

THRIFTY OIL CO.

October 14, 1994

Mr. Scott O. Seary
Alameda County
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

not certified
by CA professional
10/11/94

RE: Thrifty Oil Co. Station #054
2504 Castro Valley Boulevard
Castro Valley, California
3rd QUARTER REPORT, 1994

Dear Mr. Seary,

This letter report presents the results of soil/groundwater treatment and site monitoring during the 3rd quarter of 1994 at the subject site. The approximate location of the on- and off-site monitoring wells are shown on **Figure 1**. The engine of the RSI unit was replaced and was operational the first week in May, 1993. All monitoring is conducted by Earth Management Co. (EMC).

Site Monitoring and Sample Collection

The site was visited on September 6, 1994, by an EMC technician in order to gauge the wells and collect groundwater samples. Water levels were measured in each well from the rim of well cover using a Marine Moisture Tape (nearest 0.01 feet) capable of also measuring the presence of free floating hydrocarbons. *Depth to water* ranged from about 3.16 to 11.30 feet below grade which is consistent with previous data collected, indicating a slight drop. As of September 6, 1994, two of the wells, RE-4 and RE-7, exhibited free product visible as a sheen or film. The depth to water data was used in conjunction with the recent survey data to determine groundwater elevations across the site. The interpretation of groundwater flow across the site is depicted on **Figure 1**. In general, the *groundwater flow* was to the east at a calculated gradient of about 0.10 feet per feet.

Prior to collecting groundwater samples from the wells, about 4 well volumes of groundwater was removed using a PVC bailer. During the purging process, the pH, conductivity and temperature were checked and recorded to insure formation water was entering the well to be sampled. About 8 to 39 gallons of water were removed from each well and stored in 55 gallon D.O.T. approved drums pending disposal or discharge through the treatment unit. Groundwater samples were collected with a Teflon bailer. Samples were maintained and transported in 40 milliliter vials placed on ice pending delivery to Smith-Emery, a state



certified analytical laboratory headquartered in Los Angeles, California. Field monitoring sheets prepared by EMC personnel are included in **Appendix A**.

Analytical Results

Groundwater Monitoring Wells. Groundwater samples were analyzed for total hydrocarbons (TPH) and volatile aromatic compounds (BETX) using EPA methods 8015 and 602, respectively. Copies of the laboratory analysis reports are attached in **Appendix B**. A summary of the results are presented in **Table 1**. The two downgradient wells, RS-8 and RS-10 continue to indicate less than detectable levels of volatile aromatic compounds. Isoconcentration maps of TPH and benzene based on the September sampling event are presented as **Figures 2 and 3**.

Treatment Unit Operation Status

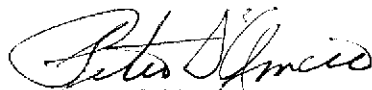
Based on the data obtained by EMC, the RSI-SAVE unit operated 888 hours during the reporting period and 10,424 hours total (current meter reading 7340). A total of about 12,959.5 gallons of water has been processed by the unit and discharged to the local sanitary sewer to date, September 20, 1994. During this reporting period, a total of 2,624.5 gallons of water was processed.

In order to monitor the effects of soil and air removal, field vapor measurements are collected and recorded from each recovery well on a monthly basis. The data is included in **Table 2** attached.

Closing

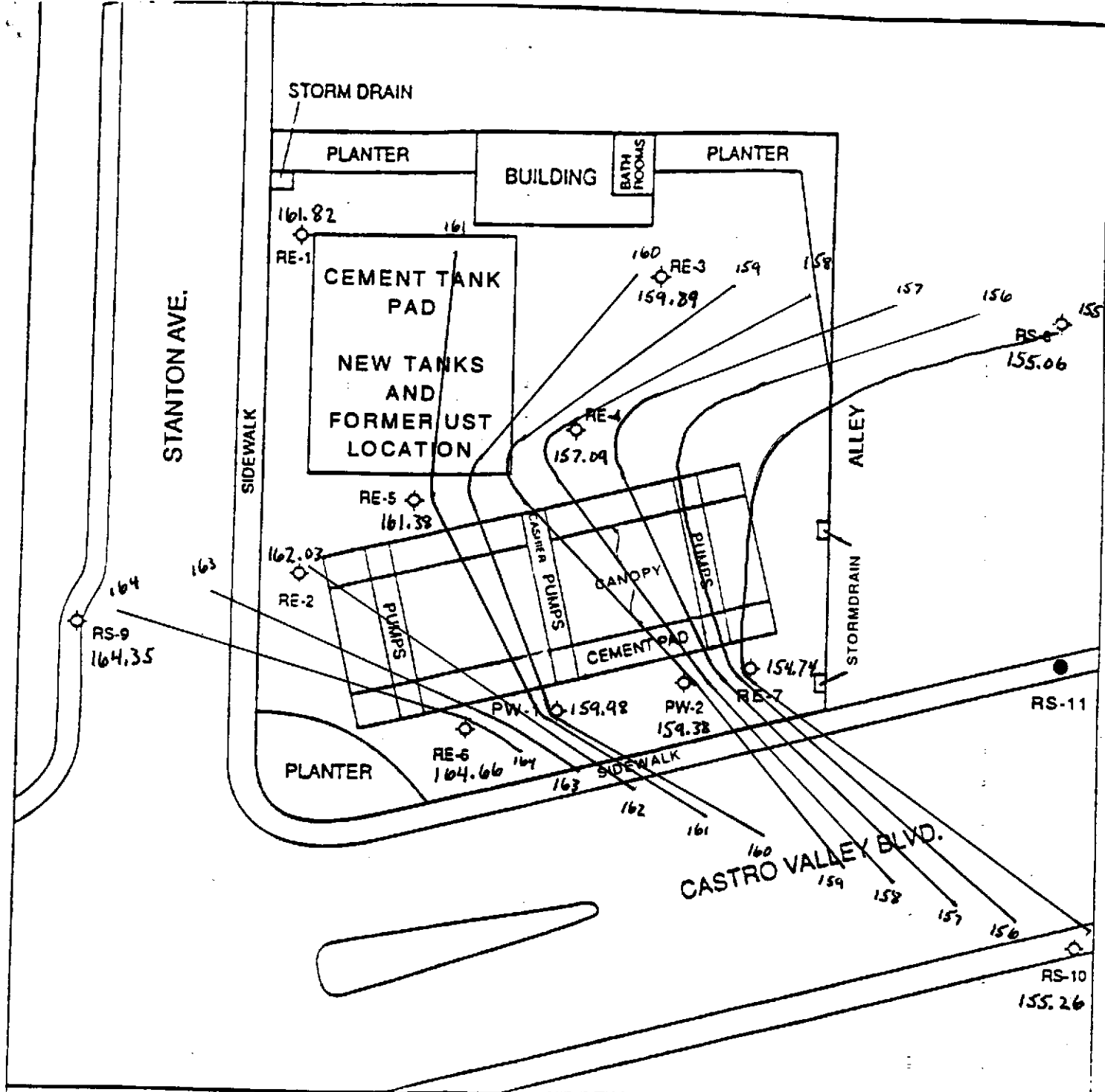
Thrifty will continue to conduct quarterly groundwater monitoring at the site. In addition, the workplan for installation of one off-site well near the southeast corner of the site has been approved as submitted. A purchase order has been issued and this work is anticipated to be completed during the 4th quarter of 1994 if encroachment permits can be obtained within the next month. If you have any questions, please contact me at (310) 923-9876.

Very truly yours,



Peter D'Amico
Manager
Environmental Affairs

FIGURES



GROUNDWATER CONTOUR MAP

THRIFTY OIL CO. #054
CASTRO VALLEY, CALIFORNIA
 Prepared for
THRIFTY OIL CO.
DOWNEY, CALIFORNIA



- ~ GROUNDWATER CONTOUR, 9/6/94
- PROPOSED MONITORING WELL
- ◊ EXISTING MONITORING WELL

SCALE IN FEET

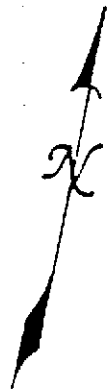
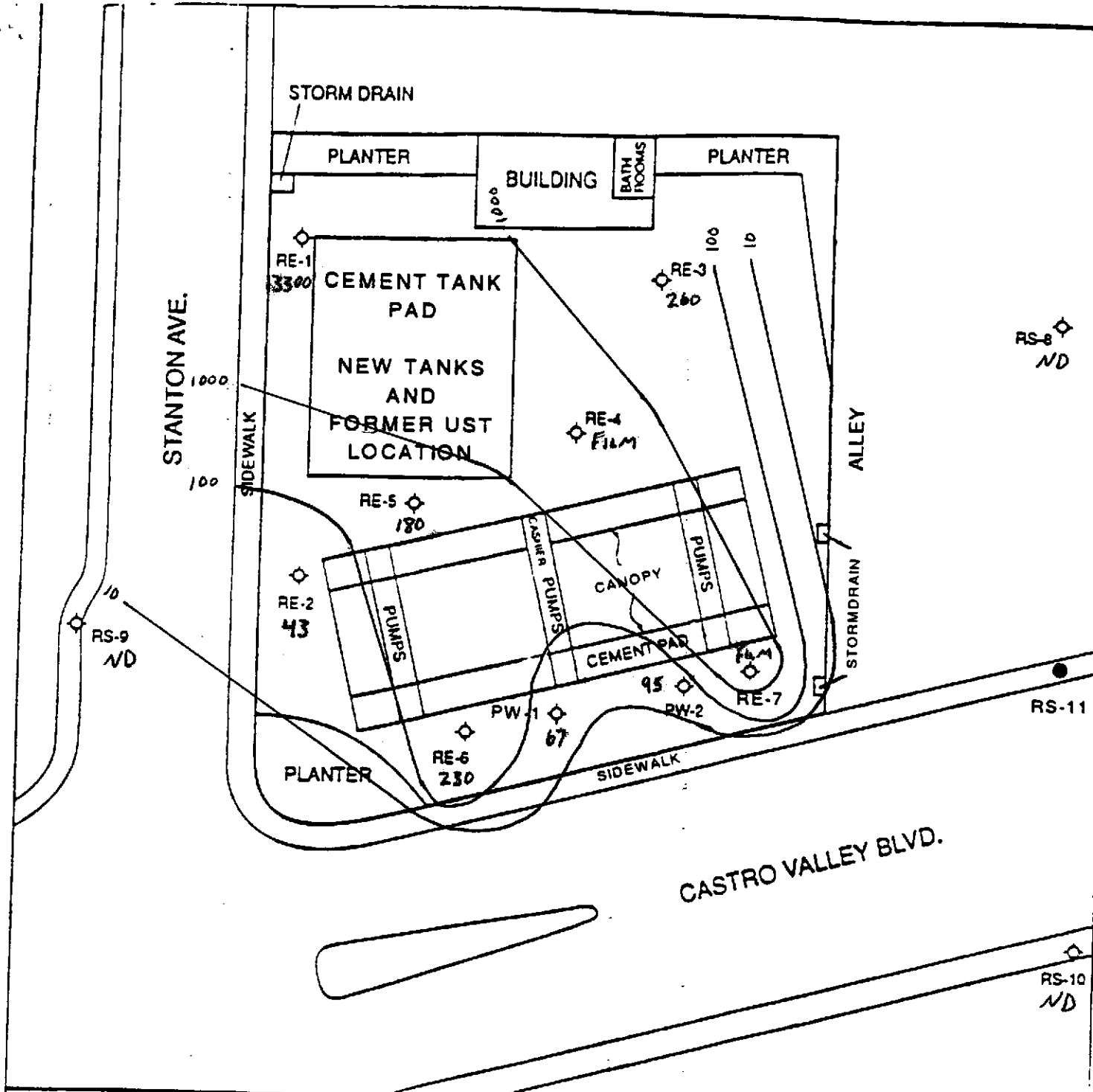
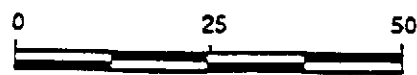


