THRIFTY OIL CO.

May 15, 1997 O.68

Ms. Amy Leach
Department of Environmental Health
Hazardous Materials Program
1131 Harbor Bay Parkway
Suite 2501
Alameda, California 94502

RE: **Thrifty Oil Co. Station #054**
2504 Castro Valley Boulevard
Castro Valley, California
4th QUARTER REPORT, 1996

Dec. 1996

Dear Ms. Leach,

Enclosed is the 4th Quarter 1996 Status Report for the subject site. This report has been prepared by Thrifty Oil Co. using the data collected by Earth Management Company.

If you have any questions, please contact Raymond C. Friedrichsen or myself at (310) 923-9876.

Respectfully,

Chris Panaitescu
General Manager
Environmental Affairs

cc: ARCO Products Company

Measure analysis for RS-11.

97 NOV 27 PM 1:16

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

THRIFTY OIL CO.

May 2, 1996

Ms. Amy Leach
Department of Environmental Health
Hazardous Materials Program
1131 Harbor Bay Parkway
Suite 2501
Alameda, California 94502

RE: **Thrifty Oil Co. Station #054**
2504 Castro Valley Boulevard
Castro Valley, California
4th QUARTER REPORT, 1996

Dec 1996

Dear Ms. Leach,

This letter report presents the results of soil/groundwater treatment and site monitoring during the 4th quarter 1996 at the subject site. The approximate location of the on- and off-site monitoring wells are shown on **Figure 1**. All monitoring is conducted by Earth Management Co. (EMC) of Santa Fe Springs, California.

Site Monitoring and Sample Collection

The site was visited on December 10, 1996, by an EMC technician to gauge the wells and collect groundwater samples. Water levels were measured in each well from the top of well casing using a Marine Moisture interface gauging probe (nearest 0.01 feet) capable of also measuring the presence of free floating hydrocarbons. ***Depth to groundwater* ranged from 2.76 to 6.08 feet below the top of well casings**. No wells exhibited free product. The depth to groundwater data was used in conjunction with the recent survey data to determine groundwater elevations beneath the site. The interpretation of groundwater flow across the site is depicted on **Figure 1**. In general, the ***groundwater flow* was to the *west/northwest*** at a gradient of approximately 0.06 feet per feet.

Prior to collecting groundwater samples from the wells, approximately 4 well volumes of groundwater was removed using a PVC bailer. During the purging process, the pH, conductivity and temperature were measured and recorded to insure formation water was entering the well to be sampled. Approximately 8 to 40 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 samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), volatile aromatic compounds (BETX) and methyl tertiary butyl ether (MTBE) using EPA methods 8015m, 8020 and GC/PID, respectively. Copies of the laboratory analysis reports are attached in **Appendix B**. A summary of the results are presented in **Table 1**. TPHg and benzene isoconcentration maps generated from the December sampling event data are presented as **Figures 2 and 3**.

TPHg was detected in groundwater samples collected at less than detectable to 2,100 ug/l, BTEX was not detected at concentrations exceeding laboratory detection limits in all samples analyzed and MTBE concentrations ranged from less than detectable to 4,700 ug/l.

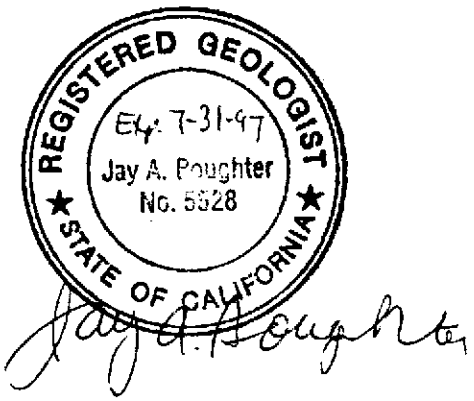
Treatment Unit Operation Status

The RSI-SAVE unit was unoperational throughout the reporting period and appeared to have been re-started on December 26, 1996. Historical well vapor data is included in **Table 2.**

Closing

Thrifty will continue to conduct quarterly groundwater monitoring at the site. The next quarterly report should be available in November of 1996. If you have any questions, please contact Ray Friedrichsen at (310) 923-9876.

