THRIFTY OIL CO.

July 21, 1995

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

RE: **Thrifty Oil Co. Station #054**
2504 Castro Valley Boulevard
Castro Valley, California
2nd QUARTER REPORT, 1995

Dear Mr. Seary,

Attached is the 2nd Quarter Report for Thrifty Oil Co. Station #054 which summarizes the operation of groundwater monitoring, sampling and analysis. This report also includes the treatment unit operation status.

If you have any question please call Raymond C. Friedrichsen or myself at (310) 923-9876.

Respectfully,

PETER D'AMICO
Manager, Environmental Affairs

10,000 Lakewood Boulevard, Downey, CA 90240-4082 • (310) 923-9876

THRIFTY OIL CO.

July 14, 1995

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

RE: **Thrifty Oil Co. Station #054**
2504 Castro Valley Boulevard
Castro Valley, California
2nd QUARTER REPORT, 1995

Dear Mr. Seary,

This letter report presents the results of soil/groundwater treatment and site monitoring during the 2nd quarter of 1995 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 June 15, 1995, 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 4.52 to 9.12 feet below grade which is consistent with previous data collected. As of June 15, 1995, wells RE-1, RE-3, 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 0.04 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 6 to 35 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 American Analytics, a state certified analytical

laboratory headquartered in Chatsworth, 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**. Isoconcentration maps of TPH and benzene based on the June sampling event are presented as **Figures 2 and 3**, respectively.

Treatment Unit Operation Status

Based on the data obtained by EMC, the RSI-SAVE unit operated 672 hours during the reporting period and 11,742 hours total (current meter reading 8658). As of June 15, 1995, a total of about 15,642.6 gallons of water had been processed by the unit and discharged to the local sanitary sewer. During the 2nd quarter reporting period, 437.1 gallons of water had been processed by the treatment unit and were discharged to the sanitary sewer.

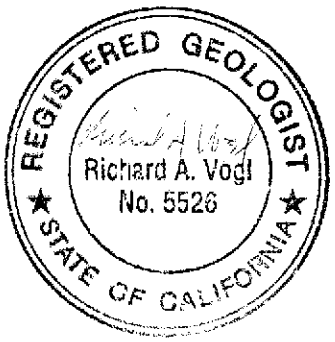
In order to monitor the effects of soil and air removal, field vapor measurements are collected and recorded from each recovery well on a monthly basis. The data is included in **Table 2** attached.

Closing

Thrifty will continue to conduct quarterly groundwater monitoring at the site. In addition, the work plan 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 3rd quarter of 1995 if encroachment permits can be obtained within the next month. If you have any questions, please contact Peter D'Amico at (310) 923-9876.