FIGURE 1



BENZENE CONTOUR MAP
THRIFTY OIL CO. #054
CASTRO VALLEY, CALIFORNIA
 Prepared for
THRIFTY OIL CO.
DOWNEY, CALIFORNIA



SCALE IN FEET

- ~ BENZENE CONTOUR, 9/6/94, ug/l
- PROPOSED MONITORING WELL
- ◇ EXISTING MONITORING WELL

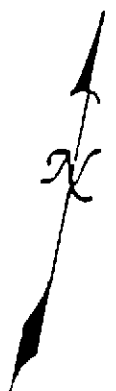


FIGURE 3

TABLES

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #54

Date Sampled	TPH	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	TOP OF CASING ELEVATION	DEPTH TO GROUNDWATER
Monitoring Well PW-1							
Apr 11, 1988	NSC					166.46	
Apr 9, 1990	230000	600	2700	1000	16000		5.10
Oct 30, 1990	35000	240	970	240	3580		6.17
Jan 18, 1991	37000	43	140	42	1600		6.28
Feb 12, 1991	45000	99	130	25	700		5.88
Mar 20, 1991	1900	0.43	ND	ND	2.8		4.75
May 22, 1991	41000	600	730	250	3800		5.10
Jun 19, 1991	NSC						5.61
Jul 17, 1991	NSC						5.53 (Film)
Aug 7, 1991	NSC						5.67 (Film)
Sep 24, 1991	NSC						5.57 (Film)
Oct 23, 1991	NSC						6.53 (Film)
Nov 6, 1991	NSC						5.85 (Film)
Dec 4, 1991	NSC						5.91 (Film)
Jan 29, 1992	NSC						5.43 (Film)
Feb 26, 1992	NSC						5.54 (Film)
Mar 19, 1992	ND	ND	ND	ND	ND		5.47
Apr 22, 1992	NSC						5.62 (Film)
May 21, 1992	1300	19	2.9	0.7	58		6.21
Jun 25, 1992	NSC						6.94
Jul 30, 1992	NSC						5.90 (Film)
Aug 20, 1992	NSC						7.12 (Film)
Sep 30, 1992	3400	57	ND	26	240		6.42
Dec 23, 1992	NSC						5.56 (Film)
Mar 10, 1993	NSC						5.65 (Film)
Jun 9, 1993	400	<0.5	1.1	<1.0	<1.0		5.30
Sep 14, 1993	180	3.7	3.2	1.5	14.0		5.43
Dec 14, 1993	<50	<0.3	<0.3	<0.3	<0.5		4.65
Mar 2, 1994	<50	<0.3	<0.3	<0.3	<0.5		5.43
Jun 6, 1994	330	1.3	<0.3	0.88	9.8		4.70
Sep 6, 1994	1100	67	<0.3	<0.3	24		6.48

TABLE 1 (Continued)

Monitoring Well RE-1							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	37000	1900	8400	1200	15000	166.82	
Apr 9, 1990	45000	6100	7000	2000	8800		4.99
Oct 30, 1990	72000	7700	5300	1800	8900		5.95
Jan 18, 1991	150000	11000	14000	1800	4300		5.17
Feb 12, 1991	140000	11000	12000	1600	13000		4.16
Mar 20, 1991	53000	3100	4200	400	5500		4.75
May 22, 1991	85000	8700	10000	1800	12000		4.42
Jun 19, 1991	110000	8500	9600	2600	16000		4.93
Jul 17, 1991	5500	950	ND	26	ND		5.19
Aug 7, 1991	NA	6700	5000	ND	7100		5.12
Sep 24, 1991	60000	6800	4300	640	6900		5.87
Oct 23, 1991	79000	7900	8300	450	7100		5.81
Nov 6, 1991	130000	14000	15000	1100	8800		5.56
Dec 4, 1991	50000	8000	4700	520	4100		5.35
Jan 29, 1992	21000	10300	11000	780	6000		4.50
Feb 26, 1992	38000	8400	10500	720	7100		5.27
Mar 19, 1992	48000	6200	9700	780	7200		4.47
Apr 22, 1992	NSC						4.62
May 21, 1992	20000	7600	10100	830	6900		4.98
Jun 25, 1992	NSC						5.14 (Film)
Jul 30, 1992	NSC						5.30 (Film)
Aug 20, 1992	NSC						5.28 (Film)
Sep 30, 1992	NSC						5.66 (Film)
Dec 23, 1992	NSC						4.81 (Film)
Mar 10, 1993	NSC						4.13 (Film)
Jun 9, 1993	NSC						4.48 (Film)
Sep 14, 1993	19000	3600	1100	740	4300		5.35
Dec 14, 1993	38000	4300	1300	<6.6	11.0		4.38
Mar 2, 1994	NSC						4.22 (Film)
Jun 6, 1994	NSC						2.16 (Film)
Sep 6, 1994	74000	3300	3900	1200	6100		5.00

TABLE 1 (Continued)

Monitoring Well PW-2							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	NSC					166.18	
Apr 9, 1990	600000	1300	11000	4600	43000		5.81
Oct 30, 1990	48000	310	51	10	480		6.95
Jan 18, 1991	86000	230	1400	350	8300		6.92
Feb 12, 1991	160000	680	1300	250	7000		6.78
Mar 20, 1991	17000	34	50	ND	1100		5.54
May 22, 1991	14000	57	2100	500	8200		6.07
Jun 19, 1991	NSC						6.37 (Film)
Jul 17, 1991	NSC						6.38 (Film)
Aug 7, 1991	NSC						6.63 (Film)
Sep 24, 1991	NSC						6.42 (Film)
Oct 23, 1991	NSC						7.25 (Film)
Nov 6, 1991	NSC						6.44 (Film)
Dec 4, 1991	NSC						6.65 (Film)
Jan 29, 1992	NSC						6.17 (Film)
Feb 26, 1992	NSC						5.90 (Film)
Mar 19, 1992	NSC						5.80 (Film)
Apr 22, 1992	NSC						5.88 (Film)
May 21, 1992	NSC						6.03 (Film)
Jun 25, 1992	NSC						6.57 (Film)
Jul 30, 1992	NSC						6.20 (Film)
Aug 20, 1992	NSC						6.64 (Film)
Sep 30, 1992	NSC						6.88 (Film)
Dec 23, 1992	NSC						6.08 (Film)
Mar 10, 1993	NSC						5.95 (Film)
Jun 9, 1993	3400	24	2.2	<0.5	240		5.38
Sep 14, 1993	4900	190	15.0	6.8	480		6.26
Dec 14, 1993	1700	4.2	<0.3	<0.3	<0.5		5.22
Mar 2, 1994	NSC						5.75 (Film)
Jun 6, 1994	980	25	1.2	<0.3	42		5.25
Sep 6, 1994	3200	95	3.0	<1.7	76		6.80

TABLE 1 (Continued)

Monitoring Well RE-2							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	NSC					167.19	
Apr 9, 1990	850	5.8	0.5	4.8	1.1		4.90
Oct 30, 1990	440	2.8	0.91	13	3.14		5.34
Jan 18, 1991	1100	8.4	3.1	ND	10		4.90
Feb 12, 1991	1100	5.9	ND	01.77	ND		4.94
Mar 20, 1991	550	4.3	ND	ND	ND		4.32
May 22, 1991	1000	5.3	3.6	4.4	8.9		4.43
Jun 19, 1991	700	2.1	1.4	3.8	3.5		6.43
Jul 17, 1991	880	12.0	8.0	4.3	28.0		4.75
Aug 7, 1991	NA	3.8	1.6	ND	ND		4.87
Sep 24, 1991	670	7.2	7.1	ND	23		5.50
Oct 23, 1991	2700	52	60	22	130		5.63
Nov 6, 1991	1900	18	61	9.1	83		5.14
Dec 4, 1991	1100	26	47	4.3	42		5.26
Jan 29, 1992	900	14	24	5.3	19		5.11
Feb 26, 1992	500	3.4	3.5	2.7	2.7		4.31
Mar 19, 1992	1200	14	20	15	18		4.45
Apr 22, 1992	200	ND	ND	ND	ND		4.78
May 21, 1992	500	7.5	6.8	3.9	7.4		5.02
Jun 25, 1992	ND	ND	0.9	0.7	ND		5.13
Jul 30, 1992	500	7.7	8.6	3.2	1.7		5.19
Aug 20, 1992	1100	6.6	4.5	2.7	2.0		5.27
Sep 30, 1992	500	5.4	2.4	1.8	4.5		5.45
Dec 23, 1992	800	1.9	ND	ND	2.3		4.60
Mar 10, 1993	1200	ND	1.4	ND	2.1		4.18
Jun 9, 1993	200	ND	ND	ND	ND		4.53
Sep 14, 1993	360	1.6	1.1	3.2	8.9		5.26
Dec 14, 1993	260	5.6	3.9	<0.3	21.0		2.75
Mar 2, 1994	410	<0.3	<0.3	<0.3	<0.5		4.27
Jun 6, 1994	760	4.6	<0.3	0.32	1.3		4.88
Sep 6, 1994	1300	43	45	8.9	69		5.16