Respectfully,



Jay A. Boughter, R.G.
Hydrogeologist

cc: ARCO Products Company

TABLES

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #54

DATE SAMPLED	TPH	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	MTBE	DEPTH TO GROUNDWTR
Monitoring Well PW-1 (Elevation = 166.46 Feet)							
Apr 11, 1988	NSC						
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
Sep 5, 1995	330	2.1	<0.5	2.1	9.6		5.96
Nov 21, 1995	660	13	1.3	<0.3	4.0		6.04
Mar 11, 1996	660	0.94	0.77	<0.3	8.1		3.60
Jun 19, 1996	120	0.53	<0.3	<0.3	2.3		4.80
Sep 16, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	5.10
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	4.92

Monitoring Well PW-2 (Elevation = 166.18)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	NSC						
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
Sep 5, 1995	2500	33	1.0	0.86	18		6.13
Nov 21, 1995	2800	130	59	18	190		6.23
Mar 11, 1996	13000	330	460	<15	3800		4.48
Jun 19, 1996	1400	<0.3	<0.3	<0.3	<0.5		5.38
Sep 16, 1996	3500	<0.3	<0.3	<0.3	<0.5	5900	5.21
Dec 10, 1996	2100	<0.3	<0.3	<0.3	<0.5	4700	5.38

TABLE 1 (Continued)

Monitoring Well RE-1 (Elevation = 166.82)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	37000	1900	8400	1200	15000		
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)
Sep 5, 1995	NSC						4.78 (Film)
Nov 21, 1995	NA	NA	NA	NA	NA		4.82
Mar 11, 1996	270	2.4	6.0	4.5	19		3.32
Jun 19, 1996	3000	570	63	<1.5	400		4.20
Sep 16, 1996	7700	440	69	<1.5	680	230	4.68
Dec 10, 1996	52	<0.3	<0.3	<0.3	<0.5	120	4.93

TABLE 1 (Continued)

Monitoring Well RE-2 (Elevation = 167.19)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	NSC						
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
Sep 5, 1995	210	<0.5	<0.5	<0.5	<1		4.76
Nov 21, 1995	160	0.65	<0.3	0.35	0.95		4.83
Mar 11, 1996	<50	<0.3	<0.3	<0.3	<0.5		3.36
Jun 19, 1996	<50	<0.3	<0.3	<0.3	<0.5		4.68
Sep 16, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	5.10
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	4.47

14

5.6

43

0.65

ND

TABLE 1 (Continued)

Monitoring Well RE-3 (Elevation = 167.39)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	70000	6600	5300	800	13000		
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)
Sep 5, 1995	NSC						6.84 (Film)
Nov 21, 1995	10,000	210	<3	4.5	330		7.38
Mar 11, 1996	1600	640	15	10	46		4.85
Jun 19, 1996	2100	280	<3	<3	120		5.80
Sep 16, 1996	140	<0.3	<0.3	<0.3	<0.5	110	4.50
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	5.35

TABLE 1 (Continued)

Monitoring Well RE-4 (Elevation = 166.94)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	150000	12000	8000	1000	27000		
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)
Sep 5, 1995	NSC						13.72 (Film)
Nov 21, 1995	32,000	46	21	66	340		12.53
Mar 11, 1996	1700	130	15	2.0	120		4.72
Jun 19, 1996	1700	230	30	0.35	100		5.40
Sep 16, 1996	510	<0.3	<0.3	<0.3	<0.5	800	5.18
Dec 10, 1996	520	<0.3	<0.3	<0.3	<0.5	1000	4.65

TABLE 1 (Continued)

Monitoring Well RE-5 (Elevation = 166.51)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	14000	1300	1100	100	2600		
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
Sep 5, 1995	4400	440	22	<2.5	57		5.03
Nov 21, 1995	660	3.4	<0.3	<0.3	0.6		5.23
Mar 11, 1996	1000	76	2.2	<0.3	130		4.16
Jun 19, 1996	90	<0.3	<0.3	<0.3	<0.5		5.42
Sep 16, 1996	1900	5.8	<0.3	<0.3	5.9	1100	5.20
Dec 10, 1996	740	<0.3	<0.3	<0.3	<0.5	1300	5.27

TABLE 1 (Continued)

Monitoring Well RE-6
(Elevation = 166.51)

Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	6000	3000	40	80	140		
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	450	5.5	2.1	51		5.12
Jun 15, 1995	2300	91	1.1	0.7	97		5.72
Sep 5, 1995	3300	60	<10	<10	74		5.94
Nov 21, 1995	2000	7.3	<0.3	0.56	8.7		6.24
Mar 11, 1996	840	43	0.96	5.7	14		5.16
Jun 19, 1996	1800	160	2.7	9.9	25		5.80
Sep 16, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	5.38
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	5.62

film

950

920

film

460

160

TABLE 1 (Continued)

Monitoring Well RE-7
(Elevation = 166.04)

Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Apr 11, 1988	<50000	17000	4400	600	8400		
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)
Sep 5, 1995	NSC						7.98 (Film)
Nov 21, 1995	20,000	8800	110	<30	310		7.32
Mar 11, 1996	4800	2200	38	26	120		5.62
Jun 19, 1996	4400	3300	49	5.8	70		6.40
Sep 16, 1996	7200	510	83	<0.3	710	130	6.20
Dec 10, 1996	700	<0.3	<0.3	<0.3	<0.5	1400	5.92

3,300

TABLE 1 (Continued)