Very truly yours,

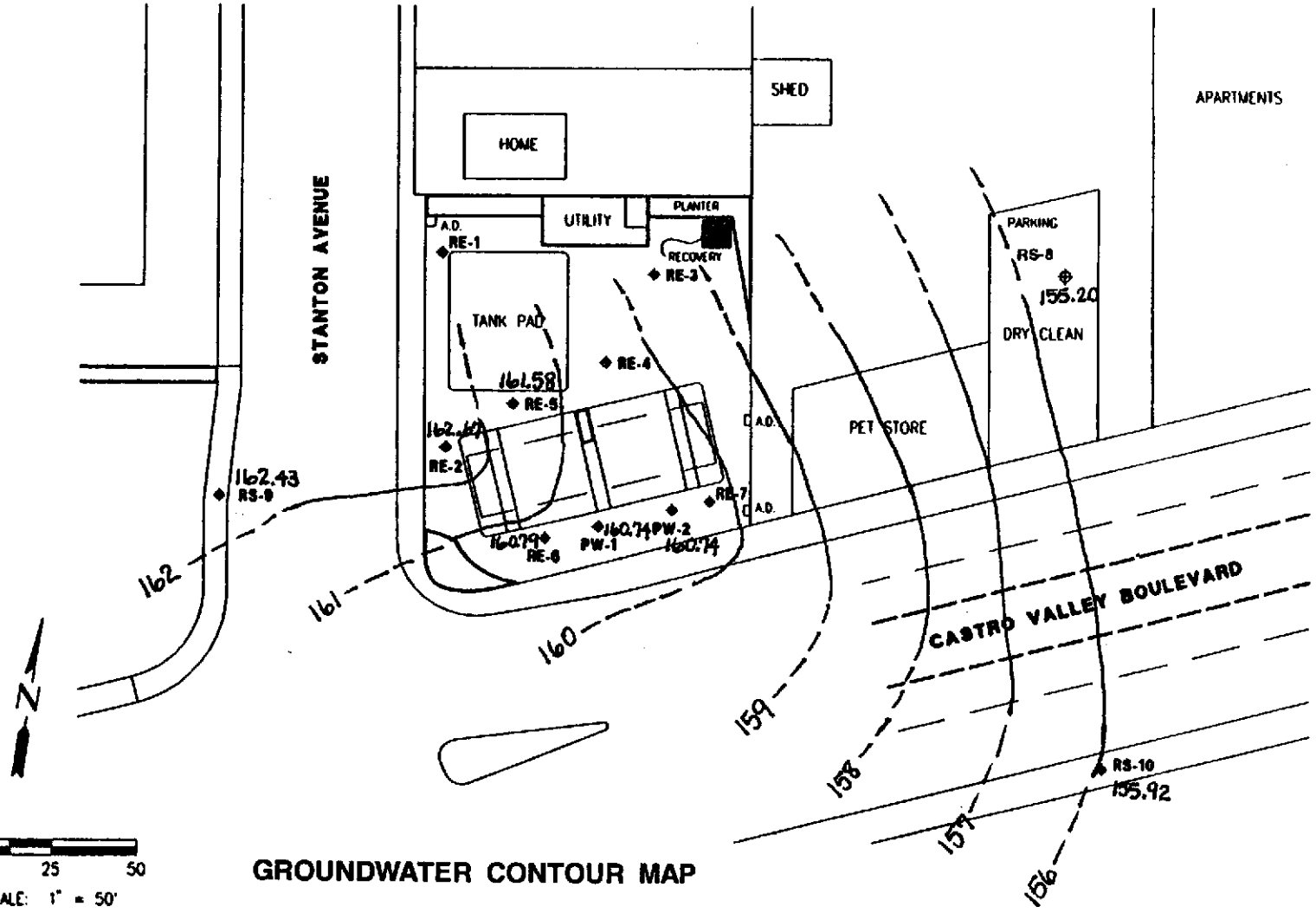
Richard Vogl, R.G.
Geologist



FIGURES

LEGEND

- RE-1 / MONITORING WELL
- A.D. AREA DRAIN
- GROUNDWATER CONTOUR (06/15/95)



