	<0.3	<0.5	<5	15.25	NP	0.00	101.98	86.73
07/14/99	<50	<0.3	<0.3	<0.3	<0.5	<5	15.96	NP	0.00	101.98	86.02

**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #063, OAKLAND, CA**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
10/07/99	<50	<0.3	<0.3	<0.3	<0.5	<5	16.33	NP	0.00	101.98	85.65
01/26/00	<50	<0.3	<0.3	<0.3	<0.5	<5	14.80	NP	0.00	101.98	87.18
04/19/00	965	<0.25	<0.25	<0.25	<0.5	<5	10.97	NP	0.00	101.98	91.01
05/26/00	<50	<0.3	<0.3	<0.3	<0.6	<5	14.43	NP	0.00	101.98	87.55
07/26/00	<50	<0.3	<0.3	<0.3	<0.6	<5	14.02	NP	0.00	101.98	87.96
10/25/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	14.04	NP	0.00	101.98	87.94
01/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	14.80	NP	0.00	101.98	87.18
04/23/01	<50	<0.18	<0.14	<0.18	<0.26	*10 / 4.2	10.97	NP	0.00	101.98	91.01
07/16/01	3,360	430	603	53	429	*41 / 4.2	14.80	NP	0.00	101.98	87.18
10/17/01	<50	<0.18	<0.14	<0.18	<0.26	*16 / 5.2	16.71	NP	0.00	101.98	85.27
01/23/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	14.80	NP	0.00	101.98	87.18
<b>MONITORING WELL #MW-6</b>											
11/21/86	<1,000	<2.0	<2.0	<2.0	<2.0	-	12.64	NP	0.00	99.44	86.80
07/22/91	-	-	-	-	-	-	-	-	-	-	-
01/22/92	<200	<0.5	<0.5	<0.5	1.5	-	-	-	-	-	-
03/24/92	-	-	-	-	-	-	10.04	NP	0.00	99.44	89.40
07/15/92	<200	<0.5	<0.5	<0.5	<0.5	-	13.29	NP	0.00	99.44	86.15
10/05/92	-	-	-	-	-	-	14.69	NP	0.00	99.44	84.75
01/06/93	<200	<0.5	<0.5	<0.5	<1.0	-	10.87	NP	0.00	99.44	88.57
07/13/93	<100	<0.5	<0.5	<0.5	<1.0	-	13.10	NP	0.00	99.44	86.34
10/11/93	<60	<0.3	<0.3	<0.3	<0.6	-	14.43	NP	0.00	99.44	85.01
01/11/94	<50	<0.3	<0.3	<0.3	<0.5	-	13.56	NP	0.00	99.44	85.88
04/12/94	<50	<0.3	<0.3	<0.3	<0.3	-	12.10	NP	0.00	99.44	87.34
07/14/94	<50	<0.3	<0.3	<0.3	<0.3	-	14.16	NP	0.00	99.44	85.28
07/15/95	140	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
01/15/96	56	0.38	0.33	<0.3	<0.5	-	14.29	NP	0.00	99.44	85.15
04/15/96	96	4.5	<0.3	<0.3	0.53	-	14.32	NP	0.00	99.44	85.12
07/15/96	140	2.4	0.44	<0.3	0.70	110	-	-	-	-	-
10/09/96	-	-	-	-	-	-	12.09	NP	0.00	99.44	87.35
01/13/97	210	<0.3	1.2	<0.3	0.68	270	9.85	NP	0.00	99.44	89.59
04/14/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
07/07/97	<50	<0.3	<0.3	<0.3	<0.5	<20	14.20	NP	0.00	99.44	85.24
10/16/97	<50	<0.3	<0.3	<0.3	<0.5	-	13.10	NP	0.00	99.44	86.34
01/07/98	<50	<0.3	<0.3	<0.3	<0.5	0.10	9.80	NP	0.00	99.44	89.64



**TABLE 1**  
**GROUNDWATER DATA**  
**THRIFTY OIL STATION #063, OAKLAND, CA**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/14/98	330	<0.3	<0.3	<0.3	<0.5	380	12.30	NP	0.00	99.44	87.14
10/15/98	<50	<0.3	<0.3	<0.3	<0.5	<5	14.30	NP	0.00	99.44	85.14
01/20/99	<50	0.47	<0.3	<0.3	<0.5	<5	13.60	NP	0.00	100.44	86.84
04/16/99	<50	<0.3	<0.3	<0.3	<0.5	<5	13.50	NP	0.00	100.44	86.94
07/14/99	<50	<0.3	<0.3	<0.3	<0.5	*5.4 / <5	14.65	NP	0.00	100.44	85.79
10/07/99	<50	<0.3	0.96	0.35	1.8	<5	15.39	NP	0.00	100.44	85.05
01/26/00	<50	<0.3	<0.3	<0.3	0.63	<5	13.85	NP	0.00	100.44	86.59
04/19/00	83.1	<0.25	<0.25	<0.25	<0.5	*11 / <5	9.65	NP	0.00	100.44	90.79
05/26/00	<50	<0.3	<0.3	<0.3	<0.6	<5	13.10	NP	0.00	100.44	87.34
07/26/00	<50	<0.3	<0.3	<0.3	<0.6	<5	12.35	NP	0.00	100.44	88.09
10/25/00	<50	<0.18	<0.14	<0.18	<0.26	*7 / 10	12.30	NP	0.00	100.44	88.14
01/10/01	<50	<0.18	<0.14	<0.18	<0.26	78	13.45	NP	0.00	100.44	86.99
04/23/01	<50	<0.18	<0.14	<0.18	<0.26	*9 / 4	9.65	NP	0.00	100.44	90.79
07/16/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	13.09	NP	0.00	100.44	87.35
10/17/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	15.37	NP	0.00	100.44	85.07
01/23/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	13.27	NP	0.00	100.44	87.17