Monitoring Well RS-8 (Elevation = 164.32)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Aug 7, 1991	ND	ND	ND	ND	ND		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
Sep 5, 1995	<100	<0.5	<0.5	<0.5	<1		9.56
Nov 21, 1995	<50	0.44	<0.3	<0.3	1.5		9.28
Mar 11, 1996	<50	1.3	<0.3	<0.3	0.6		7.52
Jun 19, 1996	640	72	20	34	150		7.80
Sep 16, 1996	<50	<0.3	<0.3	<0.3	<0.5	20	9.18
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.3	<20	6.08

2.1

0.3

2.5

1.0

72

TABLE 1 (Continued)

Monitoring Well RS-9 (Elevation = 167.51)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Aug 7, 1991	NA	0.5	ND	330	1200		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
Sep 5, 1995	1100	<0.5	<0.5	<0.5	<1		5.72
Nov 21, 1995	1100	1.1	2.9	3.5	3.0		2.46
Mar 11, 1996	440	0.7	0.34	<0.3	3.7		3.44
Jun 19, 1996	580	3.8	0.49	1.2	<0.5		3.80
Sep 16, 1996	490	<0.3	1.6	<0.3	<0.5	<20	3.80
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	2.76

TABLE 1 (Continued)

Monitoring Well RS-10 (162.89)							
Date	TPH	Benzene	Toluene	E-Benzene	Xylenes	MTBE	Depth to GW
Aug 7, 1991	ND	ND	ND	ND	ND		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
Sep 5, 1995	<100	<0.5	<0.5	<0.5	<1		8.14
Nov 21, 1995	<50	<0.3	<0.3	<0.3	<0.5		7.68
Mar 11, 1996	<50	<0.3	<0.3	<0.3	<0.5		6.76
Jun 19, 1996	<50	<0.3	<0.3	<0.3	<0.5		7.20
Sep 16, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	6.30
Dec 10, 1996	<50	<0.3	<0.3	<0.3	<0.5	<20	6.05
Monitoring Well RS-11 (elevation = 163.28)							
Sep 21, 1995	110	<0.5	<0.5	<0.5	<1		9.37
Nov 21, 1995	NA	NA	NA	NA	NA		- -
Mar 11, 1996	NA	NA	NA	NA	NA		- -
Jun 19, 1996	NA	NA	NA	NA	NA		- -
Sep 16, 1996	NA	NA	NA	NA	NA	NA	- -
Dec 10, 1996	NA	NA	NA	NA	NA	NA	- -

TPH and BTEX analyzed by EPA methods 8015M and 8020; concentrations reported in ug/L.

NSC = Not sampled due to product film on groundwater.

ND = Not Detected.

NA = Not Analyzed.

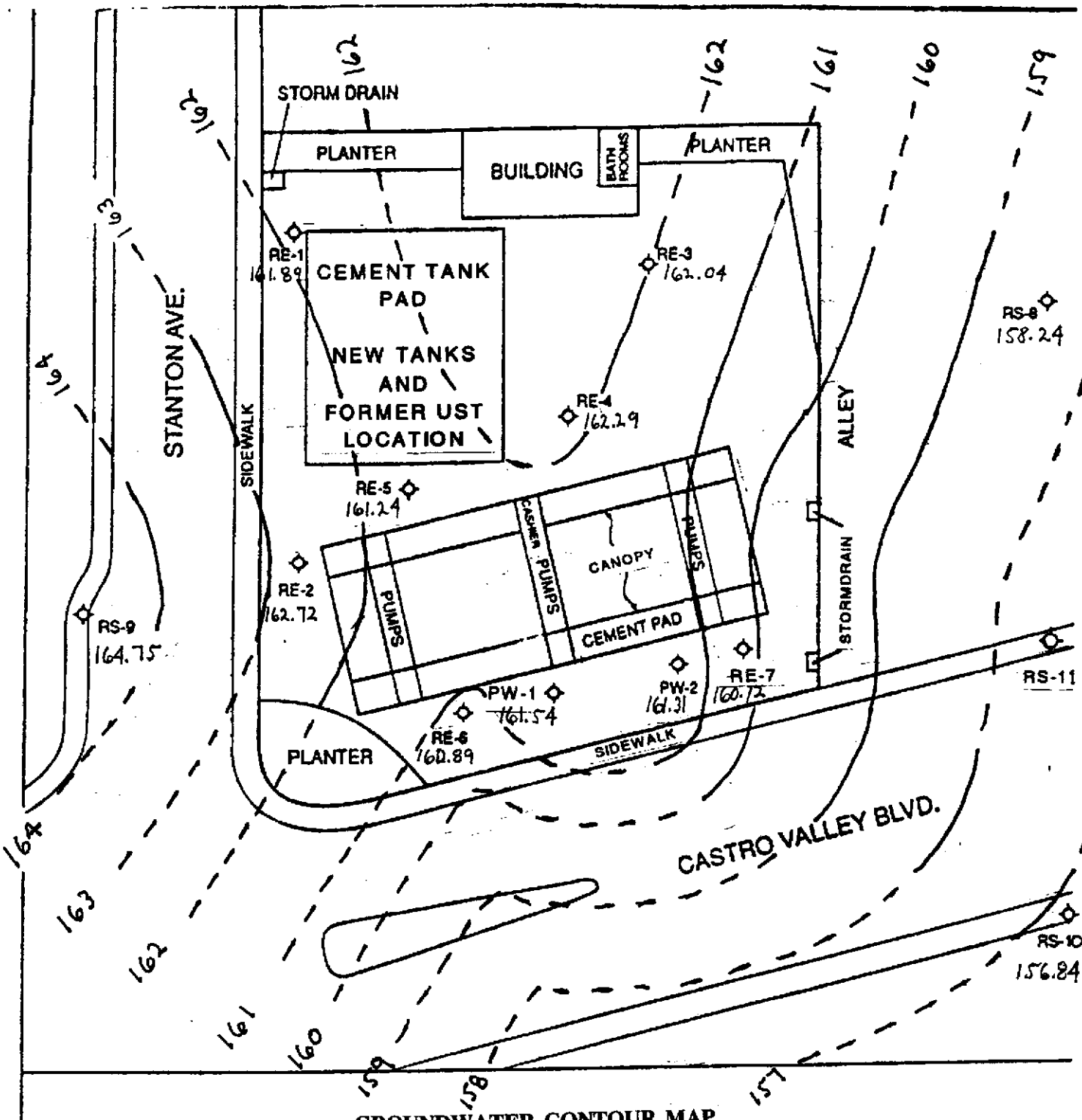
TABLE 2
Well Vapor Concentrations
Thrifty Oil Co. Station No. 54
Castro Valley, CA