GROUNDWATER CONTOUR MAP

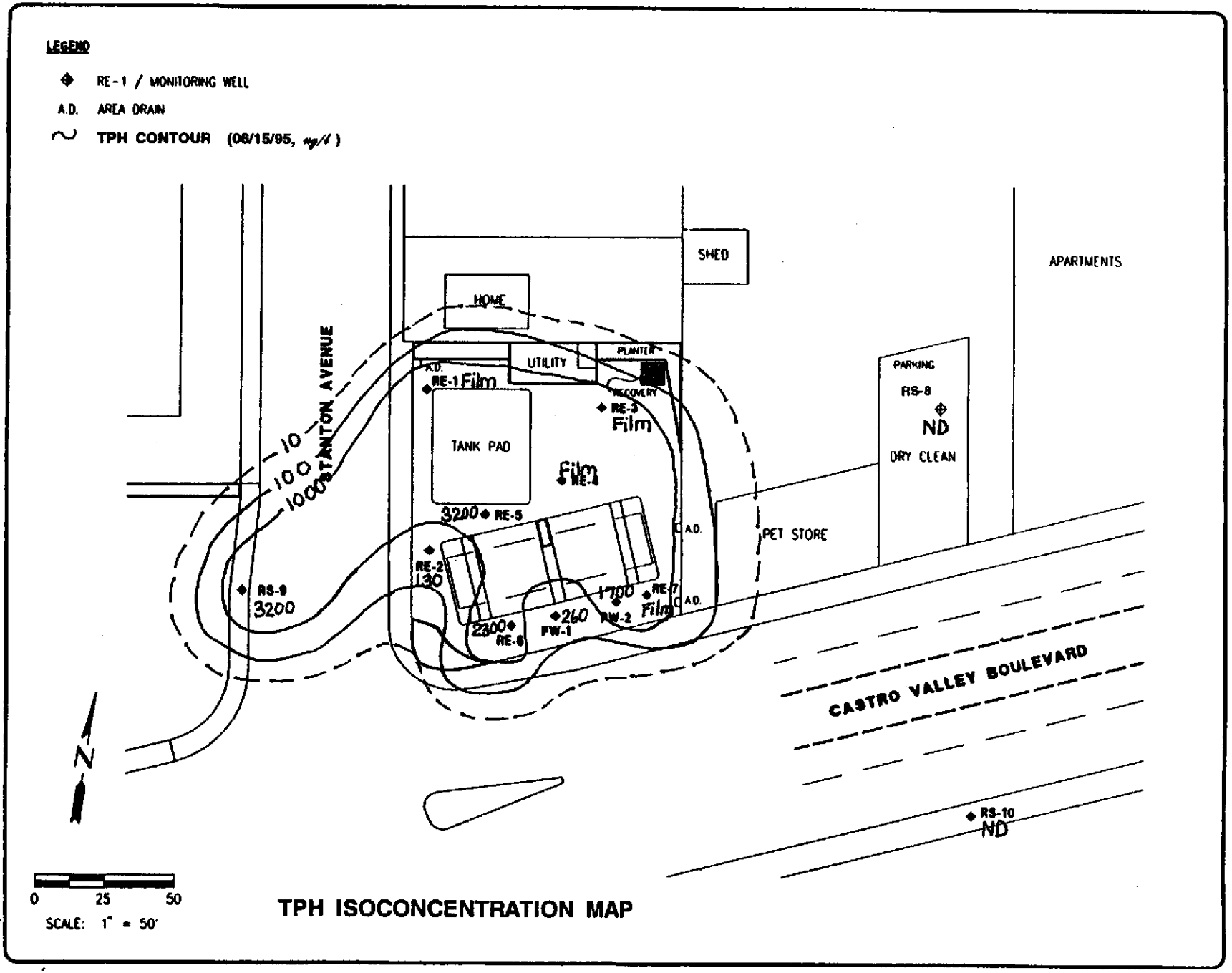
REVISIONS	BY

TOSCO OIL COMPANY
10000 LAKEWOOD BLVD.
DOWNEY, CA 90240
(310) 923-5678

STATION No. 064
CASTRO VALLEY BLVD./STANTON AVE.
CASTRO VALLEY, CA.

1" = 50'-0"

1



TPH ISOCONCENTRATION MAP

REVISIONS	BY

TRINITY OIL COMPANY
19000 LAKEWOOD BLVD.
DOWNEY, CA. 90240
(310) 923-8470

STATION No. 064
CASTRO VALLEY BLVD./STANTON AVE.
CASTRO VALLEY, CA.

1" = 50'-0"

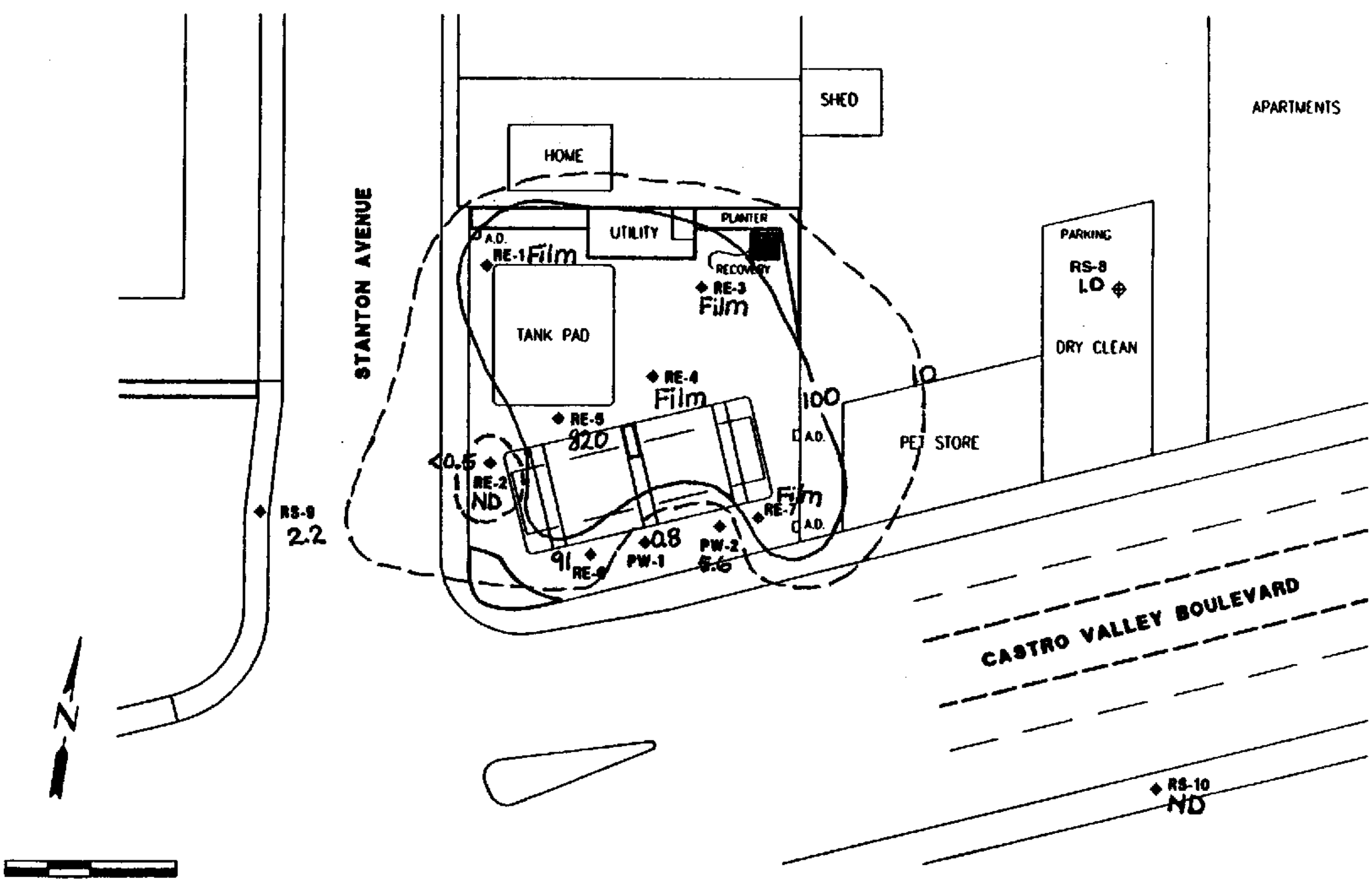
2

LEGEND

⌖ RE-1 / MONITORING WELL

A.D. AREA DRAIN

~ **BENZENE CONTOUR (06/15/95, ug/l)**



0 25 50

SCALE: 1" = 50'