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

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

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 063, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
4/8/91	1,669	0	-	-	<0.3	<0.3	<0.3	<0.9	-	-	1300	120	<7.5	1300	-
4/15/91	5,742	4,073	582	-	<0.3	<0.3	<0.3	<0.3	-	-	700	140	<15	500	-
4/22/91	10,240	8,571	643	-	<0.3	<0.3	<0.3	<0.9	-	-	850	100	34	860	-
4/29/91	15,510	13,841	753	-	<0.3	<0.3	<0.3	<0.9	-	-	220	8.4	<0.3	42	-
5/6/91	20,200	18,531	670	-	<0.3	<0.3	<0.3	<0.9	-	-	280	0.8	<0.3	56	-
5/13/91	24,430	22,761	604	-	<0.3	<0.3	<0.3	<0.9	-	-	190	5.6	<0.3	37	-
5/20/91	28,480	26,811	579	-	<0.3	<0.3	<0.3	<0.9	-	-	150	0.83	1.4	29	-
5/28/91	29,310	27,641	104	-	<0.3	<0.3	<0.3	<0.9	-	-	<0.3	<0.3	<0.3	<0.9	-
6/3/91	33,080	31,411	628	-	<0.3	<0.3	<0.3	<0.9	-	-	58	4	<0.3	33	-
6/10/91	36,939	35,270	551	-	<0.3	<0.3	<0.3	<0.9	-	-	45	<0.3	<0.3	16	-
6/17/91	40,673	39,004	533	-	<0.3	<0.3	<0.3	<0.9	-	-	69	4.9	0.9	21	-
6/24/91	44,453	42,784	540	-	<0.3	<0.3	<0.3	<0.9	-	-	5.4	2	<0.3	6.6	-
7/1/91	48,173	46,504	531	-	<0.5	<0.5	<1	<1	-	-	14	15	<1	9.1	-
7/8/91	51,681	50,012	501	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	6.9	-
7/15/91	55,186	53,517	501	-	<0.5	<0.5	<1	<1	-	-	<0.5	0.6	<1	6.3	-
7/22/91	62,150	60,481	995	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	2.6	-
7/29/91	62,150	60,481	-	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	1.2	19	-
8/5/91	63,241	61,572	156	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	<1	-
8/12/91	66,091	64,422	407	-	<0.5	<0.5	<1	<1	-	-	2.6	<0.5	<1	12	-
8/19/91	67,649	65,980	223	-	<0.5	<0.5	<1	<1	-	-	20	3.3	2.8	70	-
8/26/91	70,514	68,845	409	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	1.2	19	-
9/9/91	70,564	68,895	4	-	<0.5	<0.5	<1	<1	-	-	270	10	13	69	-
9/16/91	73,526	71,857	423	System shut down due to damaged compressor pump						-	-	-	-	-	-
10/7/91	73,526	71,857	-	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	3.8	-
10/14/91	74,516	72,847	141	-	<0.5	<0.5	<1	<1	-	-	60	1.1	<1	23	-
10/21/91	76,091	74,422	225	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	<1	-
10/28/91	83,242	81,573	1,022	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	14	-
11/3/91	83,242	81,573	-	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	3.1	-
11/11/91	84,351	82,682	139	-	<0.5	<0.5	<1	<1	-	-	99	1.9	<1	14	-
11/18/91	85,647	83,978	185	-	<0.5	<0.5	<1	<1	-	-	42	1	1	10	-
11/25/91	89,512	87,843	552	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	3.9	-
12/3/91	93,407	91,738	487	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	3.8	-
12/9/91	96,210	94,541	467	-	<0.5	<0.5	<1	<1	-	-	<0.5	<0.5	<1	3.2	-
12/16/91	99,045	97,376	405	-	<0.5	<0.5	<0.5	<0.5	-	-	1.3	<0.5	<0.5	1.5	-
12/23/91	102,334	100,665	470	-	<0.5	<0.5	<0.5	<0.5	-	-	1.7	<0.5	<0.5	2.4	-
12/30/91	105,124	103,455	399	-	<0.5	<0.5	<0.5	<0.5	-	-	22.6	1.2	0.7	4.9	-
1/15/92	115,691	114,022	660	-	<0.5	<0.5	<0.5	<0.5	-	-	130	11	<0.5	50	-
2/10/92	124,846	123,177	352	-	<0.5	<0.5	<0.5	<0.5	-	-	20	0.51	<0.5	3.6	-
3/9/92	149,965	148,296	897	<200	<0.5	<0.5	<0.5	<0.5	-	12,000	2,100	400	170	2,100	-
4/13/92	168,567	166,898	531	<200	<0.5	<0.5	<0.5	<0.5	-	2,100	280	3.9	<2.5	98	-
5/11/92	187,170	185,501	664	<200	<0.5	0.7	<0.5	<0.5	-	<200	<0.5	<0.5	<0.5	<0.5	-
6/8/92	190,490	188,821	119	-	<0.5	<0.5	<0.5	<0.5	-	-	44	3.7	0.7	64	-
7/6/92	197,080	195,411	235	-	-	-	-	-	-	-	-	-	-	-	-
7/13/92	197,890	196,221	116	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 063, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
7/13/92	197,890	196,221	-	System shut down for repair of electrical motor											
8/10/92	197,890	196,221	-	Restart the system											
8/17/92	201,300	199,631	487	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-
9/14/92	209,647	207,978	298	-	<0.5	<0.5	<0.5	<1	-	-	<0.5	<0.5	<0.5	<1	-
10/5/92	217,360	215,691	367	<200	<0.5	<0.5	<0.5	<1	-	<200	<0.5	<0.5	<0.5	<1	-
11/09/92	225,780	224,111	241	-	<0.5	<0.5	<0.5	<1	-	-	1.1	0.5	<0.5	10	-
12/14/92	243,048	241,379	493	-	<0.5	<0.5	<0.5	<1	-	-	720	46	<10	1,700	-
01/04/93	252,510	250,841	451	-	<0.5	<0.5	<0.5	<1	-	-	400	32	<25	520	-
02/15/93	266,210	264,541	326	<200	<0.5	<0.5	<0.5	<1	-	9,000	1,400	330	260	1,200	-
03/08/93	269,330	267,661	149	-	<0.5	<0.5	<0.5	<1	-	-	1,100	150	7.5	1,000	-
04/26/93	271,290	269,621	40	<100	<0.5	<0.5	<0.5	<1	-	7,200	1,100	100	25	780	-
04/26/93	271,290	269,621	-	System shut down for repair											
07/15/93	272,577	270,908	16	Restart the system											
08/11/93	284,230	282,561	432	-	<0.5	<0.5	<0.5	<1	-	-	1.3	<0.5	<0.5	1.6	-
09/16/93	298,832	297,163	406	<60	<0.3	<0.3	<0.3	<0.6	-	<60	<0.3	<0.3	<0.3	<0.6	-
10/08/93	305,641	303,972	310	-	-	-	-	-	-	-	-	-	-	-	-
10/11/93	307,068	305,399	476	<60	<0.3	<0.3	<0.3	<0.6	-	<60	<0.3	<0.3	<0.3	<0.6	-
10/15/93	308,495	306,826	357	-	-	-	-	-	-	-	-	-	-	-	-
11/12/93	318,203	316,534	347	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
12/10/93	329,947	328,278	419	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
01/13/94	345,860	344,191	468	-	<0.3	<0.3	<0.3	<0.5	-	-	<0.3	<0.3	<0.3	<0.5	-
02/10/94	359,662	357,993	493	-	<0.3	<0.3	<0.3	<0.5	-	-	430	41	36	480	-
02/18/94	618,620	-	-	Changed air filters The water flowmeter jumped from 359,662 to 618,620.											
03/10/94	627,540	366,913	446	-	<0.3	<0.3	<0.3	<0.5	-	-	<0.3	<0.3	<0.3	7.7	-
04/14/94	645,330	384,703	508	<50	<0.3	<0.3	<0.3	<0.5	-	170	1.5	<0.3	0.38	0.73	-
05/19/94	653,520	392,893	234	<50	<0.3	<0.3	<0.3	<0.5	-	1,500	46	4.1	0.5	84	-
06/16/94	664,015	403,388	375	<50	<0.3	<0.3	<0.3	<0.5	-	12,000	860	37	<13	1,600	-
07/14/94	672,750	412,123	312	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
08/11/94	681,920	421,293	328	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
09/15/94	692,083	431,456	290	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
10/17/94	699,979	439,352	247	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
11/14/94	712,539	451,912	449	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
12/19/94	734,620	473,993	631	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
01/10/95	742,072	481,445	339	-	-	-	-	-	-	-	-	-	-	-	-
01/16/95	742,074	481,447	0	System shut down for repair of compressor pump											
02/06/95	742,074	481,447	-	Restart the system											
02/13/95	744,063	483,436	284	<50	<0.3	<0.3	<0.5	<0.5	-	<50	<0.3	<0.3	<0.5	<0.5	-
03/13/95	758,930	498,303	531	<100	<0.5	<0.5	<0.5	<1	-	1,300	<0.5	<0.5	<0.5	<1	-
04/17/95	768,276	507,649	267	<100	<0.5	<0.5	<0.5	<1	-	6,200	410	73	97	280	-
05/15/95	780,716	520,089	444	<100	<0.5	<0.5	<0.5	<1	-	1,300	0.6	<0.5	<0.5	<1	-
06/12/95	784,514	523,887	136	<100	<0.5	<0.5	<0.5	<1	-	<100	<0.5	<0.5	<0.5	<1	-
07/18/95	794,158	533,531	268	<100	<0.5	<0.5	<0.5	<1	-	1,100	<0.5	<0.5	<0.5	<1	-
08/14/95	795,216	534,589	39	<100	<0.5	<0.5	<0.5	<1	-	170	<0.5	<0.5	<0.5	<1	-
09/06/95	797,631	537,004	105	<100	<0.5	<0.5	<0.5	<1	-	1,320	<0.5	<0.5	<0.5	<1	-