Well I.D.	Date	Vapor Conc., ppmV
PW-1	10-03-96	System Down
	10-10-96	System Down
	10-18-96	System Down
	10-24-96	System Down
	11-13-96	System Down
	11-21-96	System Down
	11-27-96	System Down
	12-10-96	System Down
	12-26-96	--
PW-2	10-03-96	System Down
	10-10-96	System Down
	10-18-96	System Down
	10-24-96	System Down
	11-13-96	System Down
	11-21-96	System Down
	11-27-96	System Down
	12-10-96	System Down
	12-26-96	--
RE-1	10-03-96	System Down
	10-10-96	System Down
	10-18-96	System Down
	10-24-96	System Down
	11-13-96	System Down
	11-21-96	System Down
	11-27-96	System Down
	12-10-96	System Down
	12-26-96	--
RE-2	10-03-96	System Down
	10-10-96	System Down
	10-18-96	System Down
	10-24-96	System Down
	11-13-96	System Down
	11-21-96	System Down
	11-27-96	System Down
	12-10-96	System Down
	12-26-96	--

RE-3	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --
RE-4	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --
RE-5	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --
RE-6	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --
RE-7	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --

RS-8	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --
RS-9	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --
RS-10	10-03-96 10-10-96 10-18-96 10-24-96 11-13-96 11-21-96 11-27-96 12-10-96 12-26-96	System Down System Down System Down System Down System Down System Down System Down System Down --