TABLE 1 (Continued)

Monitoring Well RE-3							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	70000	6600	5300	800	13000	167.39	
Apr 9, 1990	370000	2300	4900	3200	31000		7.15
Oct 30, 1990	13000	860	660	220	2210		7.84
Jan 18, 1991	42000	4700	4500	21	7700		6.90
Feb 12, 1991	72000	3600	4500	ND	7600		6.62
Mar 20, 1991	65000	2400	9400	50	9800		5.87
May 22, 1991	NSC						5.98 (Film)
Jun 19, 1991	NSC						6.84 (Film)
Jul 17, 1991	NSC						7.10 (Film)
Aug 7, 1991	NSC						7.30 (Film)
Sep 24, 1991	NSC						7.84 (Film)
Oct 23, 1991	NSC						8.07 (Film)
Nov 6, 1991	NSC						7.63 (Film)
Dec 4, 1991	NSC						7.83 (Film)
Jan 29, 1992	NSC						7.17 (Film)
Feb 26, 1992	NSC						5.56 (Film)
Mar 19, 1992	NSC						5.44 (Film)
Apr 22, 1992	NSC						6.56 (Film)
May 21, 1992	NSC						6.90 (Film)
Jun 25, 1992	NSC						7.18 (Film)
Jul 30, 1992	NSC						6.80 (Film)
Aug 20, 1992	NSC						7.25 (Film)
Sep 30, 1992	NSC						7.68 (Film)
Dec 23, 1992	NSC						6.07 (Film)
Mar 10, 1993	NSC						5.66 (Film)
Jun 9, 1993	NSC						6.66 (Film)
Sep 14, 1993	40000	2900	1500	180	6900		7.30
Dec 14, 1993	NSC						5.95
Mar 2, 1994	NSC						5.08
Jun 6, 1994	NSC						6.35 (Film)
Sep 6, 1994	11000	260	26	<6.6	1000		7.50

TABLE 1 (Continued)

Monitoring Well RE-4							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	150000	12000	8000	1000	27000	166.94	
Apr 9, 1990	NSC						
Oct 30, 1990	87000	7200	10000	1600	12900		7.04
Jan 18, 1991	70000	5000	5400	790	9900		11.62
Feb 12, 1991	87000	5200	2800	240	11000		11.63
Mar 20, 1991	6500	370	230	17	670		11.61
May 22, 1991	NSC						10.3 (Film)
Jun 19, 1991	NSC						11.1 (Film)
Jul 17, 1991	NSC						6.20 (Film)
Aug 7, 1991	NSC						8.15 (Film)
Sep 24, 1991	NSC						10.4 (Film)
Oct 23, 1991	NSC						11.2 (Film)
Nov 6, 1991	NSC						6.62 (Film)
Dec 4, 1991	NSC						11.2 (Film)
Jan 29, 1992	NSC						7.72 (Film)
Feb 26, 1992	NSC						5.13 (Film)
Mar 19, 1992	NSC						5.00 (Film)
Apr 22, 1992	NSC						5.94 (Film)
May 21, 1992	NSC						5.40 (Film)
Jun 25, 1992	NSC						5.71 (Film)
Jul 30, 1992	NSC						6.33 (Film)
Aug 20, 1992	NSC						5.80 (Film)
Sep 30, 1992	NSC						6.34 (Film)
Dec 23, 1992	NSC						5.50 (Film)
Mar 10, 1993	NSC						4.67 (Film)
Jun 9, 1993	NSC						5.12 (Film)
Sep 14, 1993	NSC						10.44
Dec 14, 1993	NSC						7.52
Mar 2, 1994	NSC						4.85
Jun 6, 1994	NSC						5.20 (Film)
Sep 6, 1994	NSC						9.85 (Film)

TABLE 1 (Continued)

Monitoring Well RE-5							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	14000	1300	1100	100	2600	166.51	
Apr 9, 1990	3000	690	190	40	270		4.79
Oct 30, 1990	3400	910	48	87	249		5.86
Jan 18, 1991	1400	180	8.6	0.52	48		4.40
Feb 12, 1991	1000	ND	ND	0.65	ND		4.76
Mar 20, 1991	3000	250	53	ND	110		5.08
May 22, 1991	2500	330	7.8	5.6	200		4.52
Jun 19, 1991	2000	59	1.6	5.1	110		4.39
Jul 17, 1991	NSC						5.05 (Film)
Aug 7, 1991	NSC						5.02 (Film)
Sep 24, 1991	NSC						5.86 (Film)
Oct 23, 1991	NSC						5.84 (Film)
Nov 6, 1991	9900	2300	37	260	160		5.48
Dec 4, 1991	4500	1000	27	ND	180		5.43
Jan 29, 1992	600	6.1	2.3	ND	47		5.12
Feb 26, 1992	500	5.4	2.7	1.2	14		4.93
Mar 19, 1992	ND	1.7	1.1	ND	5.5		4.45
Apr 22, 1992	1600	240	2.2	ND	160		4.63
May 21, 1992	1200	410	37	ND	118		4.90
Jun 25, 1992	ND	1.0	0.8	0.8	0.4		5.15
Jul 30, 1992	ND	2.0	1.8	1.9	6.4		5.30
Aug 20, 1992	300	1.7	3.3	0.7	12		5.44
Sep 30, 1992	1900	140	ND	19	35		5.73
Dec 23, 1992	400	8.0	ND	ND	ND		4.75
Mar 10, 1993	1100	290	9.7	ND	75		4.14
Jun 9, 1993	400	1.5	0.5	ND	12		5.42
Sep 14, 1993	240	6.9	8.8	1.4	67		5.53
Dec 14, 1993	3300	510	5.4	4.1	55		4.78
Mar 2, 1994	2400	270	4.5	<0.3	13		4.20
Jun 6, 1994	730	<0.3	<0.3	0.70	22		5.13
Sep 6, 1994	2400	180	28	2.3	76		5.45

TABLE 1 (Continued)

Monitoring Well RE-6							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	6000	3000	40	80	140	166.51	
Apr 9, 1990	3000	990	ND	70	ND		5.64
Oct 30, 1990	3400	1000	28	ND	ND		6.68
Jan 18, 1991	6300	1200	ND	3	15		6.61
Feb 12, 1991	5200	850	8.4	4.9	41		6.20
Mar 20, 1991	5800	680	12	8	16		5.62
May 22, 1991	8500	1700	14	24	6.7		6.05
Jun 19, 1991	NSC						6.12 (Film)
Jul 17, 1991	120000	9300	13000	2400	16000		6.20
Aug 7, 1991	NA	590	5.3	ND	14		6.27
Sep 24, 1991	7000	310	11	5.3	35		6.63
Oct 23, 1991	NSC						6.36 (Film)
Nov 6, 1991	4000	710	18	29	49		6.15
Dec 4, 1991	4100	1100	14	33	39		6.19
Jan 29, 1992	2600	790	14	ND	49		6.70
Feb 26, 1992	3100	950	21	30	33		5.44
Mar 19, 1992	2200	630	14	12	40		5.30
Apr 22, 1992	NA	730	2.2	ND	40		6.00
May 21, 1992	1500	840	7.8	7.1	34		6.25
Jun 25, 1992	<2000	740	8	27	28		6.38
Jul 30, 1992	NSC						6.42 (Film)
Aug 20, 1992	2800	630	17	23	22		6.50
Sep 30, 1992	7800	540	ND	12	29		6.66
Dec 23, 1992	1800	350	ND	7.7	11		5.83
Mar 10, 1993	3000	830	5.6	19	16		5.63
Jun 9, 1993	4800	920	6.2	3.2	12		6.01
Sep 14, 1993	3600	660	7.5	11	27		6.53
Dec 14, 1993	1500	200	<0.3	<0.3	8.8		3.58
Mar 2, 1994	NSC						5.12
Jun 6, 1994	2400	290	4.6	1.3	24		1.85
Sep 6, 1994	4300	230	21	<6.6	130		6.40

TABLE 1 (Continued)

Monitoring Well RE-7							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Apr 11, 1988	<50000	17000	4400	600	8400	166.04	
Apr 9, 1990	16000	7000	1200	640	1600		5.93
Oct 30, 1990	31000	14000	ND	ND	ND		8.21
Jan 18, 1991	NSC						11.8 (Film)
Feb 12, 1991	NSC						10.8 (Film)
Mar 20, 1991	120000	12000	2800	490	6600		9.96
May 22, 1991	NSC						11.7 (Film)
Jun 19, 1991	NSC						11.5 (Film)
Jul 17, 1991	NSC						7.80 (Film)
Aug 7, 1991	NSC						9.88 (0.03)
Sep 24, 1991	NSC						9.85 (0.03)
Oct 23, 1991	NSC						9.96 (Film)
Nov 6, 1991	NSC						6.77 (Film)
Dec 4, 1991	NSC						10.8 (Film)
Jan 29, 1992	NSC						8.64 (Film)
Feb 26, 1992	NSC						6.00 (Film)
Mar 19, 1992	NSC						5.55 (Film)
Apr 22, 1992	NSC						6.12 (Film)
May 21, 1992	NSC						6.40 (Film)
Jun 25, 1992	NSC						6.73 (0.02)
Jul 30, 1992	NSC						6.73 (Film)
Aug 20, 1992	NSC						6.82 (Film)
Sep 30, 1992	NSC						7.26 (Film)
Dec 23, 1992	NSC						6.22 (Film)
Mar 10, 1993	NSC						5.82 (Film)
Jun 9, 1993	NSC						6.17 (Film)
Sep 14, 1993	NSC						11.33
Dec 14, 1993	NSC						8.40
Mar 2, 1994	NSC						6.82
Jun 6, 1994	NSC						10.95 (Film)
Sep 6, 1994	NSC						11.30 (Film)