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 063, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
10/17/95	800,316	539,689	65	<100	<0.5	<0.5	<0.5	<1	-	2,400	26	2.7	3.9	46	-
11/20/95	806,264	545,637	175	150	<0.3	<0.3	<0.3	<0.5	-	450	0.31	<0.3	<0.3	<0.5	-
12/11/95	809,236	548,609	142	300	<0.3	<0.3	<0.3	0.59	-	470	<0.3	<0.3	<0.3	<0.5	-
01/15/96	822,734	562,107	386	510	<0.3	<0.3	<0.3	<0.5	-	900	0.39	<0.3	<0.3	<0.5	-
02/19/96	848,213	587,586	728	800	<0.3	0.57	<0.3	0.83	-	1700	23	3.7	<0.3	80	-
03/19/96	849,587	588,960	47	930	<0.3	<0.3	<0.3	<0.5	-	1,600	5.5	1.4	<0.3	94	-
04/15/96	852,042	591,415	91	990	<0.3	<0.3	<0.3	<0.5	-	1,100	0.43	<0.3	<0.3	<0.5	-
05/13/96	890,214	629,587	1,363	840	<0.3	<0.3	<0.3	<0.5	-	910	<0.3	<0.3	<0.3	<0.5	-
05/13/96	890,214	629,587	-	System shut down for carbon change											
06/14/96	890,214	629,587	-	Restart the system											
06/18/96	890,818	630,191	151	<50	<0.3	<0.3	<0.3	<0.5	-	1,000	92	8.7	3.4	55	-
07/01/96	892,781	632,154	151	-	-	-	-	-	-	-	-	-	-	-	-
07/08/96	894,210	633,583	204	System shut down due to burglary and damaged air compressor											
08/05/96	894,210	633,583	-	Restart the system											
08/13/96	896,220	635,593	251	<50	<0.3	<0.3	<0.3	<0.5	-	3,500	160	110	220	650	-
09/23/96	899,410	638,783	78	<50	<0.3	<0.3	<0.3	<0.5	-	<50	0.49	<0.3	<0.3	<0.5	-
10/09/96	899,845	639,218	27	<50	<0.3	<0.3	<0.3	<0.5	-	730	1.7	0.42	2.1	2.5	-
11/11/96	901,348	640,721	46	<50	<0.3	<0.3	<0.3	<0.5	-	81	<0.3	<0.3	<0.3	<0.5	-
12/09/96	901,576	640,949	8	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
01/13/97	904,630	644,003	87	<50	<0.3	<0.3	<0.3	<0.5	-	13,000	590	250	180	850	-
02/10/97	912,610	651,983	285	82	<0.3	0.38	<0.3	<0.5	-	700	0.92	0.75	<0.3	4.1	-
03/10/97	921,020	660,393	300	<50	<0.3	<0.3	<0.3	<0.5	-	600	<0.3	<0.3	<0.3	<0.5	-
04/14/97	932,410	671,783	325	<50	<0.3	<0.3	<0.3	<0.5	-	4,400	<0.3	<0.3	<0.3	<0.5	-
05/12/97	941,028	680,401	308	<50	<0.3	<0.3	<0.3	<0.5	-	5,600	7.3	0.32	<0.3	17	-
06/23/97	943,183	682,556	51	-	-	-	-	-	-	-	-	-	-	-	-
07/07/97	945,621	685,194	188	<50	<0.3	<0.3	<0.3	<0.5	-	1,500	3.4	<0.3	<0.3	26	-
08/04/97	951,020	690,393	186	-	-	-	-	-	-	-	-	-	-	-	-
09/02/97	957,933	697,306	238	System shut down due to stolen air compressor											
10/06/97	961,030	700,403	91	-	-	-	-	-	-	-	-	-	-	-	-
10/16/97	961,077	700,450	5	<50	<0.3	<0.3	<0.3	<0.5	-	550	<0.3	<0.3	<0.3	<0.5	-
11/17/97	970,920	710,293	308	-	-	-	-	-	-	-	-	-	-	-	-
12/23/97	986,016	725,389	419	-	-	-	-	-	-	-	-	-	-	-	-
01/05/98	991,520	730,893	423	-	-	-	-	-	-	-	-	-	-	-	-
01/07/98	992,365	731,738	423	<50	<0.3	<0.3	<0.3	<0.5	-	65,000	690	8,400	3,100	20,000	-
02/02/98	996,874	736,247	173	-	-	-	-	-	-	-	-	-	-	-	-
02/09/98	-	-	-	System shut down due to the UST replacement and station remodeling											
02/17/98	-	-	-	<50	<0.3	<0.3	<0.3	<0.5	-	35,000	150	<15	<15	8,900	-
04/13/98	53,000	736,247	-	Replaced carbons and restarted system with new meter (53,000)											
4/13 - 6/1/98	-	-	-	System was undergoing several maintenance / piping / hose replacement											
06/01/98	53,780	737,027	16	-	-	-	-	-	-	-	-	-	-	-	-
07/14/98	56,905	740,152	73	<50	<0.3	<0.3	<0.3	<0.5	-	3,500	14	0.56	<0.3	26	-
08/13/98	59,426	742,673	84	-	-	-	-	-	-	-	-	-	-	-	-
09/11/98	62,356	745,603	101	-	-	-	-	-	-	-	-	-	-	-	-
10/15/98	62,714	745,961	11	<50	<0.3	<0.3	<0.3	<0.5	-	2,200	21	4	<0.3	100	-

