



Prior to collecting groundwater samples from the wells that did not exhibit free floating hydrocarbons, 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 33 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 hydrocarbons (TPH) and volatile aromatic compounds (BTEX) using EPA methods 8015 and 8020, respectively. Copies of the laboratory analysis reports are attached in **Appendix B**. A summary of the results are presented in **Table 1**. The two down-gradient wells, RS-8 and RS-10 indicate no detectable hydrocarbons. However the July and August samples collected from RS-8 indicated low levels of BTEX constituents ranging from 1.1 to 5.7 ug/L. Iso-concentration maps of TPH and benzene based on the September sampling event are presented as **Figures 3 and 4**.

### Closing

Thrifty will continue to monitor groundwater at the site on a quarterly basis for the remainder of 1992. In addition, the RSI-SAVE system will be restarted and appropriate monitoring will be accomplished. If you have any questions please contact me at (213) 923-9876.

Very truly yours,

A handwritten signature in cursive script that reads "Peter D'Amico". To the right of the signature is a small, stylized mark that resembles a cross or a star.

Peter D'Amico  
Manager  
Environmental Affairs

cc: Mr. Ray Lorge  
2522 Castro Valley Blvd.  
Castro Valley, CA

Table 1 - Summary of Analytical Results

I.D	Date	D-Wat	TPH	Benzene	Toluene	E-Benzene	Xylenes
PW-1 (166.46)	4/11/88	-	NSC				
	4/09/90	5.10	230000	600	2700	1000	16000
	10/30/90	6.17	35000	240	970	240	3580
	1/18/91	6.28	37000	43	140	42	1600
	2/12/91	5.88	45000	99	130	25	700
	3/20/91	4.75	1900	0.43	ND	ND	2.8
	5/22/91	5.10	41000	600	730	250	3800
	6/19/91	5.61	NSC				
	7/17/91	5.53(Film)	NSC				
	8/07/91	5.67(Film)	NSC				
	9/24/91	5.57(Film)	NSC				
	10/23/91	6.53(Film)	NSC				
	11/06/91	5.85(Film)	NSC				
	12/04/91	5.91(Film)	NSC				
	1/29/92	5.43(Film)	NSC				
	2/26/92	5.54(Film)	NSC				
	3/19/92	5.47	ND	ND	ND	ND	ND
	4/22/92	5.62(Film)	NSC				
	5/21/92	6.21	1300	19	2.9	0.7	58
	6/25/92	6.94	NSC				
7/30/92	5.90(Film)	NSC					
8/20/92	7.12(Film)	NSC					
9/30/92	6.42	3400	57	ND	26	240	
PW-2 (166.18)	4/11/88	-	NSC				
	4/09/90	5.81	600000	1300	11000	4600	43000
	10/30/90	6.95	48000	310	51	10	480
	1/18/91	6.92	86000	230	1400	350	8300
	2/12/91	6.78	160000	680	1300	250	7000
	3/20/91	5.54	17000	34	50	ND	1100
	5/22/91	6.07	14000	57	2100	500	8200
	6/19/91	6.37(Film)	NSC				
	7/17/91	6.38(Film)	NSC				
	8/07/91	6.63(Film)	NSC				
	9/24/91	6.42(Film)	NSC				
	10/23/91	7.25(Film)	NSC				
	11/06/91	6.44(Film)	NSC				
	12/04/91	6.65(Film)	NSC				
	1/29/92	6.17(Film)	NSC				
	2/26/92	5.90(Film)	NSC				
	3/19/92	5.80(Film)	NSC				
	4/22/92	5.88(Film)	NSC				
	5/21/92	6.03(Film)	NSC				
	6/25/92	6.57(Film)	NSC				
7/30/92	6.20(Film)	NSC					
8/20/92	6.64(Film)	NSC					
9/30/92	6.88(Film)	NSC					

Results reported in micrograms per liter (ug/L)

NA - Not Analyzed.

TPH - Total Petroleum Hydrocarbons as gasoline.

D-Wat - Depth to Water.

NSC - No sample collected due to film or sheen of liquid phase hydrocarbons.