BENZENE ISOCONCENTRATION MAP

REVISIONS	BY

THRIFTY OIL COMPANY

STATION No. 054
CASTRO VALLEY BLVD/STANTON AVE.
CASTRO VALLEY, CA.

1" = 50'-0"

3

TABLES

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #54

DATE SAMPLED	TPH	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	TOP OF CASING	DEPTH TO GROUNDWTR
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
Dec 7, 1994	<50	<0.3	<0.3	<0.5	<0.5		5.22
Mar 8, 1995	<100	<0.5	<0.5	<0.5	<1		3.94
Jun 15, 1995	260	0.8	0.6	<0.5	3.2		5.72

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
Dec 7, 1994	510	1.8	<0.3	<0.5	1.7		5.57
Mar 8, 1995	1900	<0.5	<0.5	1.4	35		4.10
Jun 15, 1995	1700	5.6	<0.5	<0.5	1.6		5.44

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
Dec 7, 1994	30,000	3200	2900	1200	4600		4.10
Mar 8, 1995	28,000	4200	2300	810	7800		3.92
Jun 15, 1995	NSC						-- (Film)

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
Dec 7, 1994	NA	NA	NA	NA	NA		4.16
Mar 8, 1995	<100	<0.5	<0.5	<0.5	<1		3.96
Jun 15, 1995	130	<0.5	<0.5	<0.5	<1		4.52

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
Dec 7, 1994	NSC						5.48 (Film)
Mar 8, 1995	NSC						5.18 (Film)
Jun 15, 1995	NSC						-- (Film)

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)
Dec 7, 1994	NSC						5.20 (Film)
Mar 8, 1995	NSC						4.98 (Film)
Jun 15, 1995	NSC						- - (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
Dec 7, 1994	540	5.6	<0.3	<0.5	6.9		4.13
Mar 8, 1995	1500	220	5.5	<0.5	83		5.2
Jun 15, 1995	3200	820	53	6.2	74		4.93

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
Dec 7, 1994	1500	17	2.5	3.2	22		5.68
Mar 8, 1995	2500	460	5.5	2.1	51		5.12
Jun 15, 1995	2300	91	1.1	0.7	97		5.72

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)
Dec 7, 1994	NSC						5.63 (Film)
Mar 8, 1995	NSC						5.06 (Film)
Jun 15, 1995	NSC						-- (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
Dec 7, 1994	130	2.5	1.9	1.3	3.6		8.67
Mar 8, 1995	<100	<0.5	<0.5	<0.5	<1		8.34
Jun 15, 1995	<100	1.0	<0.5	<0.5	<1		9.12

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
Dec 7, 1994	940	22	23	10	32		5.18
Mar 8, 1995	1600	<0.5	<0.5	<0.5	2.3		4.57
Jun 15, 1995	3200	2.2	5.3	4.3	3.1		5.08

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
Dec 7, 1994	56	<0.3	<0.3	<0.5	2.1		5.92
Mar 8, 1995	<100	<0.5	<0.5	<0.5	<1		7.84
Jun 15, 1995	<100	<0.5	<0.5	<0.5	<1		6.97

Benzene, toluene, ethlybenzene, 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 I.D.	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 I.D.	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

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE1		RE3			RE6	RE7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	GAL	437.1	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	13:10	
HOURS	#	8658	
ENGINE RPM	RPM	1800	
ENGINE VACUUM	IN HG	10	
TK REC TEMP	F	140	
AIR TEMP	F	84F	
AIR FLOW	CFM	16	
VAPOR FLOW	CFM	16	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	30	
GAS METER		85%	
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: DW AIR SAMPLING & MONTHLY WATER SAMPLING

SERVICE TECHNICAN FLORIN SFETCU DATE 6-22-95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

PROJECT STATUS REPORT
THRIFTY OIL CO. S.S. #054
2504 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA 94546
DATE: 06-15-95