FIGURES



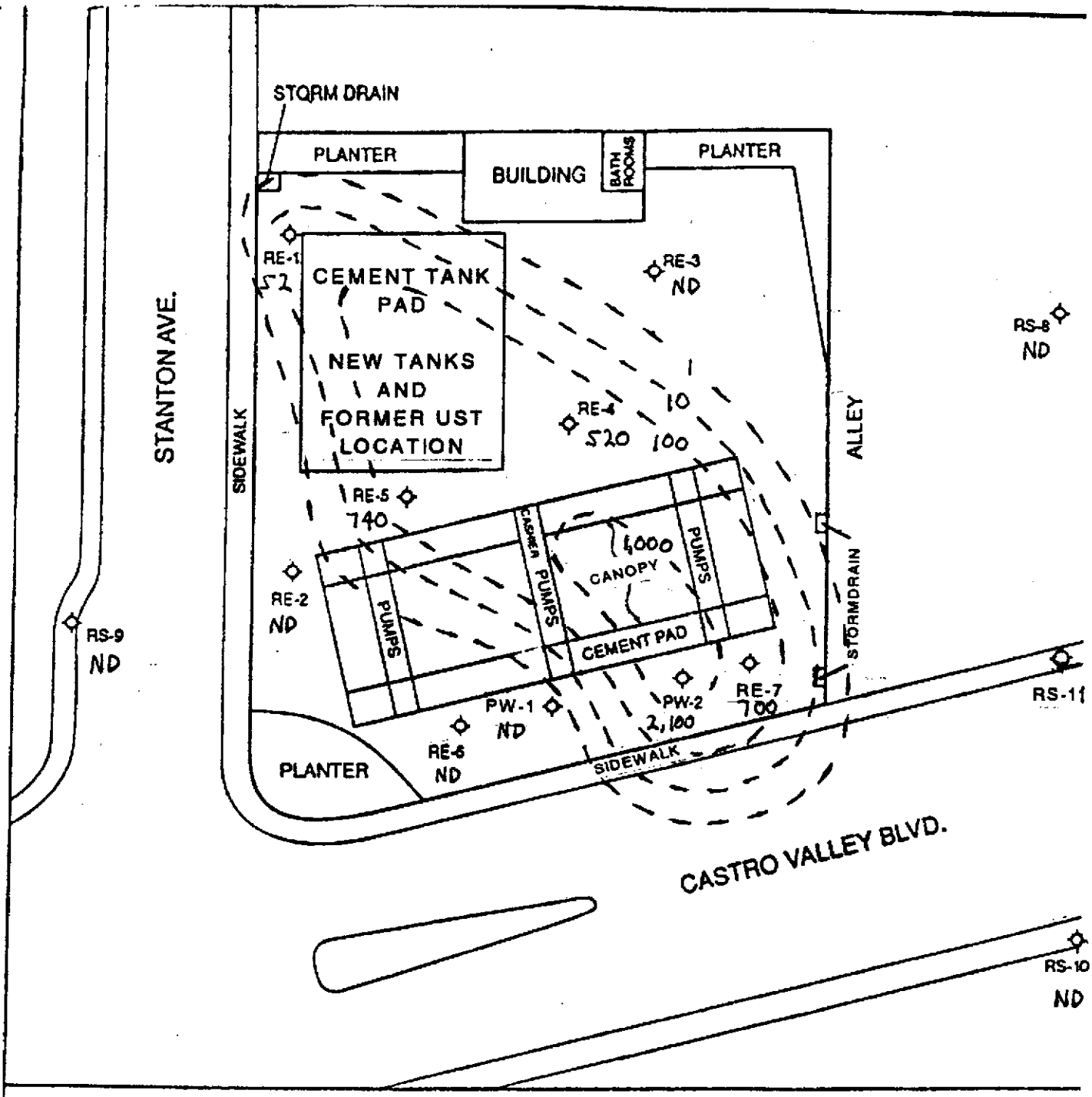
GROUNDWATER CONTOUR MAP

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

0 25 50
SCALE IN FEET

EXISTING MONITORING WELL
GROUNDWATER CONTOUR (12/10/96)

FIGURE 1



TPH ISOCONCENTRATION MAP

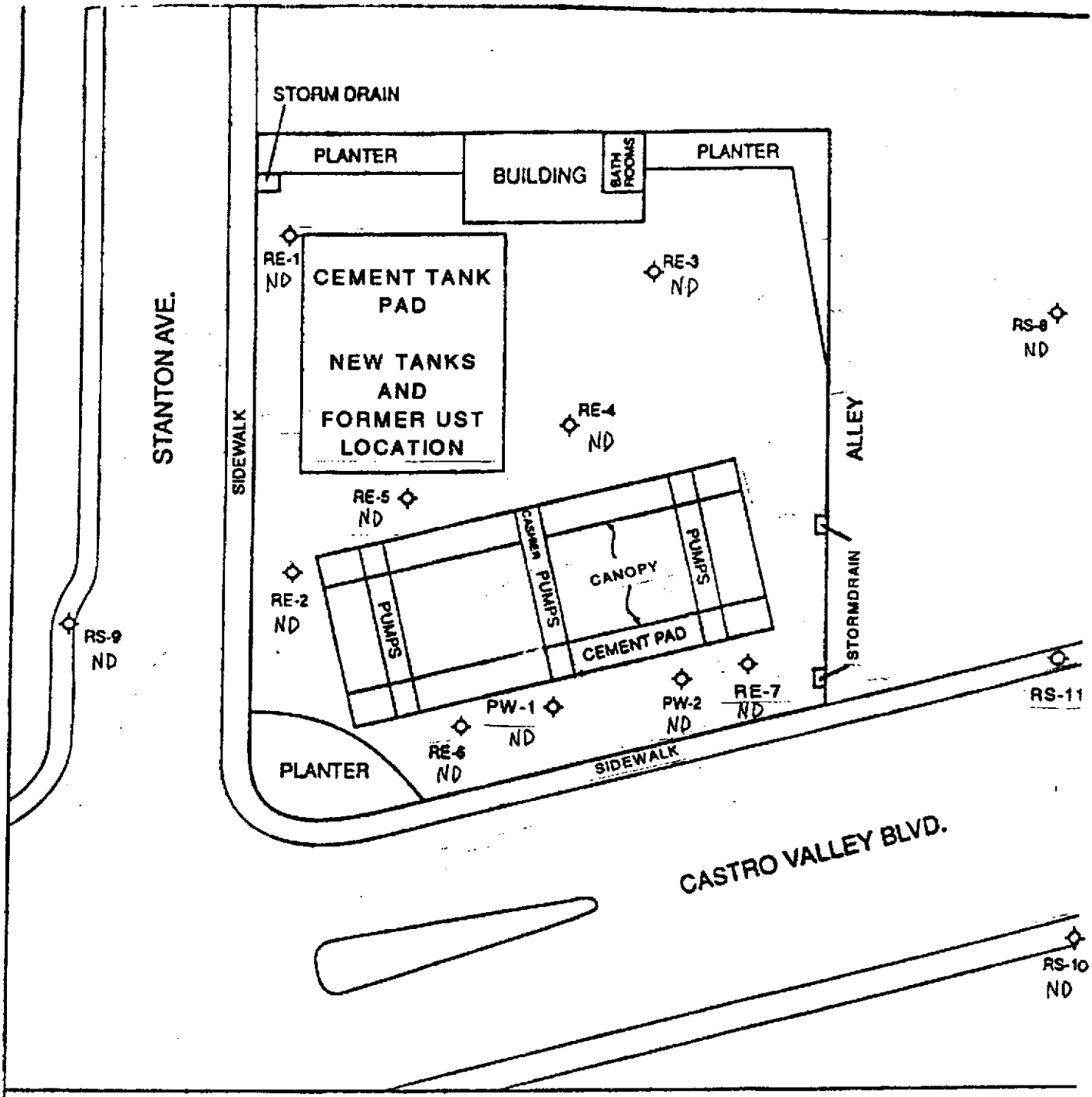
THRIFTY OIL CO. #054
CASTRO VALLEY, CALIFORNIA
Prepared for
THRIFTY OIL CO.
DOWNEY, CALIFORNIA