Table 1(CONT.) - Summary of Analytical Results

I.D	Date	D-Wat	TPH	Benzene	Toluene	E-Benzene	Xylenes	
RE-1 (166.82)	4/11/88	-	37000	1900	8400	1200	15000	
	4/09/90	4.99	45000	6100	7000	2000	8800	
	10/30/90	5.95	72000	7700	5300	1800	8900	
	1/18/91	5.17	150000	11000	14000	1800	4300	
	2/12/91	4.16	140000	11000	12000	1600	13000	
	3/20/91	4.75	53000	3100	4200	400	5500	
	5/22/91	4.42	85000	8700	10000	1800	12000	
	6/19/91	4.93	110000	8500	9600	2600	16000	
	7/17/91	5.19	5500	950	ND	26	ND	
	8/07/91	5.12	NA	6700	5000	ND	7100	
	9/24/91	5.87	60000	6800	4300	640	6900	
	10/23/91	5.81	79000	7900	8300	450	7100	
	11/06/91	5.56	130000	14000	15000	1100	8800	
	12/04/91	5.35	50000	8000	4700	520	4100	
	1/29/92	4.50	21000	10300	11000	780	6000	
	2/26/92	5.27	38000	8400	10500	720	7100	
	3/19/92	4.47	48000	6200	9700	780	7200	
	4/22/92	4.62	NSC					
	5/21/92	4.98	20000	7600	10100	830	6900	
	6/25/92	5.14(Film)	NSC					
7/30/92	5.30(Film)	NSC						
8/20/92	5.28(Film)	NSC						
9/30/92	5.66(Film)	NSC						
RE-2 (167.19)	4/11/88	-	NSC					
	4/09/90	4.90	850	5.8	0.5	4.8	1.1	
	10/30/90	5.34	440	2.8	0.91	13	3.14	
	1/18/91	4.90	1100	8.4	3.1	ND	10	
	2/12/91	4.94	1100	5.9	ND	0.77	ND	
	3/20/91	4.32	550	4.3	ND	ND	ND	
	5/22/91	4.43	1000	5.3	3.6	4.4	8.9	
	6/19/91	6.43	700	2.1	1.4	3.8	3.5	
	7/17/91	4.75	880	12.0	8.0	4.3	28.0	
	8/07/91	4.87	NA	3.8	1.6	ND	ND	
	9/24/91	5.50	670	7.2	7.1	ND	23	
	10/23/91	5.63	2700	52	60	22	130	
	11/06/91	5.14	1900	18	61	9.1	83	
	12/04/91	5.26	1100	26	47	4.3	42	
	1/29/92	5.11	900	14	24	5.3	19	
	2/26/92	4.31	500	3.4	3.5	2.7	2.7	
	3/19/92	4.45	1200	14	20	15	18	
	4/22/92	4.78	200	ND	ND	ND	ND	
	5/21/92	5.02	500	7.5	6.8	3.9	7.4	
	6/25/92	5.13	ND	ND	0.9	0.7	ND	
7/30/92	5.19	500	7.7	8.6	3.2	1.7		
8/20/92	5.27	1100	6.6	4.5	2.7	2.0		
9/30/92	5.45	500	5.4	2.4	1.8	4.5		

Results reported in micrograms per liter (ug/L)

- NA - Not Analyzed.
- TPH - Total Petroleum Hydrocarbons as gasoline.
- D-Wat - Depth to Water.
- NSC - No sample collected due to film or sheen of liquid phase hydrocarbons.

Table 1 (CONT.) - Summary of Analytical Results

I.D	Date	D-Wat	TPH	Benzene	Toluene	Ethyl-Benzene	Xylenes
RE-3 (167.39)	4/11/88	-	70000	6600	5300	800	13000
	4/09/90	7.15	370000	2300	4900	3200	31000
	10/30/90	7.84	13000	860	660	220	2210
	1/18/91	6.90	42000	4700	4500	21	7700
	2/12/91	6.62	72000	3600	4500	ND	7600
	3/20/91	5.87	65000	2400	9400	50	9800
	5/22/91	5.98(Film)	NSC				
	6/19/91	6.84(Film)	NSC				
	7/17/91	7.10(Film)	NSC				
	8/07/91	7.30(Film)	NSC				
	9/24/91	7.84(Film)	NSC				
	10/23/91	8.07(Film)	NSC				
	11/06/91	7.63(Film)	NSC				
	12/04/91	7.83(Film)	NSC				
	1/29/92	7.17(Film)	NSC				
	2/26/92	5.56(Film)	NSC				
	3/19/92	5.44(Film)	NSC				
	4/22/92	6.56(Film)	NSC				
	5/21/92	6.90(Film)	NSC				
	6/25/92	7.18(Film)	NSC				
7/30/92	6.80(Film)	NSC					
8/20/92	7.25(Film)	NSC					
9/30/92	7.68(Film)	NSC					
RE-4 (166.94)	4/11/88	-	150000	12000	8000	1000	27000
	4/09/90	-	NSC				
	10/30/90	7.04	87000	7200	10000	1600	12900
	1/18/91	11.62	70000	5000	5400	790	9900
	2/12/91	11.63	87000	5200	2800	240	11000
	3/20/91	11.61	6500	370	230	17	670
	5/22/91	10.3(Film)	NSC				
	6/19/91	11.1(Film)	NSC				
	7/17/91	6.20(Film)	NSC				
	8/07/91	8.15(Film)	NSC				
	9/24/91	10.4(Film)	NSC				
	10/23/91	11.2(Film)	NSC				
	11/06/91	6.62(Film)	NSC				
	12/04/91	11.2(Film)	NSC				
	1/29/92	7.72(Film)	NSC				
	2/26/92	5.13(Film)	NSC				
	3/19/92	5.00(Film)	NSC				
	4/22/92	5.94(Film)	NSC				
	5/21/92	5.40(Film)	NSC				
	6/25/92	5.71(0.02)	NSC				
7/30/92	6.33(Film)	NSC					
8/20/92	5.80(Film)	NSC					
9/30/92	6.34(Film)	NSC					

Results reported in micrograms per liter (ug/L)

- NA - Not Analyzed.
- TPH - Total Petroleum Hydrocarbons as gasoline.
- D-Wat - Depth to Water.
- NSC - No sample collected due to film or sheen of liquid phase hydrocarbons.