TABLE 1 (Continued)

Monitoring Well RS-8							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Aug 7, 1991	ND	ND	ND	ND	ND	164.32	9.68
Sep 27, 1991	ND	ND	ND	ND	ND		9.89
Oct 23, 1991	ND	ND	ND	ND	ND		10.05
Nov 6, 1991	ND	ND	ND	ND	ND		9.71
Dec 4, 1991	ND	ND	ND	ND	ND		10.00
Jan 29, 1992	ND	2.1	1.0	2.5	3.6		9.28
Feb 26, 1992	ND	ND	0.7	ND	0.7		7.05
Mar 19, 1992	ND	0.5	1.0	1.5	2.7		7.30
Apr 22, 1992	ND	ND	ND	ND	ND		8.60
May 21, 1992	ND	ND	ND	ND	ND		9.22
Jun 25, 1992	ND	ND	ND	ND	ND		9.49
Jul 30, 1992	ND	1.1	4.2	ND	3.0		9.55
Aug 20, 1992	ND	2.0	4.7	ND	5.7		9.63
Sep 30, 1992	ND	ND	ND	ND	ND		9.90
Dec 23, 1992	ND	ND	ND	ND	ND		9.96
Mar 10, 1993	ND	ND	ND	ND	ND		8.95
Jun 9, 1993	ND	ND	ND	ND	ND		9.00
Sep 14, 1993	200	0.3	ND	ND	ND		9.50
Dec 14, 1993	ND	ND	ND	ND	ND		8.75
Mar 2, 1994	<50	<0.3	<0.3	<0.3	<0.5		7.52
Jun 6, 1994	54	<0.3	<0.3	<0.3	2.4		9.00
Sep 6, 1994	<50	<0.3	<0.3	<0.3	<0.5		9.26

TABLE 1 (Continued)

Monitoring Well RS-9							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Aug 7, 1991	NA	0.5	ND	330	1200	167.51	2.28
Sep 27, 1991	13000	3.5	3.0	82	140		2.77
Oct 23, 1991	11000	ND	ND	39	340		3.53
Nov 6, 1991	6800	8.4	0.6	22	230		2.51
Dec 4, 1991	6500	6.5	0.7	87	200		3.20
Jan 29, 1992	8100	22	10	140	260		2.65
Feb 26, 1992	13000	40	16	220	600		3.42
Mar 19, 1992	12000	21	12	100	280		3.12
Apr 22, 1992	8600	ND	ND	20	37		3.24
May 21, 1992	6000	21	10	53	210		3.75
Jun 25, 1992	370	2.3	1.5	0.7	4.3		2.65
Jul 30, 1992	3600	20	ND	39	80		2.70
Aug 20, 1992	3000	0.7	5.2	2.0	5.3		2.83
Sep 30, 1992	9200	4.8	6.5	12	91		2.80
Dec 23, 1992	2000	17	ND	8.2	18		2.45
Mar 10, 1993	1500	ND	2.6	21	12		2.40
Jun 9, 1993	1300	0.6	1.7	ND	7.5		3.55
Sep 14, 1993	1500	1.3	7.6	4.1	14.0		2.81
Dec 14, 1993	560	ND	ND	ND	5.5		2.63
Mar 2, 1994	1100	<0.3	<0.3	<0.3	<0.5		2.60
Jun 6, 1994	290	0.58	0.53	1.1	5.8		2.52
Sep 6, 1994	890	<0.3	<0.3	<0.3	3.1		3.16

TABLE 1 (Continued)

Monitoring Well RS-10							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	Elevation	Depth to GW
Aug 7, 1991	ND	ND	ND	ND	ND	162.89	6.16
Sep 27, 1991	ND	ND	ND	ND	ND		6.48
Oct 23, 1991	ND	ND	ND	ND	ND		7.37
Nov 6, 1991	ND	ND	ND	ND	ND		6.44
Dec 4, 1991	ND	ND	ND	ND	ND		7.02
Jan 29, 1992	ND	ND	ND	ND	ND		6.78
Feb 26, 1992	ND	ND	ND	ND	ND		8.33
Mar 19, 1992	ND	ND	ND	ND	0.6		8.02
Apr 22, 1992	ND	ND	ND	ND	ND		7.78
May 21, 1992	ND	ND	0.6	ND	1.2		6.21
Jun 25, 1992	ND	ND	ND	ND	ND		7.73
Jul 30, 1992	ND	ND	0.5	ND	1.0		7.84
Aug 20, 1992	ND	ND	ND	ND	ND		7.50
Sep 30, 1992	ND	ND	ND	ND	ND		7.63
Dec 23, 1992	ND	ND	ND	ND	ND		7.24
Mar 10, 1993	ND	ND	ND	ND	ND		6.38
Jun 9, 1993	ND	ND	ND	ND	ND		7.98
Sep 14, 1993	ND	ND	ND	ND	ND		7.35
Mar 2, 1994	<50	<0.3	<0.3	<0.3	<0.3		7.00
Jun 6, 1994	<50	<0.3	<0.3	<0.3	<0.5		6.55
Sep 6, 1994	<50	<0.3	<0.3	<0.3	<0.5		7.63

Benzene, toluene, ethylbenzene, and xylene analyzed by EPA method 8020 and concentrations reported in ug/l.
 Total petroleum hydrocarbons analyzed by EPA method 8015 and concentrations reported in ug/l.
 NSC = Not sampled due to product film on groundwater.
 ND = Not Detected.
 NA = Not Analyzed.

**Table 2 - Vapor Concentrations in Wells
Thrifty Oil Co. Station #054
Castro Valley, CA**

Well ID.	Date	Vapor Conc., ppmv
PW-1	05-16-94	150
	06-06-94	28
	07-11-94	160
	08-15-94	100
	09-06-94	12
PW-2	05-16-94	150
	06-06-94	25
	07-11-94	150
	08-15-94	100
	09-06-94	18
RE-1	05-16-94	>10,000
	06-06-94	>10,000
	07-11-94	>10,000
	08-15-94	>10,000
	09-06-94	50
RE-2	05-16-94	200
	06-06-94	20
	07-11-94	210
	08-15-94	160
	09-06-94	4
RE-3	05-16-94	6,000
	06-06-94	>10,000
	07-11-94	5,000
	08-15-94	>6,000
	09-06-94	150
RE-4	05-16-94	1,000
	06-06-94	40
	07-11-94	1,500
	08-15-94	>1,000
	09-06-94	70
RE-5	05-16-94	400
	06-06-94	220
	07-11-94	300
	08-15-94	300
	09-06-94	2
RE-6	05-16-94	>10,000
	06-06-94	20
	07-11-94	>10,000
	08-15-94	>10,000
	09-06-94	200

(Table 2 Continued)

Well ID.	Date	Vapor Conc., ppmv
RE-7	05-16-94	200
	06-06-94	500
	07-11-94	>10,000
	08-15-94	>300
	09-06-94	100
RS-8	05-16-94	--
	06-06-94	0
	07-11-94	--
	08-15-94	--
	09-06-94	0
RS-9	05-16-94	--
	06-06-94	5,000
	07-11-94	--
	08-15-94	--
	09-06-94	>10,000
RS-10	05-16-94	--
	06-06-94	0
	07-11-94	--
	08-15-94	--
	09-06-94	0

APPENDIX A

MAINFOLD															
WELLS		WATER						WELLS		VAPORS					
					RE-4		RE-7			RE-1	RE-2	RE-3	RE-4	RE-5	RE-6
ON					X		X	ON	X		X			X	X
OFF								OFF		X		X	X		

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PT	DTB	PARAMETER	U/M	DATA	OBS
					TIME	AM/PM	10:00	
					HOURS	#	7.340	
					ENGINE RPM	RPM	1900	
					ENGINE VACUUM	IN HG	19	
					TK REC TEMP	F	110	
					AIR TEMP	F	74	
					AIR FLOW	CFM	18	
					VAPOR FLOW	CFM	16	
					FUEL FLOW	CFM/H	80	
					WELL VACUUM	IN H2O	30	
					GAS METER	%	85	

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT			
PARAMETER	U/M	LIMIT	DATA
FLOWMETER	GAL	717.5	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

CATALIST IN	F		
CATALIST OUT	F		
EXHAUST HC	PPM%		
EXHAUST CO	%PPM		
EXHAUST CO2	%		
EXHAUST NOX	%PPM		
CATALYST REPLACEMENT			
EXHAUST O2	%		
INLET	PPM		
OUTLET	PPM		

COMMENTS:

SERVICE TECHNICAN _____ DATE 9.28.94 THRIFTY OIL CO # 054



PROJECT STATUS REPORT
 THRIFTY OIL CO. S.S. #054
 2504 CASTRO VALLEY BLVD.
 CASTRO VALLEY, CA 94546
 DATE: 9.06.94

F R E Q .	MONITORING				ODORS			FREE		WELLS CONNECTED TO SYSTEM (W)							
	OBSERVATION WELLS				(S=SLIGHT)			PRODUCT		CONNECT		INTEGRITY		VAPOR		WATER	
	NO.	DTW	DTP	PPM	YES	NO	S	YES	NO	YES	NO	OK	NO	ON	OFF	ON	OFF
M	PW-1	6.48		12		X			✓	X	-						
M	PW-2	6.80		18		X			✓	X	-						
M	RE-1	5.00		50		X			✓	X	-						
M	RE-2	5.16		4		X			✓	X	-						
M	RE-3	7.50		150		✓			✓	X	-						
M	RE-4	9.85	Film	70	X				X	X	-						
M	RE-5	5.45		2		✓			X	X	-						
M	RE-6	6.40		200		✓			✓	X	-						
M	RE-7	11.30	shin	100	X				✓	X	-						
M	RS-8	9.26		0		X			✓	-	X						
M	RS-9	3.16		>10,000		X			X	-	X						
M	RS-10	7.63		0		✓			X	-	X						

SAVE SYSTEM WEEKLY

PARAMETER	U/M	DATA	PARAMETER	U/M	DATA
TIME	AM/PM	16:30	AIR FLOW	C F M	
WORKING	YES/NO		VAPOR FLOW	C F M	
RESTARTED	YES/NO		FUEL FLOW	C F M/H	
HOURS	#		WELL VACUUM	IN H2O	
ENGINE ROT.	RPM		L P G TANKS	#	#1:
ENGINE VACUUM	IN HG		GAS METER READING	-	N/A
TANK VACUUM	IN HG		WATER FLOWMETER	GALL.	