**TABLE 2**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 063, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum Discharge (gallons)	Flow (gal/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
11/06/98	62,952	746,199	11	-	-	-	-	-	-	-	-	-	-	-	-
11/20/98	-	-	-	System shut down for flowmeter replacement											
12/01/98	0.0	746,199	-	Restart the system with flowmeter at 000											
12/31/98	5,340.0	751,539	178	-	-	-	-	-	-	-	-	-	-	-	-
01/11/99	15,020.0	761,219	880	System shut down											
1/11 - 2/1/99	-	-	-	System was undergoing maintenance for the compressor											
01/20/99	-	-	-	<50	<0.3	<0.3	<0.3	<0.5	-	110	0.43	0.42	<0.3	<0.5	260
02/01/99	15,600.0	761,799	28	Restart system											
02/12/99	22,840.0	769,039	658	-	-	-	-	-	-	-	-	-	-	-	-
02/22/99	22,840.0	769,039	-	System shut down for carbon canister replacement											
03/26/99	22,840.0	769,039	-	Restart the system											
03/31/99	24,620.0	770,819	356	-	-	-	-	-	-	-	-	-	-	-	-
04/16/99	29,605.0	775,804	312	<50	<0.3	<0.3	<0.3	<0.5	<5	<50	<0.3	<0.3	<0.3	<0.5	<5
05/11/99	36,010.0	782,209	256	-	-	-	-	-	-	-	-	-	-	-	-
05/25/99	46,000.0	792,199	714	System shut down due to carbon canister leaking											
09/02/99	46,000.0	792,199	-	Restart system											
09/17/99	46,217.0	792,416	14	-	-	-	-	-	-	-	-	-	-	-	-
10/07/99	46,809.0	793,008	30	<50	<0.3	<0.3	<0.3	<0.5	11	65	<0.3	<0.3	<0.3	<0.5	120
10/21/99	47,278.0	793,477	34	System shut down for carbon change											
11/24/99	47,283.0	793,482	0	Restart system											
12/30/99	49,386.0	795,585	58	-	-	-	-	-	-	-	-	-	-	-	-
01/26/00	50,569.0	796,768	44	<50	<0.3	<0.3	<0.3	<0.5	-	<50	<0.3	<0.3	<0.3	<0.5	-
02/25/00	51,983.0	798,182	47	-	-	-	-	-	-	-	-	-	-	-	-
03/24/00	54,603.0	800,802	94	-	-	-	-	-	-	-	-	-	-	-	-
04/19/00	56,754.0	802,953	83	<5	<0.25	<0.25	<0.25	<0.5	-	<50	1.3	<0.25	<0.25	<0.5	<5
04/30/00	58,022.0	804,221	115	-	-	-	-	-	-	-	-	-	-	-	-
05/26/00	60,086.0	806,285	79	-	-	-	-	-	-	923	<0.6	2	85	80	*8,350/4,810
06/16/00	61,889.0	808,088	86	<50	<0.3	<0.3	<0.3	<0.6	<5	3,820	<0.3	<0.3	<0.3	<0.6	3,740
07/26/00	65,987.0	812,186	102	<50	<0.3	<0.3	<0.3	<0.6	<5	<50	<0.3	<0.3	<0.3	<0.6	<5
08/25/00	68,630.0	814,829	88	-	-	-	-	-	-	-	-	-	-	-	-
09/29/00	85,661.0	831,860	487	-	-	-	-	-	-	-	-	-	-	-	-
10/13/00	96,212.0	842,411	754	-	-	-	-	-	-	-	-	-	-	-	-
10/20/00	99,700.0	845,899	498	Shut down system for QWS and replaced flowmeter starting at 000 (old meter estimated at 99,700) System restarted on 10/25/00 after QWS											
10/25/00	0.0	845,899	-	<50	<0.18	<0.14	<0.18	<0.26	<0.24	17,100	111	121	141	972	998
10/27/00	2,160.0	848,059	1,080	-	-	-	-	-	-	-	-	-	-	-	-
11/03/00	7,420.0	853,319	751	-	-	-	-	-	-	-	-	-	-	-	-
11/24/00	16,560.0	862,459	435	-	-	-	-	-	-	-	-	-	-	-	-
12/22/00	51,530.0	897,429	1,249	-	-	-	-	-	-	-	-	-	-	-	-
01/10/01	54,520.0	900,419	157	<50	<0.18	<0.14	<0.18	<0.26	<0.24	10,000	384	223	<0.18	1,330	11,600
02/19/01	99,640.0	945,539	1,128	-	-	-	-	-	-	-	-	-	-	-	-
03/19/01	144,170.0	990,069	1,590	-	-	-	-	-	-	-	-	-	-	-	-
04/09/01	167,050.0	1,012,949	1,090	378	<0.18	<0.14	<0.18	<0.26	475	4,040	191	4	42	38	4,990
04/13/01	169,210.0	1,015,109	540	Shut down system for replacement of carbon drums											
04/18/01	169,210.0	1,015,109	-	Restart system											

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 Thrifty Oil Co. Station No 063, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gals/day)	EFFLUENT (ug/L)						INFLUENT (ug/L)					
				TPH-g	B	T	E	X	MTBE	TPH-g	B	T	E	X	MTBE
04/23/01	177,140.0	1,023,039	1,586	93	<0.18	<0.14	<0.18	<0.26	132	1,400	<0.18	<0.14	<0.18	<0.26	3,240
05/02/01	186,800.0	1,032,699	1,073	Shut down system for carbon change											
05/18/01	186,900.0	1,032,799	6	Restart system											
05/30/01	200,850.0	1,046,749	1,163	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3,100	15	<0.14	1	2	*8,510 / 5,780
06/25/01	266,720.0	1,112,619	2,533	-	-	-	-	-	-	-	-	-	-	-	-
07/09/01	278,760.0	1,124,659	860	<50	<0.18	<0.14	<0.18	<0.26	<0.24	748	15	<0.14	2	2.7	1,440
08/13/01	399,700.0	1,245,599	3,455	-	-	-	-	-	-	-	-	-	-	-	-
09/24/01	451,240.0	1,297,139	1,227	-	-	-	-	-	-	-	-	-	-	-	-
10/01/01	488,310.0	1,334,209	5,296	<50	<0.18	<0.14	<0.18	<0.26	<0.24	956	1.2	<0.14	<0.18	<0.26	878
11/12/01	636,260.0	1,482,159	3,523	-	-	-	-	-	-	-	-	-	-	-	-
12/31/01	674,080.0	1,519,979	772	-	-	-	-	-	-	-	-	-	-	-	-
01/14/02	688,450.0	1,534,349	1,026	<50	<0.18	<0.14	<0.18	<0.26	<0.24	232	1	1	<0.18	<0.26	363
02/18/02	738,420.0	1,584,319	1,428	-	-	-	-	-	-	-	-	-	-	-	-
03/25/02	814,570.0	1,660,469	2,176	-	-	-	-	-	-	-	-	-	-	-	-

<b>WD PERMIT LIMITS:</b>	NE	5.0	5.0	5.0	5.0	NE
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**Note:** < = less than laboratory detection level indicated      TPH is analyzed by EPA Method 8015 M  
 - = no sample / not analyzed      BTEX is analyzed by EPA Method 602 or 8020  
 NE = Permit Limit not established      \*MTBE 8020/8260

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

# APPENDIX A



PROJECT STATUS REPORT  
 THRIFTY OIL CO. S.S. #063  
 6125 TELEGRAPH AVENUE  
 OAKLAND, CA 94609  
 DATE: 01.23.02

OBSERVATION WELLS

NO.	DTW	DTP	PT	DTB	DIA.	ODORS			F/P			
						YES	NO	S	YES	NO		
	MONTHLY											
MW-1	15.23			29.03	2 1/2"		X			X	-	-
<del>MW-2</del>											-	-
MW-3				28.25	6 1/4"		X			X	-	-
MW-4	12.28			29.15	2 1/2"		X			X	-	-
MW-5	14.80			26.28	4"		X			X	-	-
MW-6	13.27			26.87	4"		X			X	-	-