Table 1 (CONT.) - Summary of Analytical Results

I.D	Date	D-Wat	TPH	Benzene	Toluene	Ethyl-Benzene	Xylenes
RE-5 (166.51)	4/11/88	--	14000	1300	1100	100	2600
	4/09/90	4.79	3000	690	190	40	270
	10/30/90	5.86	3400	910	48	87	249
	1/18/91	4.40	1400	180	8.6	0.52	48
	2/12/91	4.76	1000	ND	ND	0.65	ND
	3/20/91	5.08	3000	250	53	ND	110
	5/22/91	4.52	2500	330	7.8	5.6	200
	6/19/91	4.39	2000	59	1.6	5.1	110
	7/17/91	5.05(Film)	NSC				
	8/07/91	5.02(Film)	NSC				
	9/24/91	5.86(Film)	NSC				
	10/23/91	5.84(Film)	NSC				
	11/06/91	5.48	9900	2300	37	260	160
	12/04/91	5.43	4500	1000	27	ND	180
	1/29/92	5.12	600	6.1	2.3	ND	47
	2/26/92	4.93	500	5.4	2.7	1.2	14
	3/19/92	4.45	ND	1.7	1.1	ND	5.5
	4/22/92	4.63	1600	240	2.2	ND	160
	5/21/92	4.90	1200	410	37	ND	118
	6/25/92	5.15	ND	1.0	0.8	0.8	0.4
	7/30/92	5.30	ND	2.0	1.8	1.9	6.4
	8/20/92	5.44	300	1.7	3.3	0.7	12
	9/30/92	5.73	1900	140	ND	19	35
RE-6 (166.51)	4/11/88	--	6000	3000	40	80	140
	4/09/90	5.84	3000	990	ND	70	ND
	10/30/90	6.68	3400	1000	28	ND	ND
	1/18/91	6.61	6300	1200	ND	3	15
	2/12/91	6.20	5200	850	8.4	4.9	41
	3/20/91	5.82	5800	680	12	8	16
	5/22/91	6.05	8500	1700	14	24	6.7
	6/19/91	6.12(Film)	NSC				
	7/17/91	6.20	120000	9300	13000	2400	16000
	8/07/91	6.27	NA	590	5.3	ND	14
	9/24/91	6.63	7000	310	11	5.3	35
	10/23/91	6.36(Film)	NSC				
	11/06/91	6.15	4000	710	18	29	49
	12/04/91	6.19	4100	1100	14	33	39
	1/29/92	6.70	2600	790	14	ND	49
	2/26/92	5.44	3100	950	21	30	33
	3/19/92	5.30	2200	630	14	12	40
	4/22/92	6.00	NA	730	2.2	ND	40
	5/21/92	6.25	1500	840	7.8	7.1	34
	6/25/92	6.38	<2000	740	8	27	28
	7/30/92	6.42(Film)	NSC				
	8/20/92	6.50	2800	630	17	23	22
	9/30/92	6.66	7800	540	ND	12	29

Results reported in micrograms per liter (ug/L)

NA - Not Analyzed.  
 TPH - Total Petroleum Hydrocarbons as gasoline.  
 D-Wat - Depth to Water.  
 NSC - No sample collected due to film or sheen of liquid phase hydrocarbons.