EXHAUST (By others)				
INLET TO ENGINE				

MAINTENANCE ES/100/400/800 _____ FOR SPECIFIC OPERATIONS SEE FIELD RECORD

WATER SAMPLING - CHECK () WHEN DONE

EFFLUENT	INFLUENT	WELLS
() _____	() _____	() Q.-SEE C.CUST.

REMARKS: QUARTERLY SAMPLING

FREE PRODUCT REMOVED: APPROX. _____ GALLONS WATER REMOVED: APPROX. _____ GALLONS

DATA RECORDED BY: E. GARNIAN & F. SPETCU INPUT BY: M.M. >\FF\054rsirt

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS#054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E. GARMAN & F. SPETCU</u>	Weather <u>SUNNY</u>
Well No. <u>RS-8</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>25.20</u>	ft.	Well Diameter <u>2⁴</u>
Depth to Water	<u>9.26</u>	ft.	Est. Purge Vol. <u>10 GAL</u>

Sampling Data					
Initial Turbidity	Final Turbidity				
Time	<u>15:25</u>	<u>15:28</u>	<u>15:29</u>	<u>15:30</u>	_____
EC	<u>910</u>	<u>840</u>	<u>830</u>	<u>840</u>	_____
pH	<u>8.05</u>	<u>7.90</u>	<u>7.75</u>	<u>7.63</u>	_____
Temp	<u>78.5</u>	<u>76.0</u>	<u>75.0</u>	<u>74.0</u>	_____
Gal.	<u>3 GAL</u>	<u>5 GAL</u>	<u>7 GAL</u>	<u>10 GAL</u>	_____
Time	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____
	ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E. GAIMAN & F. SFETCU</u>	Weather <u>SUNNY</u>
Well No. <u>RS-10</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>24.45</u>	ft.	Well Diameter <u>2"</u>
Depth to Water	<u>7.63</u>	ft.	Est. Purge Vol. <u>11 GAL</u>

Sampling Data						
Initial Turbidity	Final Turbidity					
Time	<u>15:32</u>	<u>15:33</u>	<u>15:34</u>	<u>15:36</u>	<u>15:38</u>	_____
EC	<u>3010</u>	<u>3190</u>	<u>3200</u>	<u>3160</u>	<u>3190</u>	_____
pH	<u>7.49</u>	<u>7.38</u>	<u>7.21</u>	<u>7.08</u>	<u>7.06</u>	_____
Temp	<u>75.0</u>	<u>73.6</u>	<u>73.5</u>	<u>74.6</u>	<u>74.5</u>	_____
Gal.	<u>3 GAL</u>	<u>5 gal</u>	<u>7 gal</u>	<u>9 gal</u>	<u>11 GAL</u>	_____
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Purging/Before Sample Collection			
Depth to Water	_____	ft.	Total Well Depth _____
			ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E. GARMAN & F. SFETCU</u>	Weather <u>SUNNY</u>
Well No. <u>RS-9</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>15.00</u>	ft.	Well Diameter <u>2"</u>
Depth to Water	<u>3.16</u>	ft.	Est. Purge Vol. <u>8 GAL</u>

Sampling Data						
Initial Turbidity	Final Turbidity					
Time	<u>15:40</u>	<u>15:42</u>	<u>15:46</u>	<u>15:46</u>	<u>15:48</u>	_____
EC	<u>810</u>	<u>770</u>	<u>780</u>	<u>790</u>	<u>780</u>	_____
pH	<u>8.15</u>	<u>7.90</u>	<u>7.73</u>	<u>7.64</u>	<u>7.60</u>	_____
Temp	<u>71.7</u>	<u>72.9</u>	<u>73.8</u>	<u>74.1</u>	<u>74.0</u>	_____
Gal.	<u>2 gal</u>	<u>3 1/2 gal</u>	<u>5 gal</u>	<u>6 1/2 gal</u>	<u>8 GAL</u>	_____
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E. GARMAN & F. SFETOU</u>	Weather <u>SUNNY</u>
Well No. <u>RE-1</u>	Equip. <u>BAILER</u>

Before Purging	
Total Well Depth <u>19.85</u> ft.	Well Diameter <u>4"</u>
Depth to Water <u>5.00</u> ft.	Est. Purge Vol. <u>39 GAL</u>

Sampling Data					
Initial Turbidity					Final Turbidity
Time	<u>15:50</u>	<u>15:52</u>	<u>15:54</u>	<u>15:56</u>	<u>15:58</u>
EC	<u>1040</u>	<u>1040</u>	<u>1030</u>	<u>1030</u>	<u>1030</u>
pH	<u>7.76</u>	<u>7.36</u>	<u>7.28</u>	<u>7.23</u>	<u>7.24</u>
Temp	<u>71.1</u>	<u>70.8</u>	<u>70.8</u>	<u>70.9</u>	<u>71.0</u>
Gal.	_____	_____	_____	_____	_____
Time	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____ ft.	Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E. GASHMAN & F. SFETCU</u>	Weather <u>SUNNY</u>
Well No. <u>RE-2</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>17.10</u>	ft.	Well Diameter <u>4"</u>
Depth to Water	<u>5.16</u>	ft.	Est. Purge Vol. <u>31 GAL</u>

Sampling Data						
Initial Turbidity						Final Turbidity
Time	<u>16:00</u>	<u>16:02</u>	<u>16:04</u>	<u>16:06</u>	<u>16:08</u>	<u>16:10</u>
EC	<u>970</u>	<u>980</u>	<u>1000</u>	<u>1010</u>	<u>1010</u>	<u>1010</u>
pH	<u>7.39</u>	<u>7.25</u>	<u>7.17</u>	<u>7.20</u>	<u>7.25</u>	<u>7.20</u>
Temp	<u>69.7</u>	<u>70.5</u>	<u>72.3</u>	<u>73.7</u>	<u>73.5</u>	<u>73.5</u>
Gal.	<u>59 gal</u>	<u>109 gal</u>	<u>159 gal</u>	<u>209 gal</u>	<u>259 gal</u>	<u>31 GAL</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E GARMAN, F. SFETCU</u>	Weather <u>SUNNY</u>
Well No. <u>RE-5</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>18.25</u>	ft.	Well Diameter <u>4"</u>
Depth to Water	<u>5.45</u>	ft.	Est. Purge Vol. <u>33 GAL</u>

Sampling Data						
Initial Turbidity				Final Turbidity		
Time	<u>16:13</u>	<u>16:16</u>	<u>16:18</u>	<u>16:20</u>	<u>16:22</u>	<u>16:24</u>
EC	<u>870</u>	<u>870</u>	<u>880</u>	<u>880</u>	<u>890</u>	<u>890</u>
pH	<u>7.67</u>	<u>7.38</u>	<u>7.15</u>	<u>7.22</u>	<u>7.18</u>	<u>7.16</u>
Temp	<u>70.3</u>	<u>70.9</u>	<u>71.9</u>	<u>72.5</u>	<u>73.0</u>	<u>73.0</u>
Gal.	<u>5 gal</u>	<u>11 gal</u>	<u>16 gal</u>	<u>22 gal</u>	<u>28 gal</u>	<u>33 GAL</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____
	ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E GASMAN & F SPETCU</u>	Weather <u>SUNNY</u>
Well No. <u>KE-6</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>13.65</u>	ft.	Well Diameter <u>4"</u>
Depth to Water	<u>6.40</u>	ft.	Est. Purge Vol. <u>19 GAL</u>

Sampling Data					
	Initial Turbidity			Final Turbidity	
Time	<u>16:26</u>	<u>16:28</u>	<u>16:30</u>	<u>16:32</u>	<u>16:35</u>
EC	<u>1030</u>	<u>1040</u>	<u>1060</u>	<u>1070</u>	<u>1090</u>
pH	<u>7.70</u>	<u>7.19</u>	<u>7.09</u>	<u>7.07</u>	<u>6.96</u>
Temp	<u>71.3</u>	<u>71.5</u>	<u>72.4</u>	<u>73.0</u>	<u>73.2</u>
Gal.	<u>4 gal</u>	<u>8 gal</u>	<u>12 gal</u>	<u>15 gal</u>	<u>19 GAL</u>
Time	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____ ft.	Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site	<u>SS# 054</u>	Date	<u>7.06.94</u>
Address	_____		
Personnel	<u>E. GASMAN & F. SFETCU</u>		
Well No.	<u>PW-1</u>	Equip.	<u>BAILER</u>
		Weather	<u>SUNNY</u>

Before Purging			
Total Well Depth	<u>14.10</u>	ft.	Well Diameter <u>4"</u>
Depth to Water	<u>6.48</u>	ft.	Est. Purge Vol. <u>20 GAL</u>

Sampling Data					
Initial Turbidity	Final Turbidity				
Time	<u>16:32</u>	<u>16:40</u>	<u>16:42</u>	<u>16:45</u>	<u>16:48</u>
EC	<u>500</u>	<u>450</u>	<u>440</u>	<u>450</u>	<u>450</u>
pH	<u>7.43</u>	<u>7.32</u>	<u>7.19</u>	<u>7.18</u>	<u>7.17</u>
Temp	<u>71.1</u>	<u>72.1</u>	<u>73.1</u>	<u>74.0</u>	<u>74.0</u>
Gal.	<u>4 Gal</u>	<u>8 Gal</u>	<u>12 Gal</u>	<u>16 Gal</u>	<u>20 Gal</u>
Time	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 054</u>	Date <u>9.06.94</u>
Address _____	
Personnel <u>E. GARMAN & F. SPETCU</u>	Weather <u>SUNNY</u>
Well No. <u>PW-2</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>14.40</u>	ft.	Well Diameter <u>4"</u>
Depth to Water	<u>6.80</u>	ft.	Est. Purge Vol. <u>20 GAL</u>

Sampling Data					
	Initial Turbidity		Final Turbidity		
Time	<u>16:50</u>	<u>16:52</u>	<u>16:54</u>	<u>16:56</u>	<u>16:58</u>
EC	<u>520</u>	<u>540</u>	<u>530</u>	<u>530</u>	<u>530</u>
pH	<u>7.31</u>	<u>7.27</u>	<u>7.18</u>	<u>7.16</u>	<u>7.14</u>
Temp	<u>71.4</u>	<u>73.7</u>	<u>75.0</u>	<u>75.0</u>	<u>75.0</u>
Gal.	<u>5 gal</u>	<u>10 gal</u>	<u>13 gal</u>	<u>17 gal</u>	<u>20 GAL</u>
Time	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____
ft.	