0 25 50
SCALE IN FEET

N

EXISTING MONITORING WELL
TPH ISOCONCENTRATION CONTOUR in ug/L (12/10/96)

FIGURE 2



BENZENE ISOCONCENTRATION MAP

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

0 25 50
SCALE IN FEET

N

EXISTING MONITORING WELL
BENZENE ISONCENTRATION CONTOUR in ug/L (12/10/96)

FIGURE 3

APPENDIX A

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	Gall	412	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	AM	
HOURS	#	9776	
ENGINE RPM	RPM	1800	
ENGINE VACUUM	IN HG	13	
TK REC TEMP	F	90	
AIR TEMP	F	62	
AIR FLOW	CFM	12	
VAPOR FLOW	CFM	8	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	13	
GAS METER		% 97	
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 [signature] DATE 12-26-96 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: 12-10-1996

FREQ.	MONITORING				ODORS			FREE		WELLS CONNECTED TO SYSTEM (W)							
	OBSERVATION WELLS				(S=SLIGHT)			PRODUCT		CONNECT		INTEGRITY		VAPOR		WATER	
	NO.	DTW	DTP	PT	YES	NO	S	YES	NO	YES	NO	OK	NO	ON	OFF	ON	OFF
M	PW-1	4.92				X			X	X	-	X			X		X
M	PW-2	4.87				X			X	X	-	X			X		X
M	RE-1	4.93				X			X	X	-	X		X			X
M	RE-2	4.47				X			X	X	-	X			X		X
M	RE-3	5.35				X			X	X	-	X		X			X
M	RE-4	4.65				X			X	X	-	X			X	X	
M	RE-5	5.27				X			X	X	-	X			X		X
M	RE-6	5.62				X			X	X	-	X		X			X
M	RE-7	5.92				X			X	X	-	X		X		X	
M	RS-8	6.08				X			X	-	X	X			X		X
M	RS-9	2.76				X			X	-	X	X			X		X
M	RS-10	6.05				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. 281 GALLONS

DATA RECORDED BY : _____ INPUT BY: Carrie >\FF\054rsirt

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 11-27-96 11-25-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE : RSI GWT +VE)

START UP REPORT:

SHUT DOWN REPORT:

System still shut down

SIGNATURE: Jim Day

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

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 11-27-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE : RSI (GWT + VE)

START UP REPORT:

SHUT DOWN REPORT:

System still shut down

SIGNATURE: _____

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

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 11-21-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE : RSI (GWT+VE)

START UP REPORT:

SHUT DOWN REPORT:

System shut down.