Table 1 (CONT.) - Summary of Analytical Results

I.D	Date	E-Wat	TPH	Benzene	Toluene	Ethyl-Benzene	Xylenes
RE-7 (166.04)	4/11/88	-	<50000	17000	4400	600	8400
	4/05/90	5.93	16000	7000	1200	640	1600
	10/30/90	8.21	31000	14000	ND	ND	ND
	1/18/91	11.8(Film)	NSC				
	2/12/91	10.8(Film)	NSC				
	3/20/91	9.96	120000	12000	2800	490	6600
	5/22/91	11.7(Film)	NSC				
	6/19/91	11.5(Film)	NSC				
	7/17/91	7.80(Film)	NSC				
	8/07/91	9.88(0.03)	NSC				
	9/24/91	9.85(0.03)	NSC				
	10/23/91	9.96(Film)	NSC				
	11/08/91	6.77(Film)	NSC				
	12/04/91	10.8(Film)	NSC				
	1/29/92	8.64(Film)	NSC				
	2/26/92	6.00(Film)	NSC				
	3/19/92	5.55(Film)	NSC				
	4/22/92	6.12(Film)	NSC				
	5/21/92	6.40(Film)	NSC				
	6/25/92	6.73(0.02)	NSC				
7/30/92	6.73(Film)	NSC					
8/20/92	6.82(Film)	NSC					
9/30/92	7.26(Film)	NSC					
RS-8 (164.32)	8/07/91	9.68	ND	ND	ND	ND	ND
	9/27/91	9.89	ND	ND	ND	ND	ND
	10/23/91	10.05	ND	ND	ND	ND	ND
	11/06/91	9.71	ND	ND	ND	ND	ND
	12/04/91	10.00	ND	ND	ND	ND	ND
	1/29/92	9.28	ND	2.1	1.0	2.5	3.6
	2/26/92	7.05	ND	ND	0.7	ND	0.7
	3/19/92	7.30	ND	0.5	1.0	1.5	2.7
	4/22/92	8.60	ND	ND	ND	ND	ND
	5/21/92	9.22	ND	ND	ND	ND	ND
	6/25/92	9.49	ND	ND	ND	ND	ND
	7/30/92	9.55	ND	1.1	4.2	ND	3.0
	8/20/92	9.63	ND	2.0	4.7	ND	5.7
9/30/92	9.90	ND	ND	ND	ND	ND	
RS-9 (167.51)	8/07/91	2.28	NA	0.5	ND	330	1200
	9/27/91	2.77	13000	3.5	3.0	82	140
	10/23/91	3.53	11000	ND	ND	39	340
	11/06/91	2.51	6800	8.4	0.6	22	230
	12/04/91	3.20	6500	6.5	0.7	87	200
	1/29/92	2.65	8100	22	10	140	260
	2/26/92	3.42	13000	40	16	220	600
	3/19/92	3.12	12000	21	12	100	280
	4/22/92	3.24	8600	ND	ND	20	37
	5/21/92	3.75	6000	21	10	53	210
	6/25/92	2.65	370	2.3	1.5	0.7	4.3
	7/30/92	2.70	3600	20	ND	39	80
	8/20/92	2.83	3000	0.7	5.2	2.0	5.3
9/30/92	2.80	9200	4.8	6.5	12	91	

Results reported in micrograms per liter (ug/L)

- NA - Not Analyzed.
- TPH - Total Petroleum Hydrocarbons as gasoline.
- D-Wat - Depth to Water.
- NSC - No sample collected due to film or sheen of liquid phase hydrocarbons.

Table 1(CONT.) - Summary of Analytical Results

I.D	Date	D-Wat	TPH	Benzene	Toluene	Ethyl-Benzene	Xylenes
RS10 (162.89)	8/07/91	6.16	ND	ND	ND	ND	ND
	9/27/01	6.48	ND	ND	ND	ND	ND
	10/23/91	7.37	ND	ND	ND	ND	ND
	11/06/91	6.44	ND	ND	ND	ND	ND
	12/04/91	7.02	ND	ND	ND	ND	ND
	1/29/92	6.78	ND	ND	ND	ND	ND
	2/26/92	8.33	ND	ND	ND	ND	ND
	3/19/92	8.02	ND	ND	ND	ND	0.6
	4/22/92	7.78	ND	ND	ND	ND	ND
	5/21/92	8.21	ND	ND	0.6	ND	1.2
	6/25/92	7.73	ND	ND	ND	ND	ND
	7/30/92	7.84	ND	ND	0.5	ND	1.0
	8/20/92	7.50	ND	ND	ND	ND	ND
	9/30/92	7.63	ND	ND	ND	ND	ND

Results reported in micrograms per liter (ug/L)

NA - Not Analyzed.

TPH - Total Petroleum Hydrocarbons as gasoline.