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site	<u>SS. # 0.54</u>	Date	<u>9.06.94</u>
Address	_____		
Personnel	<u>E. GAJMAN & F. FETCU</u>	Weather	<u>SUNNY</u>
Well No.	<u>RE-3</u>	Equip.	<u>BAILER</u>

Before Purging			
Total Well Depth	<u>17.60</u>	ft.	Well Diameter <u>4"</u>
Depth to Water	<u>7.50</u>	ft.	Est. Purge Vol. <u>26 GAL</u>

Sampling Data						
Initial Turbidity	Final Turbidity					
Time	<u>17:00</u>	<u>17:02</u>	<u>17:05</u>	<u>17:08</u>	<u>17:13</u>	_____
EC	<u>1160</u>	<u>1190</u>	<u>1220</u>	<u>1240</u>	<u>1250</u>	_____
pH	<u>7.45</u>	<u>7.38</u>	<u>7.34</u>	<u>7.28</u>	<u>7.26</u>	_____
Temp	<u>70.4</u>	<u>71.8</u>	<u>72.9</u>	<u>73.4</u>	<u>73.7</u>	_____
Gal.	<u>6 gal</u>	<u>11 gal</u>	<u>17 gal</u>	<u>22 gal</u>	<u>26 gal</u>	_____
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____ ft.



EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD													
WELLS	WATER						WELLS	VAPORS					
ON			RE4			RE7	ON	RE1		RE3		RE6	RE7
OFF							OFF		RE2		RE4	RE5	

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PT	DTB	PARAMETER	U/M	DATA	OBS
					TIME	AM/PM	14:40	
					HOURS	#	7.316	
					ENGINE RPM	RPM	1900	
					ENGINE VACUUM	IN HG	19	
					TK REC TEMP	F	120	
					AIR TEMP	F	80	
					AIR FLOW	CFM	18	
					VAPOR FLOW	CFM	16	
					FUEL FLOW	CFM/H	90	
					WELL VACUUM	IN H2O	30	
					GAS METER	%	85	

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT			
PARAMETER	U/M	LIMIT	DATA
FLOWMETER			
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

COMMENTS:

SERVICE TECHNICIAN FLOREN SFETCU DATE 8/29/94 THRIFTY OIL CO # 054



GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD													
WELLS	WATER						WELLS	VAPORS					
ON				REL		RE-7	ON	RE1		RE3		RE6	RE7
OFF							OFF		RE2		RE4	RE5	

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PT	DTB	PARAMETER	U/M	DATA	OBS
					TIME	AM/PM	15:40	
					HOURS	#	7273.0	
					ENGINE RPM	RPM	1900	
					ENGINE VACUUM	IN HG	16	
					TK REC TEMP	F	140	
					AIR TEMP	F	88	
					AIR FLOW	CFM	15	
					VAPOR FLOW	CFM	18	
					FUEL FLOW	CFM/H	80	
					WELL VACUUM	IN H2O	30	
					GAS METER		45%	
					CATALIST IN	F		
					CATALIST OUT	F		
					EXHAUST HC	PPM/%		
					EXHAUST CO	%PPM		
					EXHAUST CO2	%		
					EXHAUST NOX	%PPM		
					CATALYST REPLACEMENT			
					EXHAUST O2	%		
					INLET	PPM		
					OUTLET	PPM		

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER			
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

COMMENTS:

SERVICE TECHNICAN FLORIN S FETOU DATE 8/29/94 THRIFTY OIL CO # 054

MAINFOLD																
WELLS		WATER						WELLS		VAPORS						
ON				RE4			RE7		ON	RE1	-	RE3	-	-	RE6	RE7
OFF									OFF	-	RE2	-	RE4	RE5	-	-

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PT	DTB	PARAMETER	U/M	DATA	OBS
					TIME	AM/PM	16:30	
					HOURS	#	6799	
					ENGINE RPM	RPM	1900	
					ENGINE VACUUM	IN HG	12	
					TK REC TEMP	F	100	
					AIR TEMP	F	70	
					AIR FLOW	CFM	15	
					VAPOR FLOW	CFM	12	
					FUEL FLOW	CFM/H	80	
					WELL VACUUM	IN H2O	30	
					GAS METER	%	80	
					CATALIST IN	F		
					CATALIST OUT	F		
					EXHAUST HC	PPM/%		
					EXHAUST CO	%PPM		
					EXHAUST CO2	%		
					EXHAUST NOX	%PPM		
					CATALYST REPLACEMENT			
					EXHAUST O2	%		
					INLET	PPM		
					OUTLET	PPM		

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT			
PARAMETER	U/M	LIMIT	DATA
FLOWMETER	gall	0	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

COMMENTS: The RE7 water line is ~~not~~ hooked. is OK. B/W air sampling, Monthly water sampling.

SERVICE TECHNICAN E. GASMAN DATE 08.08.94 THRIFTY OIL CO # 014

MAINFOLD															
WELLS		WATER						WELLS		VAPORS					
ON				RE4			RE7	ON	RE1		RE3		RE6	RE7	
OFF								OFF		RE2		RE4	RE5		

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PPM	DTB	PARAMETER	U/M	DATA	OBS
RE1			>10000		TIME	AM/PM	16:30	
RE2			160		HOURS	#	6941	
RE3			>6000		ENGINE RPM	RPM	1800	
RE4			>1000		ENGINE VACUUM	IN HG	12	
RE5			300		TK REC TEMP	F	100	
RE6			>10000		AIR TEMP	F	100	
RE7			>300		AIR FLOW	CFM	15	
PW 1			100		VAPOR FLOW	CFM	16	
PW 2			100		FUEL FLOW	CFM/H	80	
					WELL VACUUM	IN H2O	30	
					GAS METER	%	80	

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT				RSI SYSTEM			
PARAMETER	U/M	LIMIT	DATA	PARAMETER	U/M	DATA	OBS
FLOWMETER	gal	720		CATALIST IN	F		
ROTAMETER				CATALIST OUT	F		
VPI FLOW				EXHAUST HC	PPM/%		
VPI VACUUM				EXHAUST CO	%PPM		
AIR COMPRES				EXHAUST CO2	%		
VAPOR				EXHAUST NOX	%PPM		
INLET VAPOR				CATALYST REPLACEMENT			
TEMPERATURE				EXHAUST O2	%		
LEL				INLET	PPM		
				OUTLET	PPM		

COMMENTS:

SERVICE TECHNICAN E. GASMAN DATE 8-15-94 THRIFTY OIL CO # 054

MAINFOLD														
WELLS		WATER					WELLS		VAPORS					
		RE1	RE2	RE3	RE4	RE5			RE6	RE7				
ON			X			X	ON	X		X			X	X
OFF							OFF	X	X		X	X		

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PT	DTB	PARAMETER	U/M	DATA	OBS
					TIME	AM/PM	12:30	
					HOURS	#	6735	
					ENGINE RPM	RPM	1800	
					ENGINE VACUUM	IN HG	11	
					TK REC TEMP	F	100	
					AIR TEMP	F	70	
					AIR FLOW	CFM	15	
					VAPOR FLOW	CFM	14	
					FUEL FLOW	CFM/H	70	
					WELL VACUUM	IN H2O	30	
					GAS METER	%	80	
					CATALIST IN	F		
					CATALIST OUT	F		
					EXHAUST HC	PPM/%		
					EXHAUST CO	%PPM		
					EXHAUST CO2	%		
					EXHAUST NOX	%PPM		
					CATALYST REPLACEMENT			
					EXHAUST O2	%		
					INLET	PPM		
					OUTLET	PPM		

COMMENTS: RE 7 - water ~~line~~ line is blocked.