SIGNATURE: [signature]

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

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 11-13-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE : RSI (GWT+VE)

START UP REPORT:

SHUT DOWN REPORT:
System shut down

SIGNATURE: _____

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

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 10-31-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE :

START UP REPORT:

SHUT DOWN REPORT:

Shut down for repair -

SIGNATURE: _____

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	Gals	307	
ROTAMETER			
VPI FLOW			
VPI VACUUM			
AIR COMPRES			
VAPOR			
INLET VAPOR			
TEMPERATURE			
LEL			

RSI SYSTEM

PARAMETER	U/M	DATA	OBS
TIME	AM/PM	PM	
HOURS	#	9773	
ENGINE RPM	RPM	1700	
ENGINE VACUUM	IN HG	12	
TK REC TEMP	F	90	
AIR TEMP	F	72	
AIR FLOW	CFM	10	
VAPOR FLOW	CFM	7	
FUEL FLOW	CFM/H	80	
WELL VACUUM	IN H2O	13	
GAS METER		0 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: Restart system again

SERVICE TECHNICAN [signature] DATE 10-24-96 THRIFTY OIL CO # 054

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

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 10-18-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE :

START UP REPORT:

SHUT DOWN REPORT: System still shut down for repair.

SIGNATURE: Steve Dotson

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

EARTH MANAGEMENT CO.
Environmental Remediation

DATE: 10-10-96

START UP / SHUT DOWN REPORT
STATION # 054
SYSTEM TYPE : RSI

START UP REPORT:

SHUT DOWN REPORT:

System shut down because I don't have parts from L.A. to repair the transmittion, what it make connection with blower and circulation pump-

SIGNATURE: Jerry Stoz

EARTH MANAGEMENT CO.
Environmental Remediation

MAINTENANCE & REPAIR REPORT

A) SS #: 054 SYSTEM TYPE: RSI (VE + [redacted] GW)
B) DEFICIENCY DESCRIPTION :
Need fluid Transmission

C) NAME OF REPORTING PARTY AND DATE:
D) DATE SCHEDULED : A.S.A.P

1) NAME: DATE/TIME
2) FINDINGS: 10-03-1996

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

4) POST REPAIR TEST RESULTS:
N/A

5) THE CAUSE OF THE DEFICIENCY:
/

BRIEF INSTRUCTIONS FOR PREVENTIVE MAINTENANCE TO THE TECHNICIAN:
N/A

6) OTHER:

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.: A135054-43
Date Received: 12/12/96
Date Reported: 12/17/96
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
52588	RS-10	12/10/96	12/12/96	<50	50
52589	RS-8	12/10/96	12/12/96	<50	50
52590	PW-1	12/10/96	12/12/96	<50	50
52591	RE-6	12/10/96	12/12/96	<50	50
52592	RE-2	12/10/96	12/12/96	<50	50
52593	RE-3	12/10/96	12/12/96	<50	50
52594	RS-9	12/10/96	12/12/96	<50	50
52595	RE-4	12/10/96	12/12/96	520	50
52596	RE-5	12/10/96	12/12/96	740	50
52597	PW-2	12/10/96	12/12/96	2100	50
52598	RE-7	12/10/96	12/12/96	700	50
52599	RE-1	12/10/96	12/12/96	52	50
52600	Trip Blank	12/10/96	12/12/96	<50	50

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

NOTES:
The reported concentration for gasoline range organics in sample 52595(RE-4) to 52599(RE-1) is mainly from the contribution of an early eluting component(MTBE).

George Havalias
Laboratory Director

American Analytics • 9765 Eton Avenue, Chatsworth, California 91311
Tel:(818)998-5547 • (800)533-8378 • Fax:(818)998-7258

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.: 52603
Project No.: N/A
AA Project No.: A135054-43
Date Analyzed: 12/12/96
Date Reported: 12/17/96

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	500	100	490	98	2	59 - 149

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.: A135054-43
Date Received: 12/12/96
Date Reported: 12/17/96
Units: ug/L

Date Sampled:	12/10/96	12/10/96	12/10/96	12/10/96	
Date Analyzed:	12/12/96	12/12/96	12/12/96	12/12/96	
AA ID No.:	52588	52589	52590	52591	
Client ID No.:	RS-10	RS-8	PW-1	RE-6	MRL
Compounds:					
Benzene	<0.3	<0.3	<0.3	<0.3	0.3
Ethylbenzene	<0.3	<0.3	<0.3	<0.3	0.3
Toluene	<0.3	<0.3	<0.3	<0.3	0.3
Xylenes	<0.5	<0.5	<0.5	<0.5	0.5

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.: A135054-43
Date Received: 12/12/96
Date Reported: 12/17/96
Units: ug/L

Date Sampled:	12/10/96	12/10/96	12/10/96	12/10/96	
Date Analyzed:	12/12/96	12/12/96	12/12/96	12/12/96	
AA ID No.:	52592	52593	52594	52595	
Client ID No.:	RE-2	RE-3	RS-9	RE-4	MRL
Compounds:					
Benzene	<0.3	<0.3	<0.3	<0.3	0.3
Ethylbenzene	<0.3	<0.3	<0.3	<0.3	0.3
Toluene	<0.3	<0.3	<0.3	<0.3	0.3
Xylenes	<0.5	<0.5	<0.5	<0.5	0.5