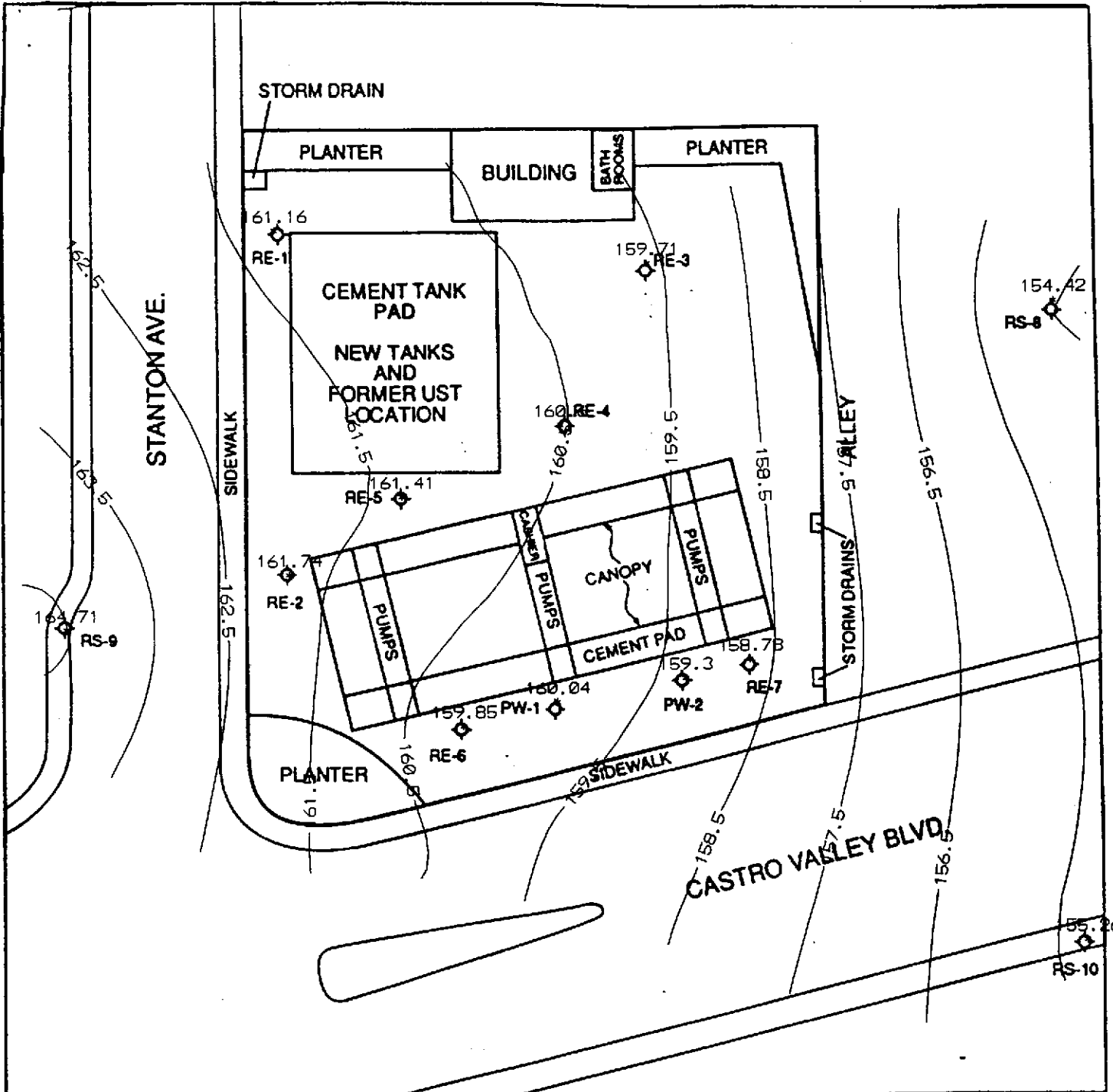
D-Wat - Depth to Water.

NSC - No sample collected due to film or sheen of liquid phase hydrocarbons.





21161-002-044	THRIFTY OIL STORE #054	<b>VICINITY MAP</b>
DAMES & MOORE	2504 CASTRO VALLEY BLVD CASTRO VALLEY, CA	



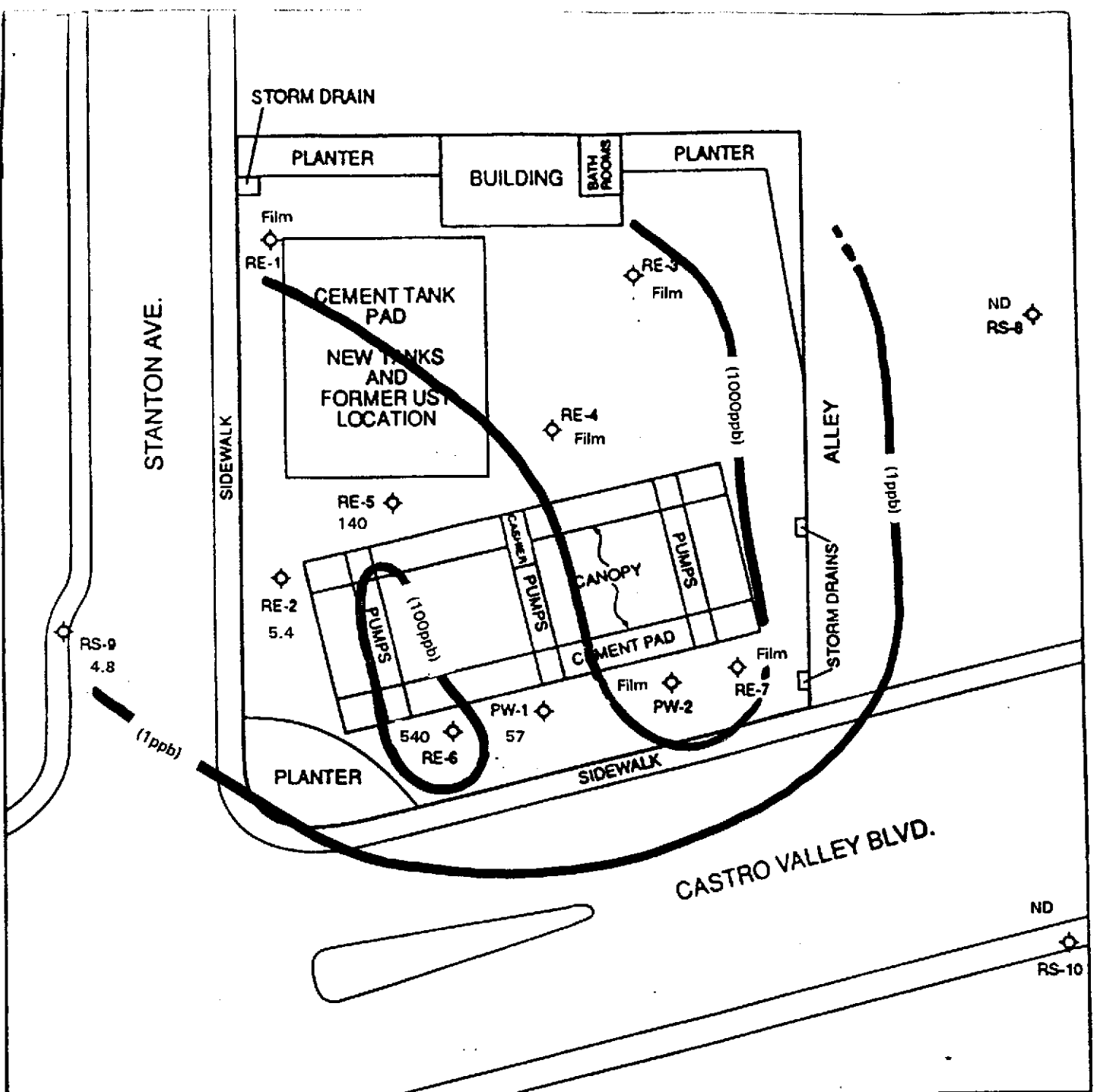
**SITE PLAN II**  
**THRIFTY OIL CO. #054**  
**CASTRO VALLEY, CALIFORNIA**  
 Prepared for  
**THRIFTY OIL CO.**  
**DOWNEY, CALIFORNIA**