SERVICE TECHNICIAN E. GASMAN DATE 8-1-94 THRIFTY OIL CO # 054

MAINFOLD														
WELLS	WATER						WELLS	VAPORS						
				RE4		RE7		RE1	RE2	RE3	RE4	RE5	RE6	RE7
ON				X		X	ON	X		X				X
OFF							OFF		X		X	X	X	

WELL MONITORING					RSI SYSTEM			
WELL NO	DTW	DTP	PT	DTB	PARAMETER	U/M	DATA	OBS
					TIME	AM/PM	11:00	
					HOURS	#	6700	
					ENGINE RPM	RPM	1900	
					ENGINE VACUUM	IN HG	11	
					TK REC TEMP	F	95	
					AIR TEMP	F	70	
					AIR FLOW	CFM	17	
					VAPOR FLOW	CFM	14	
					FUEL FLOW	CFM/H	70	
					WELL VACUUM	IN H2O	30	

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT			
PARAMETER	U/M	LIMIT	DATA
FLOWMETER			
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			
GAS METER	%		70%
CATALIST IN	F		
CATALIST OUT	F		
EXHAUST HC	PPM/%		
EXHAUST CO	%PPM		
EXHAUST CO2	%		
EXHAUST NOX	%PPM		
CATALYST REPLACEMENT			
EXHAUST O2	%		
INLET	PPM		>10000
OUTLET	PPM		290

COMMENTS:

SERVICE TECHNICAN E. GASHAN DATE 7.28.94 THRIFTY OIL CO # 054

PARAMETER	U/M		
TIME	AM/PM	12:00	
WORKING	YES/NO	NO	
RESTARTED	YES/NO	YES	
HOURS	#	6679	
ENGINE ROT.	RPM	1700	
ENGINE VACUUM	IN HG	10	
ENG. OIL PRESS.	PSI	35	
ENG. WATER TEMP.	°F	160	
ENG. ELECTR. TENS.	VOLTS	13	
TANK VACUUM	IN HG	13	
TK. REC. PRES.	PSI	20	
TK. REC. TEMP.	°F	90	
AIR TEMPERATURE	°F	75	
AIR FLOW	CFM	15	
VAPOR FLOW	CFM	16	
FUEL FLOW	CFM/H	90	
WELL VACUUM	IN H2O	30	
L P G TANKS	%	#1: 88 #2:	
GAS METER READING			
WATER FLOWMETER	GALL.	Est: 12242	
CATALYST IN TEMP.	°F		
CATALYST OUT TEMP.	°F		
EXHAUST <small>(See permit and PSR for frequency and limits)</small>	BY C.A.	H-C	ppm/%
		CO	%/ppm
		CO2	%
		O2	%
		NOX	%/ppm
	BY	O.V.	ppm
OUTLET FROM ENGINE		O.V.	ppm
INLET TO ENGINE		O.V.	ppm

MAINTENANCE RECORD				
Operation	Each Stop	100 Hours Week	400 Hours 2 Weeks	800 Hours Monthly
Oil, Engine, Check Level	✓			
Coolant, Check Level	✓			
Fuel, Oil, Coolant, Check for Leaks	✓			
Oil, Engine, Change				
Oil, Filter, Change				
Battery, Check Charge and Fluid				
Battery Cables, Clean				
P.T.O. Bearings, Lubricate				
Fan, Alternator Belts, Check and Adjust				
Idle Speed, Check				
Idle Mixture, Check				
Radiator, Inspect and Clean Exterior				
Distributor, Clean and Check Points				
Ignition Timing, Check and Adjust				
PCV Valve, Replace				
PCV Hoses and Fitting, Check				
Spark Plugs, Replace				
Points, Replace				
Oil, Vacuum Pump, Change				
Intake Manifold Bolts, Torque				
All Nuts and Bolts, Check				

Comments: The water flowmeter is broken. Need to be replaced.
 From 6-23-94 the system was working
 353 hours x 6 gal/hour = 1918 gal

READJUST ENGINE PARAMETERS AT LEAST ONCE PER MONTH (IGNITION TIMING, AIR TO FUEL RATIO, EXHAUST O2 AND TEMP., NOX, HC & CO). CHECK HERE () WHEN DONE

INSPECT CATALYST (See permit and PSR for frequency). CHECK HERE () O.K. () NO

CHANGE CATALYST (See permit and PSR for limits). CHECK HERE () WHEN REPLACED

VAPOR WELLS ON: RE 1, RE 3, RE 7 WATER WELLS ON: RE 4, RE 7

SERVICE TECH: E. GASHA DATE: 11/18/1994 THRIFTY OIL CO. ss #: 054



PROJECT STATUS REPORT
 THRIFTY OIL CO. S.S. #054
 2504 CASTRO VALLEY BLVD.
 CASTRO VALLEY, CA 94546
 DATE: 7.11.94

F R E Q .	MONITORING				ODORS			FREE		WELLS CONNECTED TO SYSTEM (W)							
	OBSERVATION WELLS				(S=SLIGHT)			PRODUCT		CONNECT		INTEGRITY		VAPOR		WATER	
	NO.	DTW	DTP	PPM	YES	NO	S	YES	NO	YES	NO	OK	NO	ON	OFF	ON	OFF
M	PW-1	4.90		160		X			X		X	-	X				
M	PW-2	5.34		150		X			X		X	-	X				
M	RE-1	4.30	Film	71000	X				X		X	-	X		X		
M	RE-2	4.05		210		X			X		X	-	X				
M	RE-3	6.51	Film	5000	X				X		X	-	X				
M	RE-4	6.08	Film	1500	X				X		X	-	X				X
M	RE-5	4.71		300		X			X		X	-	X				
M	RE-6	5.27	Phem	71000	X				X		X	-	X				X
M	RE-7	5.18	Film	71000	X				X		X	-	X				X
M	RS-8	8.72				X			X		-	X					
M	RS-9	2.41				X			X		-	X					
M	RS-10	7.28				X			X		-	X					

SAVE SYSTEM WEEKLY

PARAMETER	U/M	DATA	PARAMETER	U/M	DATA
TIME	AM/PM		AIR FLOW	C F M	
WORKING	YES/NO		VAPOR FLOW	C F M	
RESTARTED	YES/NO		FUEL FLOW	C F M/H	
HOURS	#		WELL VACUUM	IN H2O	
ENGINE ROT.	RPM		L P G TANKS	% #1:	
ENGINE VACUUM	IN HG		GAS METER READING	-	N/A
TANK VACUUM	IN HG		WATER FLOWMETER	GALL.	

EXHAUST (By others)					
INLET TO ENGINE					

MAINTENANCE ES/100/400/800 FOR SPECIFIC OPERATIONS SEE FIELD RECORD

WATER SAMPLING - CHECK (✓) WHEN DONE

EFFLUENT	INFLUENT	WELLS
()	()	() Q.-SEE C.CUST.

REMARKS:

FREE PRODUCT REMOVED: APPROX. GALLONS WATER REMOVED: APPROX. GALLONS

DATA RECORDED BY: E. GASMAN INPUT BY: M.M. >\PF\054rsirt

APPENDIX B



SMITH-EMERY COMPANY

The Full Service Independent Testing Laboratory, Established 1904

781 East Washington Boulevard
P.O. Box 880550, Hunter's Point Shipyard Bldg. 114
5427 East La Palma Avenue

- Los Angeles, California 90021
- San Francisco, California 94188
- Anaheim, California 92807
- (213) 749-3411
- (415) 330-3000
- (714) 693-1026
- Fax: (213) 746-7228
- Fax: (415) 330-3030
- Fax: (714) 693-1034

Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175801
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1742
Method: Submitted By Client

I.D.: PW-1

===== CONSTITUENT =====	===== METHOD =====	===== RESULT ====	===== UNIT ====	===== MDL =====
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	1100 ug/l		50 ug/l
Benzene	EPA 602	67 ug/l		0.3 ug/l
Toluene	EPA 602	ND ug/l		0.3 ug/l
Ethylbenzene	EPA 602	ND ug/l		0.3 ug/l
Xylenes	EPA 602	24 ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	73 Percent		



SMITH-EMERY COMPANY

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- Fax: (714) 693-1034

Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/16/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175802
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1755
Method: Submitted By Client

I.D.: PW-2

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	3200 ug/l		280 ug/l
Benzene	EPA 602	95 ug/l		1.7 ug/l
Toluene	EPA 602	3.0 ug/l		1.7 ug/l
Ethylbenzene	EPA 602	ND ug/l		1.7 ug/l
Xylenes	EPA 602	76 ug/l		5.0 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	79 Percent		



SMITH-EMERY COMPANY

The Full Service Independent Testing Laboratory, Established 1904

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- (714) 693-1026
- Fax: (213) 746-7228
- Fax: (415) 330-3030
- Fax: (714) 693-1034

Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175803
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1810
Method: Submitted By Client

I.D.: RE-1

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	== <u>RESULT</u> ==	=== <u>UNIT</u> ===	=== <u>MDL</u> ===
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	74000 ug/l		2200 ug/l
Benzene	EPA 602	3300 ug/l		13 ug/l
Toluene	EPA 602	3900 ug/l		13 ug/l
Ethylbenzene	EPA 602	1200 ug/l		13 ug/l
Xylenes	EPA 602	6100 ug/l		22 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	86 Percent		



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- Fax: (213) 746-7228
- Fax: (415) 330-3030
- Fax: (714) 693-1034

Thrifty Oil Co. #054
 File# 72546
 10000 Lakewood Blvd.
 Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
 310/923/9876

T.O.C. #054, ELAP Cert. 1131
 Indefinite Extension 03/29/94

Sample #: 4252175804
 Received: 09/09/94
 Type: Water

Collector: Client
 Sampling Date & Time: 09/06/94, 1700
 Method: Submitted By Client

I.D.: RE-2

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	1300 ug/l		50 ug/l
Benzene	EPA 602	43 ug/l		0.3 ug/l
Toluene	EPA 602	45 ug/l		0.3 ug/l
Ethylbenzene	EPA 602	8.9 ug/l		0.3 ug/l
Xylenes	EPA 602	69 ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	67 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175805
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1825
Method: Submitted By Client

I.D.: RE-3

=====CONSTITUENT=====	====METHOD====	==RESULT==	===UNIT===	===MDL===
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	11000 ug/l		1100 ug/l
Benzene	EPA 602	260 ug/l		6.6 ug/l
Toluene	EPA 602	26 ug/l		6.6 ug/l
Ethylbenzene	EPA 602	ND ug/l		6.6 ug/l
Xylenes	EPA 602	1000 ug/l		11 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	82 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175807
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1715
Method: Submitted By Client

I.D.: RE-5

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	== <u>RESULT</u> ==	=== <u>UNIT</u> ===	=== <u>MDL</u> ===
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	2400 ug/l		50 ug/l
Benzene	EPA 602	180 ug/l		0.3 ug/l
Toluene	EPA 602	28 ug/l		0.3 ug/l
Ethylbenzene	EPA 602	2.3 ug/l		0.3 ug/l
Xylenes	EPA 602	76 ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	109 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175808
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1730
Method: Submitted By Client

I.D.: RE-6

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	09/12/94		
Analysis Date		09/12/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	4300 ug/l		1100 ug/l
Benzene	EPA 602	230 ug/l		6.6 ug/l
Toluene	EPA 602	21 ug/l		6.6 ug/l
Ethylbenzene	EPA 602	ND ug/l		6.6 ug/l
Xylenes	EPA 602	130 ug/l		11 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	89 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175810
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1620
Method: Submitted By Client