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.: A135054-43
Date Received: 12/12/96
Date Reported: 12/17/96
Units: ug/L

Date Sampled:	12/10/96	12/10/96	12/10/96	12/10/96	
Date Analyzed:	12/12/96	12/12/96	12/12/96	12/12/96	
AA ID No.:	52596	52597	52598	52599	
Client ID No.:	RE-5	PW-2	RE-7	RE-1	MRL
Compounds:					
Benzene	<0.3	<0.3	<0.3	<0.3	0.3
Ethylbenzene	<0.3	<0.3	<0.3	<0.3	0.3
Toluene	<0.3	<0.3	<0.3	<0.3	0.3
Xylenes	<0.5	<0.5	<0.5	<0.5	0.5

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.: A135054-43
Date Received: 12/12/96
Date Reported: 12/17/96
Units: ug/L

Date Sampled:	**12/10/96**	
Date Analyzed:	**12/12/96**	
AA ID No.:	**52600**	
Client ID No.:	**Trip Blank**	**MRL**
Compounds:		
Benzene	<0.3	0.3
Ethylbenzene	<0.3	0.3
Toluene	<0.3	0.3
Xylenes	<0.5	0.5

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

George Havalias
Laboratory Director

AMERICAN ANALYTICS

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.: 52603
Project No.: N/A
AA Project No.: A135054-43
Date Analyzed: 12/12/96
Date Reported: 12/17/96

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	18.6	93	18.3	92	1	65 - 135
Ethylbenzene	19.3	97	18.9	95	2	77 - 123
Toluene	19.8	99	19.6	98	1	66 - 134
Xylenes	19.6	98	19.3	97	1	73 - 127

George Havalias
Laboratory Director

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AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135054-43
Date Received: 12/12/96
Date Reported: 12/17/96
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
52588	RS-10	12/10/96	12/12/96	<20	20
52589	RS-8	12/10/96	12/12/96	<20	20
52590	PW-1	12/10/96	12/12/96	<20	20
52591	RE-6	12/10/96	12/12/96	<20	20
52592	RE-2	12/10/96	12/12/96	<20	20
52593	RE-3	12/10/96	12/12/96	<20	20
52594	RS-9	12/10/96	12/12/96	<20	20
52595	RE-4	12/10/96	12/12/96	1000	20
52596	RE-5	12/10/96	12/12/96	1300	20
52597	PW-2	12/10/96	12/12/96	4700	20
52598	RE-7	12/10/96	12/12/96	1400	20
52599	RE-1	12/10/96	12/12/96	120	20

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

George Havalias
Laboratory Director

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311

(818) 998-5547 (818) 998-5548 1-800-533-TEST 1-800-533-8378 FAX (818) 998-7258

DATE: 12-10-96

PAGE 1 OF 4

AA Client: THRIFTY OIL CO.		Phone: (310)923-9976	Sampler's Name: SERBAN P.
Project Manager: CRIS PANAITESCU		P.O. No.	Sampler's Signature:
Project Name: QUARTERLY WATER SAMPLING		Project No.	Project Manager's Signature
Job Name and Address: SS # 054 2504 CASTRO VALLEY BLVD. CASTRO VALLEY 94546			

ANALYSIS REQUIRED

Detection Limits

Test Name: TPH, BTEX, MTBE

Test Requirements

AA I.D.#	Client's I.D.	Date	Time	Sample Type	Number of Containers	TPH	BTEX	MTBE
52588	RS-10	12/10/96	16:00	WATER	3	X	X	X
52589	RS-8		16:10		3	X	X	X
52590	PW-1		16:20		3	X	X	X
52591	RE-6		16:25		3	X	X	X
52592	RE-2		16:35		3	X	X	X
52593	RE-3		16:45		3	X	X	X
52594	RS-9		17:00		3	X	X	X
52595	RE-4		17:10		3	X	X	X
52596	RE-5		17:20		3	X	X	X
52597	PW-2		17:30		3	X	X	X
52598	RE-7		17:35		3	X	X	X
52599	RE-1		17:45		3	X	X	X
52600	TRIP BLANK		7:00		2	X	X	
					38			

SAMPLE INTEGRITY-TO BE FILLED IN BY RECEIVING LAB

Samples Intact	Yes ✓	No	
Samples Properly Cooled	Yes ✓	No	
Samples Accepted	Yes ✓	No	
If Not Why:			

AA Project No. A135054-43

Relinquished by:	Date	Time	Received by:
	12/11/96	17:00	CA. OVERNIGHT
Relinquished by: CA. OVERNIGHT	12/11/96	17:30	Received by:
Relinquished by:	12/12	8:00	Received by:
Relinquished by:	Date	Time	Received by:

DISTRIBUTION: White - Laboratory, Canary - Laboratory, Pink - Account Executive, Gold - Client