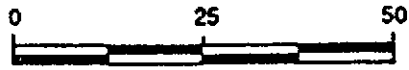
- GROUNDWATER CONTOUR, 9-30-93
- ◊ EXISTING MONITORING WELL

FIGURE 2 - GROUNDWATER CONTOUR MAP





**SITE PLAN II**  
**THRIFTY OIL CO. #054**  
**CASTRO VALLEY, CALIFORNIA**  
 Prepared for  
**THRIFTY OIL CO.**  
**DOWNEY, CALIFORNIA**



SCALE IN FEET

- BENZENE ISO-CON., 9-3-92
- EXISTING MONITORING WELL



FIGURE 4 - BENZENE ISO-CON MAP



PROJECT STATUS REPORT  
 THRIFTY OIL CO. S.S. #054  
 2504 CASTRO VALLEY BLVD.  
 CASTRO VALLEY, CA 94546  
 DATE: 7/30/1992

F R E Q .	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	5:90	SCREEN				Y		Y		X	-					
M	PW-2	6:20	FILM		X				Y		X	-					
M	RE-1	5:30	SCREEN				Y		Y		X	-					
M	RE-2	5:19				X			Y		X	-					
M	RE-3	6:80	FILM		Y				Y		X	-					
M	RE-4	6:33	FILM		Y				Y		X	-					
M	RE-5	5:30				Y			Y		X	-					
M	RE-6	6:42	SCREEN				Y		Y		X	-					
M	RE-7	6:73	FILM		Y				Y		X	-					
M	RS-8	9:55				Y			Y		-	X					
M	RS-9	2:70				Y			Y		-	X					
M	RS-10	7:84				X			Y		-	X					

SAVE SYSTEM WEEKLY

PARAMETER	U/M	DATA	PARAMETER	U/M	DATA
TIME	AM/PM		AIR FLOW	C F M	
WORKING	YES/NO	N/O	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: $\emptyset$
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. 94 GALLONS  
 DATA RECORDED BY : \_\_\_\_\_ INPUT BY: M.M. >\FF\054rsirt



PROJECT STATUS REPORT  
 THRIFTY OIL CO. S.S. #054  
 2504 CASTRO VALLEY BLVD.  
 CASTRO VALLEY, CA 94546  
 DATE: 8/20/92

F R E Q .	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	7.12	SHEEN				Y		X		X	-					
M	PW-2	6.64	SHEEN				Y		Y		X	-					
M	RE-1	5.28	SHEEN				Y		Y		X	-					
M	RE-2	5.27				Y			Y		X	-					
M	RE-3	7.25	SHEEN				Y		Y		X	-					
M	RE-4	5.80	FILM		Y				Y		X	-					
M	RE-5	5.44				Y			Y		X	-					
M	RE-6	6.50				Y			Y		X	-					
M	RE-7	6.82	FILM		Y				Y		X	-					
M	RS-8	9.63				Y			Y		-	X					
M	RS-9	2.83				Y			Y		-	X					
M	RS-10	7.50				X			Y		-	X					