FREQ.	MONITORING OBSERVATION WELLS				ODORS (S=SLIGHT)			FREE PRODUCT		WELLS CONNECTED TO SYSTEM (W)							
										CONNECT		INTEGRITY		VAPOR		WATER	
	NO.	DTW	DTP	PT	YES	NO	S	YES	NO	YES	NO	OK	NO	ON	OFF	ON	OFF
M	PW-1	5.72				X			X	X	-	X			X		X
M	PW-2	5.44				X			X	X	-	X			X		X
M	RE-1	Sheen			X				X	X	-	X			X		X
M	RE-2	4.52				X			X	X	-	X			X		X
M	RE-3	Sheen			X				X	X	-	X			X		X
M	RE-4	Sheen			X				X	X	-	X		X		X	
M	RE-5	4.93				X			X	X	-	X			X		X
M	RE-6	5.72				X			X	X	-	X			X		X
M	RE-7	Sheen			X				X	X	-	X		X		X	
M	RS-8	9.12				X			X	-	X	X			X		X
M	RS-9	5.08				X			X	-	X	X			X		X
M	RS-10	6.97				X			X	-	X	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. 160 GALLONS

DATA RECORDED BY : FLORIN SERBAN INPUT BY: M.M. >\FF\054rsirt

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE1		RE3			RE6	RE7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	GAL	435.2	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	13:15	
HOURS	#	2651	
ENGINE RPM	RPM	-	
ENGINE VACUUM	IN HG	-	
TK REC TEMP	F	-	
AIR TEMP	F	64°F	
AIR FLOW	CFM		
VAPOR FLOW	CFM		
FUEL FLOW	CFM/H		
WELL VACUUM	IN H2O		
GAS METER		50%	
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: The engine desn't start and I didn't do the GW AIR SAMPLING & Monthly water Sampling

SERVICE TECHNICAN FLORIN SFETCU DATE 6.15.95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel FLORIN, SERBAN Weather Rain

Well No. RE-5 Equip. Bailer

Before Purging

Total Well Depth 18.25 ft. Well Diameter 4"

Depth to Water 4.93 ft. Est. Purge Vol. 35

Sampling Data

Initial Turbidity Final Turbidity

Time	14:35	14:40	14:45	14:50	14:55	15:00
EC	730	710	680	660	630	630
pH	4.63	4.62	4.62	4.61	4.61	4.61
Temp	74.5	73.8	73.5	73.2	72.1	71.8
Gal.	5	11	17	23	29	35
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water ft. Total Well Depth ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel FLORIN, SERBAN Weather Rain

Well No. RE-6 Equip. Boiler

Before Purging

Total Well Depth 13.65 ft. Well Diameter 4"

Depth to Water 5.72 ft. Est. Purge Vol. 21

Sampling Data

Initial Turbidity Final Turbidity

Time	14:05	14:08	14:11	14:14	14:17	14:20
EC	2060	2050	2030	2010	1990	1990
pH	4.65	4.64	4.64	4.63	4.63	4.63
Temp	73.4	74.1	73.2	71.2	71.2	71.2
Gal.	3	7	10	14	17	21
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water ft. Total Well Depth ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel FLORIN, SERBAN Weather Rain

Well No. RS-9 Equip. Bailer

Before Purging

Total Well Depth 15.00 ft. Well Diameter 2"

Depth to Water 5.08 ft. Est. Purge Vol. 6

Sampling Data

Initial Turbidity _____ Final Turbidity _____

Time	13:48	13:48	13:50			
EC	2100	2010	1990	1		
pH	4.62	4.63	4.63			
Temp	68.4	68.4	68.3			
Gal.	2	4	6			
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water _____ ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel SERBAN, FLORIN Weather Rain

Well No. RS-8 Equip. Bailer

Before Purging

Total Well Depth 25.20 ft. Well Diameter 2"

Depth to Water 9.12 ft. Est. Purge Vol. 10

Sampling Data

Initial Turbidity _____ Final Turbidity _____

Time	12:20	12:22	12:23	12:25		
EC	2770	2730	2740	2730		
pH	4.65	4.64	4.64	4.64		
Temp	70.8	69.8	69.7	69.7		
Gal.	2	5	7	10		
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water _____ ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel SERBAN, FLORIN Weather Rain

Well No. RS-10 Equip. Boiler

Before Purging

Total Well Depth 24.45 ft. Well Diameter 2"

Depth to Water 6.97 ft. Est. Purge Vol. 11

Sampling Data

Initial Turbidity _____ Final Turbidity _____

Time	11:44	11:46	11:48	11:50		
EC	780	740	720	720		
pH	4.76	4.74	4.74	4.72		
Temp	69.6	68.9	68.6	68.2		
Gal.	2	5	8	11		
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water _____ ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel FLORIN, SERBAN Weather Rain

Well No. PW-2 Equip. Boiler

Before Purging

Total Well Depth 14.40 ft. Well Diameter 4"

Depth to Water 5.44 ft. Est. Purge Vol. 23

Sampling Data

Initial Turbidity _____ Final Turbidity _____

Time						
EC	680	680	660	660	660	660
pH	4.88	4.88	4.88	4.87	4.87	4.87
Temp	72.1	72.8	72.7	72.5	72.4	72.4
Gal.	3	7	11	15	19	23
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water _____ ft. Total Well Depth _____ ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site 054 Date 06-15-1995

Address

Personnel FLORIN, SERBAN Weather Rain

Well No. PW-1 Equip. BAILER

Before Purging

Total Well Depth 14.10 ft. Well Diameter 4"

Depth to Water 5.72 ft. Est. Purge Vol. 22

Sampling Data

Initial Turbidity Final Turbidity

Time						10:40
EC	780	760	770	760	760	760
pH	4.89	4.86	4.80	4.82	4.78	4.73
Temp	71.8	71.5	71.3	70.9	70.6	70.3
Gal.	3	7	10	14	18	22
Time						
EC						
pH						
Temp						
Gal.						