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE	DTP - DEPTH TO PRODUCT FROM SURFACE
PT - PRODUCT THICKNESS	S - SLIGHT
MEASUREMENTS IN FEET	
REMARKS:	
FREE PRODUCT REMOVED: APPROX. <u>    </u> GALLONS	WATER REMOVED: APPROX. <u>84</u> GALLONS
DATA RECORDED BY: <u>SPRBAK</u>	INPUT BY: Carrie



**FIELD DATA -GROUNDWATER SAMPLING PROGRAM**

Site:	063	Date:	01.23.02
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DM
Well No:	MW-1	Equip:	BAILER

<b>Before Purging:</b>			
Total Well Depth: (ft.)	29.03	Well Diameter	2"
Depth to Water (ft)	15.23	Est. Purge Volume:	9

<b>Sampling Data:</b>							
<b>Initial Turbidity:</b>				<b>Final Turbidity:</b>			
Time	9:42	9:43	9:44	9:46	9:47	9:48	9:50
EC	890	910	900	910	900	910	900
pH	6.26	6.27	6.23	6.26	6.23	6.26	6.24
Temp	21.4	21.3	21.1	20.9	20.7	20.0	20.3
Gal.	1	2	3	5	6	7	9
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>			
Depth to Water (ft.)	11.06	Total Well Depth(ft).	29.03

**FIELD DATA - GROUNDWATER SAMPLING PROGRAM**

Site:	063	Date:	01.23.01
Address:			
Personnel:	SERBON	Weather:	SUNNY DAY
Well No:	MW-4	Equip:	BAILER

<b>Before Purging:</b>			
Total Well Depth: (ft.)	29.15	Well Diameter	2"
Depth to Water (ft)	12.28	Est. Purge Volume:	11

<b>Sampling Data:</b>							
<b>Initial Turbidity:</b>				<b>Final Turbidity:</b>			
Time	10:00	10:02	10:03	10:05	10:06	10:08	10:10
EC	860	880	870	860	870	890	910
pH	6.09	6.06	6.15	6.12	6.09	6.12	6.09
Temp	71.3	71.1	70.9	70.7	70.6	70.4	70.2
Gal.	1	3	4	6	7	9	11
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>			
Depth to Water (ft.)	13.50	Total Well Depth(ft.)	29.15

## FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	063	Date:	01.23.02
Address:			
Personnel:	SERBAN,	Weather:	SUNNY DAY
Well No:	MW 5	Equip:	BAIFER

<b>Before Purging:</b>			
Total Well Depth: (ft.)	26.28	Well Diameter	4"
Depth to Water (ft)	14.80	Est. Purge Volume:	30

Sampling Data:							
	Initial Turbidity:			Final Turbidity:			
Time	8:34	8:38	8:42	8:47	8:51	8:55	9:00
EC	960	940	920	930	930	960	960
pH	6.12	6.15	6.20	6.22	6.23	6.22	6.23
Temp	71.2	70.9	70.7	70.5	70.3	70.1	70.1
Gal.	4	8	12	18	21	25	30
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>	
Depth to Water (ft.)	9.20
Total Well Depth(ft.)	26.28

## FIELD DATA - GROUNDWATER SAMPLING PROGRAM

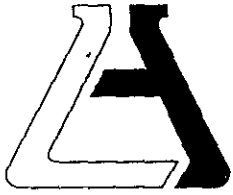
Site:	063	Date:	01.23.02
Address:			
Personnel:	JERBAK	Weather:	SUNNY DAY
Well No:	MW 6	Equip:	PDAUER

<b>Before Purging:</b>			
Total Well Depth: (ft.)	26.87	Well Diameter	4"
Depth to Water (ft)	13.27	Est. Purge Volume:	34

<b>Sampling Data:</b>							
<b>Initial Turbidity:</b>				<b>Final Turbidity:</b>			
Time	9:10	9:15	9:20	9:25	9:30	9:35	9:40
EC	1150	1160	1160	1180	1110	1110	1180
pH	6.16	6.21	6.23	6.21	6.14	6.21	6.14
Temp	21.4	21.1	20.9	20.7	20.5	20.5	20.3
Gal.	4	9	14	19	24	29	34
Time							
EC							
pH							
Temp							
Gal.							

<b>After Purging/Before Sample Collection</b>	
Depth to Water (ft.)	10.82
Total Well Depth(ft.)	26.28

# APPENDIX B



**ASSOCIATED LABORATORIES**

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

FAX 714/538-1209

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

LAB REQUEST 87343

REPORTED 02/04/2002

RECEIVED 01/25/2002

PROJECT Station #063  
6125 Telegraph Ave., Oakland

SUBMITTER Client

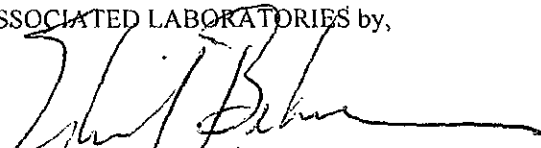
COMMENTS Global ID: T0600101366

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>
322900	TOC #063, MW5
322901	TOC #063, MW6
322902	TOC #063, MW1
322903	TOC #063, MW4
322904	TOC #063, Trip 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. Behafe, 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

<b>Order #:</b> 322900	<b>Client Sample ID</b> TOC #063, MW5 .
<b>Matrix:</b> WATER	<b>Date Sampled:</b> 01/23/2002 <b>Time Sampled:</b> 12:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX + MTBE</b>						
Benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Methyl t - butyl ether	ND	1	5	0.24	ug/L	01/28/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/28/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/28/02 HP
<b>8015M - Total Petroleum Hydrocarbons</b>						
Gasoline	ND	1	50	50	ug/L	01/28/02 HP

<b>Order #:</b> 322901	<b>Client Sample ID</b> TOC #063, MW6 .
<b>Matrix:</b> WATER	<b>Date Sampled:</b> 01/23/2002 <b>Time Sampled:</b> 12:40

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX + MTBE</b>						
Benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Methyl t - butyl ether	ND	1	5	0.24	ug/L	01/28/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/28/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/28/02 HP
<b>8015M - Total Petroleum Hydrocarbons</b>						
Gasoline	ND	1	50	50	ug/L	01/28/02 HP

<b>Order #:</b> 322902	<b>Client Sample ID</b> TOC #063, MW1
<b>Matrix:</b> WATER	<b>Date Sampled:</b> 01/23/2002 <b>Time Sampled:</b> 12:50

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX + MTBE</b>						
Benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Methyl t - butyl ether	ND	1	5	0.24	ug/L	01/28/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/28/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/28/02 HP
<b>8015M - Total Petroleum Hydrocarbons</b>						
Gasoline	ND	1	50	50	ug/L	01/28/02 HP