SAVE SYSTEM WEEKLY

PARAMETER	U/M	DATA	PARAMETER	U/M	DATA
TIME	AM/PM		AIR FLOW	C F M	
WORKING	YES/NO	<i>NO</i>	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. 110 GALLONS

DATA RECORDED BY: E. GARMAN      INPUT BY: M.M. >\FF\054rsirt



PROJECT STATUS REPORT  
 THRIFTY OIL CO. S.S. #054  
 2504 CASTRO VALLEY BLVD.  
 CASTRO VALLEY, CA 94546  
 DATE: 9/30/1992

FREQUENCY	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	6.42				X			X		X	-					
M	PW-2	6.88	SHOEN				X		X		X	-					
M	RE-1	5.66	FILM		X				X		X	-					
M	RE-2	5.45				X			X		X	-					
M	RE-3	7.68	SHOEN				X		X		X	-					
M	RE-4	6.34	FILM		X				X		X	-					
M	RE-5	5.73				X			X		X	-					
M	RE-6	6.66				X			X		X	-					
M	RE-7	7.26	FILM		X				X		X	-					
M	RS-8	9.90				X			X		-	X					
M	RS-9	2.80				X			X		-	X					
M	RS-10	7.63				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	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. 129 GALLONS

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

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/1992 STATION NO. 054  
 PERSONNEL E. GASMAN, T. ROFU  
 WELL NO. RE-5 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 18.25 Ft. Well Diameter 4"  
 Depth to Water 5.73 Ft. Purge Volume 32 gallons

Sampling Data

Time	3:45	3:50	3:55	4:00	4:05	4:15
EC	1440	1440	1460	1460	1460	1460
pH	6.47	6.46	6.46	6.45	6.45	6.45
Temp	74	73	73	73	73	73
Gal.	5	10	15	20	25	32
Time						
EC						
pH						
Temp						
Gal.						

After Sampling

Depth to Water 6.21 Ft. Total Well Depth 18.25 Ft.



FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/1992 STATION NO. 054  
 PERSONNEL E. GAIMAN, T. ROSE  
 WELL NO. RE-2 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 17.10 Ft. Well Diameter 4"  
 Depth to Water 5.45 Ft. Purge Volume 30 gallons

Sampling Data

Time	<u>2:35</u>	<u>2:40</u>	<u>2:45</u>	<u>2:50</u>	<u>2:55</u>	<u>3:00</u>	
EC	<u>1550</u>	<u>1550</u>	<u>156</u>	<u>1570</u>	<u>1570</u>	<u>1570</u>	
pH	<u>6.51</u>	<u>6.50</u>	<u>6.49</u>	<u>6.48</u>	<u>6.48</u>	<u>6.48</u>	
Temp	<u>76</u>	<u>76</u>	<u>76</u>	<u>74</u>	<u>74</u>	<u>74</u>	
Gal.	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 6.10 Ft. Total Well Depth 17.10 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/1992 STATION NO. 054  
PERSONNEL E. GARMAN, T. ROSE  
WELL NO. PX 1 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 14.10 Ft. Well Diameter 4"  
Depth to Water 6.42 Ft. Purge Volume 20 gallons

Sampling Data

Time	1:15	1:20	1:25	1:30	1:35		
EC	<u>797</u>	<u>717</u>	<u>707</u>	<u>707</u>	<u>707</u>		
pH	<u>6.56</u>	<u>6.55</u>	<u>6.54</u>	<u>6.54</u>	<u>6.54</u>		
Temp	<u>75</u>	<u>75</u>	<u>74</u>	<u>74</u>	<u>74</u>		
Gal.	<u>4</u>	<u>8</u>	<u>12</u>	<u>16</u>	<u>20</u>		
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 7.00 Ft. Total Well Depth 14.10 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/1992 STATION NO. 054  
 PERSONNEL E. GASMAN, T. ROSE  
 WELL NO. RE 6 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 13.65 Ft. Well Diameter 4"  
 Depth to Water 6.66 Ft. Purge Volume 18 gallons

Sampling Data

Time	<u>12:00</u>	<u>12:05</u>	<u>12:10</u>	<u>12:15</u>	<u>12:20</u>	<u>12:25</u>	_____
EC	<u>1730</u>	<u>1700</u>	<u>1700</u>	<u>1700</u>	<u>1700</u>	<u>1700</u>	_____
pH	<u>6.60</u>	<u>6.60</u>	<u>6.59</u>	<u>6.59</u>	<u>6.59</u>	<u>6.59</u>	_____
Temp	<u>79</u>	<u>78</u>	<u>77</u>	<u>77</u>	<u>77</u>	<u>77</u>	_____
Gal.	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>	<u>15</u>	<u>18</u>	_____
Time	_____	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 7.20 Ft. Total Well Depth 13.65 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/1992 STATION NO. 054  
 PERSONNEL E. GALMAN T. ROJU  
 WELL NO. RS-9 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 15 Ft. Well Diameter 2"  
 Depth to Water 2.80 Ft. Purge Volume 8 gallons