After Purging/Before Sample Collection

Depth to Water ft. Total Well Depth ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site SS# 054 Date 06-15-1995

Address

Personnel SERBAN, FLORIN Weather Rain

Well No. RE-2 Equip. Bailer

Before Purging

Total Well Depth 17.10 ft. Well Diameter 4"

Depth to Water 4.52 ft. Est. Purge Vol. 33

Sampling Data

Initial Turbidity Final Turbidity

Time	9:50	9:54	9:58	10:02	10:06	10:10
EC	770	760	740	710	680	650
pH	5.02	5.04	5.06	5.08	5.09	5.10
Temp	66.0	65.7	65.7	65.9	66.1	66.6
Gal.	5	11	16	22	27	33
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						
ON				RE 4			RE 7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE 6	RE 7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	GAL	412.7	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	10:10	
HOURS	#	8634	
ENGINE RPM	RPM	1800	
ENGINE VACUUM	IN HG	12	
TK REC TEMP	F	95	
AIR TEMP	F	74°F	
AIR FLOW	CFM	16	
VAPOR FLOW	CFM	14	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	30	
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		
OUTLET	PPM		

COMMENTS: Water remediation system some time work some time dont work

SERVICE TECHNICAN FLORIN SFETCU DATE 6-13-95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE6	RE6
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	GAL	384.6	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	13:50	
HOURS	#	8529	
ENGINE RPM	RPM	1600	
ENGINE VACUUM	IN HG	12	
TK REC TEMP	F	100	
AIR TEMP	F	62°F	
AIR FLOW	CFM	18	
VAPOR FLOW	CFM	18	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	30	
GAS METER		40%	
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 FLORINI SEETOU DATE 06/08/95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT
GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE 4			RE 7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE 6	RE 7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	Gal	276	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	15:20	
HOURS	#	8436	
ENGINE RPM	RPM	1700	
ENGINE VACUUM	IN HG	16	
TK REC TEMP	F	95	
AIR TEMP	F	68°F	
AIR FLOW	CFM	18	
VAPOR FLOW	CFM	16	
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		

COMMENTS: Water come to slow change the oil

SERVICE TECHNICAN FLORIN GRECU DATE [illegible] THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE 4			RE 7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE 6	RE 7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER		257.3	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	16:10	
HOURS	#	8408	
ENGINE RPM	RPM	1700	
ENGINE VACUUM	IN HG	12	
TK REC TEMP	F	110	
AIR TEMP	F	80	
AIR FLOW	CFM	17	
VAPOR FLOW	CFM	18	
FUEL FLOW	CFM/H	75	
WELL VACUUM	IN H2O	30	
GAS METER		85%	
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: Start engine annul S/W Air Sampling

SERVICE TECHNICAN FLORIN SFETCU DATE 5/25/95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE 1		RE3			RE6	RE7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER		933.1	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	1515	
HOURS	#	8405	
ENGINE RPM	RPM	—	
ENGINE VACUUM	IN HG	—	
TK REC TEMP	F	—	
AIR TEMP	F	70°	
AIR FLOW	CFM	—	
VAPOR FLOW	CFM	—	
FUEL FLOW	CFM/H	—	
WELL VACUUM	IN H2O	—	
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:

SERVICE TECHNICAN FLORAL SPECTOR DATE 5.19.95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

EARTH MANAGEMENT CO.
Environmental Remediation

PROJECT STATUS REPORT
THRIFTY OIL CO. S.S. #054
2504 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA 94546
DATE: MAY 11, 1995

FREQ.	MONITORING OBSERVATION WELLS				ODORS (S=SLIGHT)			FREE PRODUCT		WELLS CONNECTED TO SYSTEM (W) CONNECT		INTEGRITY		VAPOR		WATER	
	NO.	DTW	DTP	PT	YES	NO	S	YES	NO	YES	NO	OK	NO	ON	OFF	ON	OFF
M	PW-1	4.06				✓			✓	X	-						
M	PW-2	4.18				✓			✓	X	-						
M	RE-1	4.03				✓			✓	X	-						
M	RE-2	4.08				✓			✓	X	-						
M	RE-3	5.27	Shin		✓				✓	X	-						
M	RE-4	5.12	Shin		✓				✓	X	-						
M	RE-5	5.28				✓			✓	X	-						
M	RE-6	5.21				✓			✓	X	-						
M	RE-7	5.13	Shin		✓				✓	X	-						
M	RS-8	8.42				✓			✓	-	X						
M	RS-9	4.64				✓			✓	-	X						
M	RS-10	7.93				✓			✓	-	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 : FLORIN SFETCU INPUT BY: M.M. >\FF\054rsirt