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



Order #: 322903  
Matrix: WATER

Client Sample ID TOC #063, MW4  
Date Sampled: 01/23/2002 Time Sampled: 13:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX + MTBE</b>						
Benzene	196	50	15.0	0.18	ug/L	01/28/02 HP
Ethyl benzene	68	50	15.0	0.18	ug/L	01/28/02 HP
Methyl t - butyl ether	688	50	250.0	0.24	ug/L	01/28/02 HP
Toluene	57	50	15.0	0.14	ug/L	01/28/02 HP
Xylene (total)	2,090	50	30.0	0.26	ug/L	01/28/02 HP
<b>8260B BTEX/MTBE Only</b>						
Methyl-tert-butylether (MTBE)	738	10	10.0	0.6	ug/L	01/31/02 AM
<b>8015M - Total Petroleum Hydrocarbons</b>						
Gasoline	12,100	20	1000.0	50	ug/L	01/28/02 HP

Order #: 322904  
Matrix: WATER

Client Sample ID TOC #063, Trip Blank  
Date Sampled: 01/23/2002 Time Sampled: 12:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX + MTBE</b>						
Benzene	1.0	1	0.3	0.18	ug/L	01/28/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/28/02 HP
Methyl t - butyl ether	ND	1	5	0.24	ug/L	01/28/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/28/02 HP
Xylene (total)	1.0	1	0.6	0.26	ug/L	01/28/02 HP
<b>8015M - Total Petroleum Hydrocarbons</b>						
Gasoline	ND	1	50	50	ug/L	01/28/02 HP

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





**ASSOCIATED LABORATORIES LAB REQUEST RESULTS SUMMARY**

Client: Thrifty Oil  
 Jeff Suryakusuma  
 13539 E. Foster Rd.  
 Santa Fe Springs, CA 90670

Lab Request: 87343  
 Date Received: 1/25/2002  
 Print Date: 02/04/2002

Project: Station #063  
 6125 Telegraph Ave., Oakland

Objectives: Confirm MTBE if detected.

Sample ID.	Gasoline	Benzene	Toluene	Ethyl benzene	Xylene (total)	MTBE	MTBE by EPA8260
TOC #063, MW1	ND	ND	ND	ND	ND	ND	
TOC #063, MW4	12,100 ug/L	196 ug/L	57 ug/L	68 ug/L	2,090 ug/L	688 ug/L	738 ug/L
TOC #063, MW5	ND	ND	ND	ND	ND	ND	
TOC #063, MW6	ND	ND	ND	ND	ND	ND	
TOC #063, Trip Blank	ND	1.0 ug/L	ND	ND	1.0 ug/L	ND	

ND = Not Detected  
 Blank Field = Component not analyzed by this method.

**ASSOCIATED LABORATORIES**  
QA REPORT FORM

QC Sample: LR 87295-770

Matrix: WATER

Prep. Date: 01/28/02

Analysis Date: 01/28-29/02

LAB ID#'s in Batch: LR 87343, 87344, 87345, 87305, 87362

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

REPORTING UNITS = ug/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spk. Dup	%Rec MS	%Rec MSD	RPD
Benzene	8021	ND	10	8.7	8.7	87	87	0
Toluene	8021	ND	10	8.5	8.4	85	84	1
Ethylbenzene	8021	ND	10	9.3	9.4	93	94	1
Xylenes	8021	ND	20	18.8	18.5	94	93	2

ND = Not Detected

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

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

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

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

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

Test	Method	PREP. BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
Benzene	8021	ND	8.9	10	89	80%	120%
Toluene	8021	ND	8.5	10	85	80%	120%
Ethylbenzene	8021	ND	9.4	10	94	80%	120%
Xylenes	8021	ND	18.1	20	91	80%	120%

LCS = Lab Control Sample Result

TRUE = True Value of LCS

L LIMIT / H LIMIT = LCS Control Limits

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	70-130
QA Sample	92
MS	94
MSD	93
Method Blank	93
LCS	96

AAA-TFT = a,a,a-Trifluorotoluene

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

QC Sample: LCS/LCSD - Water Samples

Analysis Date: 01/31/02

Applies to: LR 87343

Reporting Units = ug/L

**Lab Controlled Spike / Lab Controlled Spike Duplicate**

Test	Sample Result	Spike Added	LCS Spike	LCS Spk. Dup	%Rec LCS	%Rec LCS D	RPD	QC Limits	
								RPD	%REC
1,1-Dichloroethene	ND	50	45.53	43.19	91	86	5	22	59-172
MTBE	ND	50	64.12	64.64	128	129	1	24	62-137
Benzene	ND	50	48.34	51.73	97	103	7	24	62-137
Trichloroethene	ND	50	43.09	44.88	86	90	4	21	66-142
Toluene	ND	50	43.26	46.29	87	93	7	21	59-139
Chlorobenzene	ND	50	49.24	50.32	98	101	2	21	60-133

QC Sample: LCS # 1

Analysis Date: 01/31/02

**LCS RECOVERY / METHOD BLANK**

Test	Sample Result	Spike Added	LCS Spike	%Rec LCS	QC Limits %REC
1,1-Dichloroethene	ND	50	45.53	91	59-172
MTBE	ND	50	64.12	128	62-137
Benzene	ND	50	48.34	97	62-137
Trichloroethene	ND	50	43.09	86	66-142
Toluene	ND	50	43.26	87	59-139
Chlorobenzene	ND	50	49.24	98	60-133

Method Blank = All ND

**ASSOCIATED LABORATORIES**  
QA REPORT FORM

QC Sample: LR 87295-770

Matrix: WATER

Prep. Date: 01/28/02

Analysis Date: 01/28-29/02

ID#'s in Batch: LR 87343, 87344, 87345, 87305, 87362

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

Reporting Units = ug/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
TPH	8015M-G	ND	200	216	202	108	101	6.7

ND = Not Detected

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

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

%REC LIMITS = 70 - 130
RPD LIMITS = 30

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

	PREP BLK					
	Value	Result	True	%Rec	L.Limit	H.Limit
LCS	ND	197	200	99	80%	120%

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	70-130
QA Sample	92
MS	116
MSD	115
Method Blank	93
LCS	119

AAA-TFT = a,a,a-Trifluorotoluene

**ASSOCIATED LABORATORIES**  
EPA 8260 / 624 - SURROGATE RECOVERY

**Lab Request / Order: 87343**

Analysis Date: 01/31/02

Matrix: WATER

Sample No.(Order)	(DCA)	(DBF)	(TOL)	(BFB)
87343-903	131	91	96	100

(DBF) = Dibromofluoromethane

(DCA) = 1,2-Dichloroethane-d4

(TOL) = Toluene-d8

(BFB) = p-Bromofluorobenzene

QC Limits: 70-135
-------------------

**ASSOCIATED LABORATORIES**  
EPA 8021 / 8015G - SURROGATE RECOVERY

*Lab Request: 87343*

Analysis Date: 01/28/02

Matrix : WATER

<b>Sample No.(Order)</b>	<b>AAA-TFT</b>
<b>QC Limit</b>	<b>70-130</b>
87343-900	94
87343-901	93
87343-902	95
87343-903	94
87343-904	94

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

### Cooler Receipt Form

Client: Thriftly 51 Project: 70C 063  
Cooler Received: 1/25 Cooler Opened: 1/25 By: Dunham  
Signed: Dunham