I.D.: RS-8

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Extraction Method/Date	EPA 5030	09/13/94		
Analysis Date		09/13/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	ND ug/l		50 ug/l
Benzene	EPA 602	ND ug/l		0.3 ug/l
Toluene	EPA 602	ND ug/l		0.3 ug/l
Ethylbenzene	EPA 602	ND ug/l		0.3 ug/l
Xylenes	EPA 602	ND ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	91 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175806
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1650
Method: Submitted By Client

I.D.: RS-9

-----CONSTITUENT-----	-----METHOD-----	-----RESULT-----	-----UNIT-----	-----MDL-----
Extraction Method/Date	EPA 5030	09/13/94		
Analysis Date		09/13/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	890 ug/l		50 ug/l
Benzene	EPA 602	ND ug/l		0.3 ug/l
Toluene	EPA 602	ND ug/l		0.3 ug/l
Ethylbenzene	EPA 602	ND ug/l		0.3 ug/l
Xylenes	EPA 602	3.1 ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	74 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175809
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1635
Method: Submitted By Client

I.D.: RS-10

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	09/13/94		
Analysis Date		09/13/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	ND ug/l		50 ug/l
Benzene	EPA 602	ND ug/l		0.3 ug/l
Toluene	EPA 602	ND ug/l		0.3 ug/l
Ethylbenzene	EPA 602	ND ug/l		0.3 ug/l
Xylenes	EPA 602	ND ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	89 Percent		



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Thrifty Oil Co. #054
 File# 72546
 10000 Lakewood Blvd.
 Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
 310/923/9876

T.O.C. #054, ELAP Cert. 1131
 Indefinite Extension 03/29/94

 Sample #: 4252175811
 Received: 09/09/94
 Type: Water

Collector: Client
 Sampling Date & Time: 09/06/94, 1600
 Method: Submitted By Client

I.D.: Effluent

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Extraction Method/Date	EPA 5030	09/13/94		
Analysis Date		09/13/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	ND ug/l		50 ug/l
Benzene	EPA 602	ND ug/l		0.3 ug/l
Toluene	EPA 602	ND ug/l		0.3 ug/l
Ethylbenzene	EPA 602	ND ug/l		0.3 ug/l
Xylenes	EPA 602	ND ug/l		0.5 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	87 Percent		



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Thrifty Oil Co. #054
File# 72546
10000 Lakewood Blvd.
Downey, CA 90240

09/14/94

Attn: Michael S. Cosby
310/923/9876

T.O.C. #054, ELAP Cert. 1131
Indefinite Extension 03/29/94

Sample #: 4252175812
Received: 09/09/94
Type: Water

Collector: Client
Sampling Date & Time: 09/06/94, 1610
Method: Submitted By Client

I.D.: Influent

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	== <u>RESULT</u> ==	=== <u>UNIT</u> ===	=== <u>MDL</u> ===
Extraction Method/Date	EPA 5030	09/13/94		
Analysis Date		09/13/94		
EPA 8015M/602, Combination		*		
TPH-Gasoline	EPA 8015M	2400 ug/l		150 ug/l
Benzene	EPA 602	76 ug/l		0.88 ug/l
Toluene	EPA 602	ND ug/l		0.88 ug/l
Ethylbenzene	EPA 602	ND ug/l		0.88 ug/l
Xylenes	EPA 602	210 ug/l		2.6 ug/l
Surrogate		*		
Trifluorotoluene	EPA 602	84 Percent		

Respectfully Submitted,

Shahid Noori

Shahid Noori, Organic Supervisor



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September 27, 1994

Quality Control Report Matrix Spike and Duplicate Spike

Client: Thrifty Oil
 File No: 72546
 Report No: 42521758
 Matrix: Water
 Method: EPA 602/8015
 Lab No: 4251111104
 Batch No: 4255602/8015-1
 Date Analyzed: 09/12/94

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/l)	<u>AMOUNT SPIKED</u> (ug/l)	<u>AMOUNT RECOVERED</u> (ug/l)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R. P. D.</u>
Benzene	(S)	ND	9.1	8.04	88		
Benzene	(DS)	ND	9.1	7.95	87	63-137	1%
Toluene	(S)	ND	9.1	8.25	91		
Toluene	(DS)	ND	9.1	8.06	89	65-142	2%
Ethyl Benzene	(S)	ND	9.1	8.57	94		
Ethyl Benzene	(DS)	ND	9.1	8.39	92	56-141	2%
Xylene	(S)	ND	27.3	24.96	91		
Xylene	(DS)	ND	27.3	24.62	90	55-143	1%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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September 27, 1994

Quality Control Report Matrix Spike and Duplicate Spike

Client: Thrifty Oil
File No: 72546
Report No: 42521758
Matrix: Water
Method: EPA 602/8015
Lab No: 4252113502
Batch No: 4256602/8015-1
Date Analyzed: 09/13/94

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/l)	<u>AMOUNT SPIKED</u> (ug/l)	<u>AMOUNT RECOVERED</u> (ug/l)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R. P. D.</u>
Benzene	(S)	ND	60	54	91		
Benzene	(DS)	ND	60	46	78	63-137	16%
Toluene	(S)	ND	60	54	90		
Toluene	(DS)	ND	60	46	77	65-142	16%
Ethyl Benzene	(S)	ND	60	55	92		
Ethyl Benzene	(DS)	ND	60	47	78	56-141	16%
Xylene	(S)	ND	180	172	95		
Xylene	(DS)	ND	180	145	81	55-143	17%

S = Spike
DS = Duplicate Spike
R.P.D. = Relative Percent Difference
ND = None Detected



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02794

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: 9.06.94 PAGE 1 OF 2
FILE NO. 72546 LAB NO. 4252175801

CLIENT NAME: TOC

PROJECT NAME: _____ PROJECT NO. 054 P.O. NO. _____

ADDRESS: _____

PROJECT MANAGER: MICHAEL COSBY PHONE #: _____ FAX #: _____

SAMPLER NAME: EUGENIU GASMAN (Printed) Eugeniu Gasman (Signature)

TAT (Analytical Turn Around Time) 0 = Same Day, 1 = 24 Hour, 2 = 48 Hour, (Etc.)

ANALYSES REQUESTED:

8015M GAS BY DIESEL <input type="checkbox"/>	602/8020 BTEX	4181							
--	---------------	------	--	--	--	--	--	--	--

REMARKS: AIR Bill #
2409441941

Temp 41°F

SAMPLE CONDITION/ COMMENTS:

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = Voa Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		8015M GAS BY DIESEL	602/8020 BTEX	4181							
				WATER	SOIL	SLUDGE	OTHER		#	TYPE										
<u>PW-1</u>	<u>9.06.94</u>	<u>17:42</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>PW-2</u>	<u>9.6.94</u>	<u>17:55</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RE-1</u>	<u>9.6.94</u>	<u>18:10</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RE-2</u>	<u>9.6.94</u>	<u>17:00</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RE-3</u>	<u>9.6.94</u>	<u>18:25</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RS-9</u>	<u>9.6.94</u>	<u>16:50</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RE 5</u>	<u>9.6.94</u>	<u>17:15</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RE 6</u>	<u>9.6.94</u>	<u>17:30</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RS10</u>	<u>9.6.94</u>	<u>16:35</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								
<u>RS 8</u>	<u>9.6.94</u>	<u>16:20</u>		<u>X</u>					<u>2</u>	<u>V</u>	<u>X</u>	<u>X</u>								

Relinquished By: (Signature and Printed Name) <u>Eugeniu Gasman</u>	Received By: (Signature and Printed Name) <u>Rebecca Rollins</u>	Date: <u>9/9/94</u> Time: <u>11:45</u>
Relinquished By: (Signature and Printed Name)	Received By: (Signature and Printed Name)	Date: _____ Time: _____
Relinquished By: (Signature and Printed Name)	Received By: (Signature and Printed Name)	Date: _____ Time: _____

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO

2. Samples will not be stored over 30 days, unless additional storage time is requested.

3. Storage time requested: _____ days

By _____ Date _____

SPECIAL INSTRUCTIONS:



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02794

CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: 9.06.94 PAGE 2 OF 2
FILE NO. 72546 LAB NO. 4252175801

CLIENT NAME: TOC

ANALYSES REQUESTED:

REMARKS: AIR Bill #

PROJECT NAME: PROJECT NO. 054 P.O. NO.

2409441941

ADDRESS:

PROJECT MANAGER: MICHAEL COSBY PHONE #: FAX #:

Temp 41°F

SAMPLER NAME: EUGENIU GASMANU (Printed) Eugeniu Gasmanu (Signature)

TAT (Analytical Turn Around Time) 0 = Same Day; 1 = 24 Hour; 2 = 48 Hour; (Etc.)

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = Voa Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		8015M GAS	DIESEL	602/8020 BTEX	418.1						SAMPLE CONDITION/ COMMENTS:	
				WATER	SOIL	SLUDGE	OTHER		#	TYPE											
<u>EFFLUENT</u>	<u>9.6.94</u>	<u>16:00</u>		<u>X</u>					<u>2</u>	<u>✓</u>	<u>X</u>	<u>X</u>									
<u>INFLUENT</u>	<u>9.6.94</u>	<u>16:10</u>		<u>✓</u>					<u>2</u>	<u>✓</u>	<u>X</u>	<u>X</u>									
<u>TRIP BLANK</u>	<u>9.6.94</u>	<u>7:00</u>		<u>X</u>					<u>2</u>	<u>✓</u>	<u>X</u>	<u>X</u>								<u>DID NOT RECEIVE *</u>	

Relinquished By: (Signature and Printed Name) Eugeniu Gasmanu

Received By: (Signature and Printed Name) Rickey Rickey Rollins

Date: 9/9/94 Time: 1145

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date: Time:

2. Samples will not be stored over 30 days, unless additional storage time is requested.

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date: Time:

3. Storage time requested: _____ days

SPECIAL INSTRUCTIONS:

By _____ Date _____