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE 4			RE7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE6	RE7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB
	—			

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER		252.1	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	15:40	
HOURS	#	8405	
ENGINE RPM	RPM	—	
ENGINE VACUUM	IN HG	—	
TK REC TEMP	F	—	
AIR TEMP	F	62F	
AIR FLOW	CFM	—	
VAPOR FLOW	CFM	—	
FUEL FLOW	CFM/H	—	
WELL VACUUM	IN H2O	—	
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: TRY TO RESTART, BATERY DEAD

SERVICE TECHNICAN FLORIN SFETCU DATE 5/11/95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE1		RE3			RE6	RE7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	~~25~~	252.1	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	15:00	
HOURS	#	8405	
ENGINE RPM	RPM	1700	
ENGINE VACUUM	IN HG	1	
TK REC TEMP	F	95	
AIR TEMP	F	65°F	
AIR FLOW	CFM	15	
VAPOR FLOW	CFM	14	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	30	
GAS METER		65%	
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 FLORIN SFETCU DATE 5/05/95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE-4			RE-7
OFF							

WELLS	VAPORS						
ON	RE-1		RE-3			RE-6	RE-7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	248		
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	14:20	
HOURS	#	8336	
ENGINE RPM	RPM	1800	
ENGINE VACUUM	IN HG	1	
TK REC TEMP	F	90	
AIR TEMP	F	70°F	
AIR FLOW	CFM	17	
VAPOR FLOW	CFM	5	
FUEL FLOW	CFM/H	70	
WELL VACUUM	IN H2O	30	
GAS METER		87%	
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: Water remediation system is not working
Need more time to check the pump and installation

SERVICE TECHNICAN FLORIN SFETCU DATE 4.26.95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE1		RE3			RE6	RE7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	248		
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	12:00	
HOURS	#	8318	
ENGINE RPM	RPM	1800	
ENGINE VACUUM	IN HG	1	
TK REC TEMP	F	95	
AIR TEMP	F	68°F	
AIR FLOW	CFM	14	
VAPOR FLOW	CFM	7	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	30	
GAS METER		33%	
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: The water remediation system is not work

SERVICE TECHNICAN _____ DATE 4.21.95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE4			RE7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE 6	RE7
OFF		x		x	x		

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER	248		
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	11:30	
HOURS	#		
ENGINE RPM	RPM	1900	
ENGINE VACUUM	IN HG	1	
TK REC TEMP	F	110	
AIR TEMP	F	64°F	
AIR FLOW	CFM	14	
VAPOR FLOW	CFM	8	
FUEL FLOW	CFM/H	90	
WELL VACUUM	IN H2O	30	
GAS METER		85%	
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: I need more information to rezolve the water Remediation System

SERVICE TECHNICAN FLORIN SFETCU DATE 4.14.95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON							
OFF				RE 4			RE 7

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

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER			
ROTAMETER	248		
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM		
HOURS	#	13:20	
ENGINE RPM	RPM	826	
ENGINE VACUUM	IN HG	1800	
TK REC TEMP	F	1	
AIR TEMP	F	110	
AIR FLOW	CFM	72°F	
VAPOR FLOW	CFM	14	
FUEL FLOW	CFM/H	9	
WELL VACUUM	IN H2O	70	
GAS METER		30	
CATALIST IN	F	30%	
CATALIST OUT	F		
EXHAUST HC	PPM/%		
EXHAUST CO	%PPM		
EXHAUST CO2	%		
EXHAUST NOX	%PPM		
CATALYST REPLACEMENT			
EXHAUST O2	%		
INLET	PPM		
OUTLET	PPM		

COMMENTS: Water remediation system is not work

SERVICE TECHNICAN _____ DATE _____ THRIFTY OIL CO # _____

EARTH MANAGEMENT CO.
Environmental Remediation

FIELD STATUS REPORT

GROUND WATER AND SOIL CLEAN-UP SYSTEM

MAINFOLD

WELLS	WATER						
ON				RE 4			RE 7
OFF							

WELLS	VAPORS						
ON	RE 1		RE 3			RE 6	RE 7
OFF							

WELL MONITORING

WELL NO	DTW	DTP	PT	DTB

HYDROCARBON STRIPPER & VAPOR EXTRACTION SYSTEM W/ACU OR CAT

PARAMETER	U/M	LIMIT	DATA
FLOWMETER		268	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	15:20	
HOURS	#	8059	
ENGINE RPM	RPM	1900	
ENGINE VACUUM	IN HG	1	
TK REC TEMP	F	105	
AIR TEMP	F	68 °F	
AIR FLOW	CFM	16	
VAPOR FLOW	CFM	8	
FUEL FLOW	CFM/H	90	
WELL VACUUM	IN H2O	30	
GAS METER		87%	
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: Replace w cut Hoses. water is flow very slow