- Was cooler scanned for presence of radioactivity, and noted if found? Yes /  No
- Were custody seals present on outside of cooler? Yes /  No
- a: If Yes, were they intact? Yes /  No
- b: Were signature and date correct? Yes /  No
- Were custody papers completely filled out?  Yes / No
- Did you sign and date the custody papers in the appropriate place?  Yes / No
- Was a shippers packing slip attached to the cooler?  Yes / No
- What kind of packing material was used? ice
- Was sufficient ice used?  Yes / No Temperature: 1.8 °C Date: 1/25
- Were all bottles sealed in plastic bags? Yes /  No
- Did all bottles arrive intact?  Yes / No
- Were all bottles labeled correctly? (ID, Analysis, Dates, Times)  Yes / No
- Were the correct containers included for the tests required?  Yes / No
- Were all VOA vials checked for headspace? NA /  Yes / No
- Was sufficient volume of sample sent in all containers?  Yes / No
- Were correct preservatives used?  Yes / No

Approved by: Dunham Date: 1/25  
If not approved: Name of person contacted \_\_\_\_\_ Date: \_\_\_\_\_



# ASSOCIATED LABORATORIES

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

## Chain of Custody Record

Company: THRIFTY OIL CO. Phone: (562) 921-3581  
 Project Manager: JEFF SURYARUSUMA Fax: (562) 921-7560  
 Project Name: Q. U. S. Project #: 063  
 Site Name and Address: 6125 TELEGRAPH AVE.  
OAKLAND, CA. 94609.

A.L. Job No. 87343

Page 1 of 1

Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	Analysis Requested		Test Instructions & Comments
							T	B	
1	MW 5	01.23.02	12:30	H <sub>2</sub> O	3 VOA	HCL	X	X	TO 600101366 *CONFIRM NTBE BY 8260B, IF DETECTABLE
2	MW 6	↑	12:40	↑	↑	↑	X	X	
3	MW 1	↑	12:50	↑	↑	↑	X	X	
4	MW 4	↑	13:00	↑	↑	↑	X	X	
5	TRIP BLANK	↑	12:30	↑	2 VOA	↑	X	X	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

Sample Receipt - To Be Filled By Laboratory			Relinquished by		
Total Number of Containers	Properly Cooled Y/N/NA	Signature	Signature	2.	3.
14	Y	<u>[Signature]</u>	<u>[Signature]</u>	FEDEX	
Custody Seals Y/N/NA	Y/N/NA	Printed Name: <u>SURYARUSUMA</u>	Printed Name:		
Received in Good Condition Y/N	Y	Date:	Date:		
Turn Around Time			Received By:	2.	3.
			Signature:		
			Printed Name:		
			Date:		
			Received By:		
			Signature:		
			Printed Name:		
			Date:		



# APPENDIX C

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBIA POPEVIC

DATE OF INSPECTION: 03.25.02

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

FLOW METER READING: -0814570-

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 12

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 10

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCU

DATE OF INSPECTION: 03.18.02

OBSERVATIONS AND  
COMMENTS: ADD OIL, CLEAN WATER FILTER BAG, CHECK

BELT, HOSES, DRUMS, REPLACE CARTRIDGE WATER FILTER,

FLOW METER READING: - 079.7340 -

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.7

INSPECTOR'S SIGNATURE: 

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: JERBA-POPESCU

DATE OF INSPECTION: 03.11.02

OBSERVATIONS AND  
COMMENTS: CHECK OIL, BELT, HOSES, REPLACE CARTRIDGE  
WATER FILTER, CLEAN FILTER BAG,

FLOW METER READING: -0783560-

SAMPLES OBTAINED: H1A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: 

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCU

DATE OF INSPECTION: 03.04.02

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

FLOW METER READING: -0761450-

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAPODES U

DATE OF INSPECTION: 02.25.02

OBSERVATIONS AND  
COMMENTS: ADD OIL, CLEAN WATER FILTER BAG,

CHECK BELT, HOSES, REPLACE CARTRIDGE WATER  
FILTER,

FLOW METER READING: - 074.6340 -

SAMPLES OBTAINED: H10


PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14.

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 12

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.7.

INSPECTOR'S SIGNATURE: 

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBA PODESU

DATE OF INSPECTION: 02.18.02

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

FLOW METER READING: -0738420-

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.7

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBACPOPEW

DATE OF INSPECTION: 02.11.02

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

FLOW METER READING: -0721320-

SAMPLES OBTAINED: H/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 12

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.9

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.7

INSPECTOR'S SIGNATURE: 



THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCU

DATE OF INSPECTION: 02.04.02

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

FLOW METER READING: - 071242 -

SAMPLES OBTAINED: H/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 12

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBIA POPESE

DATE OF INSPECTION: 01-21-02

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

water filter bag,

FLOW METER READING: -0694980-

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 0.7

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: 

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBARIPODESCU

DATE OF INSPECTION: 01.14.02

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

FLOW METER READING: -0688450-

SAMPLES OBTAINED: yes

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN POPESCU

DATE OF INSPECTION: 01.07.02

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

water filter bag

FLOW METER READING: -0680330-

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: [Signature]

THRIFTY OIL CO. SERVICE STATION #63  
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA  
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAY POPESCU

DATE OF INSPECTION: 12-31-01

OBSERVATIONS AND  
COMMENTS: CHANGE OIL, CLEAN WATER FILTER, REPLACE  
CARTRIDGE WATER FILTER, CHECK BELT,

FLOW METER READING: -0674080-

SAMPLES OBTAINED: N/A


PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 12

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 10

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

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

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT: 0.6

INSPECTOR'S SIGNATURE: 

# APPENDIX D



**ASSOCIATED LABORATORIES**

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

FAX 714/538-1209

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

LAB REQUEST 86756

REPORTED 01/29/2002

RECEIVED 01/16/2002

PROJECT Station #063  
6125 Telegraph Ave., Oakland

SUBMITTER Client

COMMENTS

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

<u>Order No.</u>	<u>Client Sample Identification</u>
320993	TOC #063, Outlet PSP #1
320994	TOC #063, Int-1
320995	TOC #063, Int-2
320996	TOC #063, Int-3
320997	TOC #063, Inlet

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 #:** 320993**Client Sample ID** TOC #063, Outlet PSP #1**Matrix:** WATER**Date Sampled:** 01/14/2002 **Time Sampled:** 11:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8021B BTEX + MTBE**

Benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Methyl t - butyl ether	ND	1	5	0.24	ug/L	01/18/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/18/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/18/02 HP

**8015M - Total Petroleum Hydrocarbons**

Gasoline	ND	1	50	50	ug/L	01/18/02 HP
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**Order #:** 320994**Client Sample ID** TOC #063, Int-1**Matrix:** WATER**Date Sampled:** 01/14/2002 **Time Sampled:** 11:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8021B BTEX + MTBE**

Benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Methyl t - butyl ether	6.3	1	5	0.24	ug/L	01/18/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/18/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/18/02 HP

**8015M - Total Petroleum Hydrocarbons**

Gasoline	ND	1	50	50	ug/L	01/18/02 HP
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**Order #:** 320995**Client Sample ID** TOC #063, Int-2**Matrix:** WATER**Date Sampled:** 01/14/2002 **Time Sampled:** 11:15

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8021B BTEX + MTBE**

Benzene	6.0	1	0.3	0.18	ug/L	01/18/02 HP
Ethyl benzene	2.0	1	0.3	0.18	ug/L	01/18/02 HP
Methyl t - butyl ether	1,060	50	250.0	0.24	ug/L	01/18/02 HP
Toluene	1.0	1	0.3	0.14	ug/L	01/18/02 HP
Xylene (total)	1.0	1	0.6	0.26	ug/L	01/18/02 HP