SERVICE TECHNICAN FLORIN JAITCU DATE 4.07.95 THRIFTY OIL CO # 054

13415 Carmenita Road/P.O. Box 2129, Santa Fe Springs, CA 90670

OFFICE RECORD

APPENDIX B

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 054
Sample Matrix: Water
Method: EPA 8015M (Gasoline)

AA Project No.: A135054-12
Date Received: 06/16/95
Date Reported: 06/23/95
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
34401	Trip blank	06/15/95	06/19/95	<100	100
34402	RE-2	06/15/95	06/19/95	130	100
34403	PW-1	06/15/95	06/19/95	260	100
34404	PW-2	06/15/95	06/19/95	1700	100
34405	RS-10	06/15/95	06/19/95	<100	100
34406	RS-8	06/15/95	06/19/95	<100	100
34407	RS-9	06/15/95	06/19/95	3200	100
34408	RE-6	06/15/95	06/21/95	2300	100
34409	RE-5	06/15/95	06/21/95	3200	100

MRL: Method Reporting Limit
<: Not detected at or above the value of the concentration indicated.

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 054
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135054-12
Date Received: 06/16/95
Date Reported: 06/23/95
Units: ug/L

Date Sampled:	06/15/95	06/15/95	06/15/95	06/15/95	
Date Analyzed:	06/19/95	06/19/95	06/19/95	06/19/95	
AA ID No.:	34401	34402	34403	34404	
Client ID No.:	Trip blank	RE-2	PW-1	PW-2	MRL
Compounds:					
Benzene	<0.5	<0.5	0.8	5.6	0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	0.5
Toluene	<0.5	<0.5	0.6	<0.5	0.5
Xylenes	<1	<1	3.2	1.6	1

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 054
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135054-12
Date Received: 06/16/95
Date Reported: 06/23/95
Units: ug/L

Date Sampled:	06/15/95	06/15/95	06/15/95	06/15/95	
Date Analyzed:	06/19/95	06/19/95	06/19/95	06/21/95	
AA ID No.:	34405	34406	34407	34408	
Client ID No.:	RS-10	RS-8	RS-9	RE-6	MRL
Compounds:					
Benzene	<0.5	1.0	2.2	91	0.5
Ethylbenzene	<0.5	<0.5	4.3	0.7	0.5
Toluene	<0.5	<0.5	5.3	1.1	0.5
Xylenes	<1	<1	3.1	97	1

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 054
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135054-12
Date Received: 06/16/95
Date Reported: 06/23/95
Units: ug/L

Date Sampled:	**06/15/95**	
Date Analyzed:	**06/21/95**	
AA ID No.:	**34409**	
Client ID No.:	**RE-5**	**MRL**
Compounds:		
Benzene	820	0.5
Ethylbenzene	6.2	0.5
Toluene	53	0.5
Xylenes	74	1

MRL: Method Reporting Limit
<: Not detected at or above the value of the concentration indicated.

George Havalias
Laboratory Director

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LABORATORY QA/QC REPORT

Client: Thrifty Oil Company
Project Name: SS# 054
Method: EPA 8020 (BTEX)
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No.: 34416
Project No.: N/A
AA Project No.: A135054-12
Date Analyzed: 06/19/95
Date Reported: 06/23/95

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	15.68	78	17.39	87	11	65 - 135
Ethylbenzene	15.40	77	13.86	69	11	77 - 123
Toluene	18.32	92	17.22	86	7	66 - 134
Xylenes	16.17	81	14.52	73	10	73 - 127

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LABORATORY QA/QC REPORT

Client: Thrifty Oil Company
Project Name: S$# 054
Method: EPA 8020 (BTEX)
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No.: 34507
Project No.: N/A
AA Project No.: A135054-12
Date Analyzed: 06/21/95
Date Reported: 06/23/95

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	18.2	91	17.67	88	3	65 - 135
Ethylbenzene	21.1	106	20.83	104	2	77 - 123
Toluene	22.0	110	21.47	107	3	66 - 134
Xylenes	21.4	107	21.07	105	2	73 - 127

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LABORATORY QA/QC REPORT

Client: Thrifty Oil Company
Project Name: SS# 054
Method: EPA 8015M (Gasoline)
Sample ID: Matrix Spike
Concentration: 500 ug/L

AA ID No.: 34416
Project No.: N/A
AA Project No.: A135054-12
Date Analyzed: 06/19/95
Date Reported: 06/23/95

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	342	68	610	122	57	51 - 149

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AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: Thrifty Oil Company
Project Name: SS# 054
Method: EPA 8015M (Gasoline)
Sample ID: Matrix Spike
Concentration: 500 ug/L

AA ID No.: 34507
Project No.: N/A
AA Project No.: A135054-12
Date Analyzed: 06/21/95
Date Reported: 06/23/95

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	467	93	457	91	2	51 - 149

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