**8015M - Total Petroleum Hydrocarbons**

Gasoline	777	1	50	50	ug/L	01/18/02 HP
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PQL = Practical Quantitation Limit. MDL = Method detection limit, DF = Dilution Factor  
 ND = Not detected below indicated MDL. J=Trace





**Order #:** 320996**Client Sample ID** TOC #063, Int-3**Matrix:** WATER**Date Sampled:** 01/14/2002 **Time Sampled:** 11:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8021B BTEX + MTBE**

Benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Methyl t - butyl ether	ND	1	5	0.24	ug/L	01/18/02 HP
Toluene	ND	1	0.3	0.14	ug/L	01/18/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/18/02 HP

**8015M - Total Petroleum Hydrocarbons**

Gasoline	ND	1	50	50	ug/L	01/18/02 HP
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**Order #:** 320997**Client Sample ID** TOC #063, Inlet**Matrix:** WATER**Date Sampled:** 01/14/2002 **Time Sampled:** 11:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8021B BTEX + MTBE**

Benzene	1.0	1	0.3	0.18	ug/L	01/18/02 HP
Ethyl benzene	ND	1	0.3	0.18	ug/L	01/18/02 HP
Methyl t - butyl ether	363	20	100.0	0.24	ug/L	01/18/02 HP
Toluene	1.0	1	0.3	0.14	ug/L	01/18/02 HP
Xylene (total)	ND	1	0.6	0.26	ug/L	01/18/02 HP

**8015M - Total Petroleum Hydrocarbons**

Gasoline	232	1	50	50	ug/L	01/18/02 HP
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PQL = Practical Quantitation Limit. MDL = Method detection limit, DF = Dilution Factor  
 ND = Not detected below indicated MDL, J=Trace



**ASSOCIATED LABORATORIES**  
EPA 8021 / 8015G - SURROGATE RECOVERY

**Lab Request: 86756**

Analysis Date: 01/18/02

Matrix : WATER

Sample No.(Order)	AAA-TFT
QC Limit	70-130
320993	95
320994	95
320995	104
320996	96
320997	102

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

**ASSOCIATED LABORATORIES**  
QA REPORT FORM

QC Sample: LR 86857-338  
 Matrix: WATER  
 Prep. Date: 01/19/02  
 Analysis Date: 01/19 - 20/02  
 LAB ID#'s in Batch: LR 86811, 86756

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

REPORTING UNITS = ug/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spk. Dup	%Rec MS	%Rec MSD	RPD
Benzene	8021	ND	10	8.9	8.8	89	88	1
Toluene	8021	ND	10	8.9	8.6	89	86	3
Ethylbenzene	8021	ND	10	9.7	9.7	97	97	0
Xylenes	8021	ND	20	19.8	19.0	99	95	4

ND = Not Detected

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

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

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

RPD LIMITS = 30
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**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

Test	Method	PREP. BLK	LCS				
		Value	Result	True	%Rec	L.Limit	H.Limit
Benzene	8021	ND	9.0	10	90	80%	120%
Toluene	8021	ND	8.8	10	88	80%	120%
Ethylbenzene	8021	ND	10.3	10	103	80%	120%
Xylenes	8021	ND	19.4	20	97	80%	120%

LCS = Lab Control Sample Result

TRUE = True Value of LCS

L.LIMIT / H.LIMIT = LCS Control Limits

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	70-130
QA Sample	94
MS	98
MSD	97
Method Blank	98
LCS	99

AAA-TFT = a,a,a-Trifluorotoluene

**ASSOCIATED LABORATORIES**  
QA REPORT FORM

QC Sample: LR 86857-338

Matrix: WATER

Prep. Date: 01/18/02

Analysis Date: 01/18 - 19/02

ID#'s in Batch: LR 86747, 86770, 86810, 86811, 86756

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

Reporting Units = ug/L

Test	Method	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	RPD
TPH	8015M-G	ND	200	207	187	104	94	10.2

ND = Not Detected

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

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

%REC LIMITS = 70 - 130
RPD LIMITS = 30

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

	PREP BLK					
	Value	Result	True	%Rec	L.Limit	H.Limit
LCS	ND	237	200	119	80%	120%

LCS Result = Lab Control Sample Result

True = True Value of LCS

L Limit / H.Limit = LCS Control Limits

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	70-130
QA Sample	94
MS	117
MSD	117
Method Blank	95
LCS	118

AAA-TFT = a,a,a-Trifluorotoluene

# Chain of Custody Record

**ASSOCIATED LABORATORIES**

806 North Batavia • Orange, CA 92868

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



Company <b>THRIFTY OIL CO.</b>		Phone <b>(562) 921-3581</b>		A.L. Job No. <b>86756</b>		Page _____ of _____								
Project Manager <b>JEFF SURYAKUSUMA</b>		Fax <b>(562) 921-7510</b>		<b>Analysis Requested</b>				<b>Test Instructions &amp; Comments</b>						
Project Name <b>SYSTEM WATER SAMPLING</b>		Project # <b>063</b>												
Site Name and Address <b>6125 TELEGRAPH AVE. OAKLAND, CA.</b>				T B M P T T H X E										
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.								
1 <b>OUTLET PSHA</b>		<b>01.14.02</b>	<b>11:00</b>	<b>H<sub>2</sub>O</b>	<b>3VOA</b>	<b>HCL</b>	X	X	X					
2 <b>INT-1</b>		↑	<b>11:10</b>	↑	↑	↑	X	X	X					
3 <b>INT-2</b>		↑	<b>11:15</b>	↑	↑	↑	X	X	X					
4 <b>INT-3</b>		↑	<b>11:20</b>	↑	↑	↑	X	X	X					
5 <b>INLET</b>		↓	<b>11:30</b>	↓	↓	↓	X	X	X					
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

<b>Sample Receipt - To Be Filled By Laboratory</b>				Relinquished by <b>1. ZARBA</b>		Relinquished by <b>2. FEDEX</b>		Relinquished by <b>3.</b>	
Total Number of Containers	<b>15</b>	Property Cooled Y/N/NA	<b>Y</b>	Signature:	<b>[Signature]</b>	Signature:	<b>[Signature]</b>	Signature:	
Custody Seals Y/N/NA	<b>N</b>	Samples Intact Y/N/NA	<b>Y</b>	Printed Name:	<b>ZARBA</b>	Printed Name:		Printed Name:	
Received in Good Condition Y/N	<b>Y</b>	Samples Accepted Y/N	<b>Y</b>	Date:	<b>01.15.01</b>	Time:	<b>18:00</b>	Date:	
<b>Turn Around Time</b>				Received By: <b>1. FEDEX</b>		Received By: <b>2.</b>		Received By: <b>3.</b>	
<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Same Day	<input type="checkbox"/> 48 hrs.	Signature:	<b>[Signature]</b>	Signature:	<b>[Signature]</b>	Signature:	
		<input type="checkbox"/> 24 hrs.	<input type="checkbox"/> 72 hrs.	Printed Name:	<b>DUONG W</b>	Printed Name:		Printed Name:	
				Date:	<b>1/15</b>	Time:	<b>11:20</b>	Date:	<b>1-16</b>
								Time:	<b>8:00</b>