Sampling Data

Time	<u>10:55</u>	<u>11:00</u>	<u>11:05</u>	<u>11:10</u>	<u>11:15</u>		
EC	<u>1240</u>	<u>1230</u>	<u>1230</u>	<u>1230</u>	<u>1230</u>		
pH	<u>6.64</u>	<u>6.64</u>	<u>6.64</u>	<u>6.64</u>	<u>6.64</u>		
Temp	<u>76</u>	<u>75</u>	<u>74</u>	<u>74</u>	<u>74</u>		
Gal.	<u>1</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>		
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 3.10 Ft. Total Well Depth 15 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/1992 STATION NO. 054  
PERSONNEL E. GASMAN, T. ROSE  
WELL NO. RS-8 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAIER

Before Sampling

Total Well Depth 25.20 Ft. Well Diameter 2"  
Depth to Water 9.90 Ft. Purge Volume 10 gallons

Sampling Data

Time	9:50	9:55	10:00	10:05	10:10	10:15	
EC	<u>2160</u>	<u>1700</u>	<u>1630</u>	<u>1580</u>	<u>1580</u>	<u>1580</u>	
pH	<u>7.40</u>	<u>7.26</u>	<u>7.20</u>	<u>7.20</u>	<u>7.20</u>	<u>7.20</u>	
Temp	<u>75</u>	<u>74</u>	<u>73</u>	<u>73</u>	<u>73</u>	<u>73</u>	
Gal.	<u>1</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>10</u>	
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 10.30 Ft. Total Well Depth 25.20 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 9/30/92 STATION NO. 054  
 PERSONNEL E. GAsMAN T. ROSU  
 WELL NO. RS-10 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 24.45 Ft. Well Diameter 2"  
 Depth to Water 7.63 Ft. Purge Volume 11 gallons

Sampling Data

Time	<u>9:05</u>	<u>9:10</u>	<u>9:15</u>	<u>9:20</u>	<u>9:25</u>	<u>9:30</u>	
EC	<u>6630</u>	<u>6560</u>	<u>6400</u>	<u>6400</u>	<u>6400</u>	<u>6400</u>	
pH	<u>7.13</u>	<u>7.11</u>	<u>7.02</u>	<u>7.00</u>	<u>7.00</u>	<u>7.00</u>	
Temp	<u>79</u>	<u>75</u>	<u>73</u>	<u>73</u>	<u>73</u>	<u>73</u>	
Gal.	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>9</u>	<u>11</u>	
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 8.00 Ft. Total Well Depth 24.45 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 8/20/1992 STATION NO. 054  
 PERSONNEL E. GASMAN, T. ROW  
 WELL NO. RE-5 WEATHER SUNNY  
 SAMPLE EQUIPMENT TETLON BAILER

Before Sampling

Total Well Depth 18.25 Ft. Well Diameter 4"  
 Depth to Water 5.44 Ft. Purge Volume 33 gallons

Sampling Data

Time	<u>1:30</u>	<u>1:35</u>	<u>1:40</u>	<u>1:45</u>	<u>1:50</u>	<u>1:55</u>	<u>2:00P</u>
EC	<u>1420</u>	<u>1410</u>	<u>1410</u>	<u>1390</u>	<u>1360</u>	<u>1360</u>	<u>1360</u>
pH	<u>6.34</u>	<u>6.20</u>	<u>6.03</u>	<u>6.00</u>	<u>5.96</u>	<u>5.96</u>	<u>5.96</u>
Temp	<u>75</u>	<u>74</u>	<u>73.9</u>	<u>72.9</u>	<u>72</u>	<u>72</u>	<u>72</u>
Gal.	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>33</u>
Time	_____	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 6.00 Ft. Total Well Depth 18.25 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 8/20/1992 STATION NO. 054  
PERSONNEL E. GALMAN, T. ROSU  
WELL NO. RE-6 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAIKER

Before Sampling

Total Well Depth 13.65 Ft. Well Diameter 4"  
Depth to Water 6.50 Ft. Purge Volume 18 gallons

Sampling Data

Time	<u>12:45</u>	<u>12:50</u>	<u>12:55</u>	<u>1:00</u>	<u>1:05</u>	<u>1:10</u>	_____
EC	<u>1520</u>	<u>1560</u>	<u>1570</u>	<u>1570</u>	<u>1570</u>	<u>1570</u>	_____
pH	<u>6.29</u>	<u>6.20</u>	<u>6.00</u>	<u>5.90</u>	<u>5.90</u>	<u>5.90</u>	_____
Temp	<u>75</u>	<u>74</u>	<u>73</u>	<u>73</u>	<u>73</u>	<u>73</u>	_____
Gal.	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>	<u>15</u>	<u>18</u>	_____
Time	_____	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 7.10 Ft. Total Well Depth 13.65 Ft.



FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 8/20/1992 STATION NO. 054  
PERSONNEL E. GASMAN, T. ROSE  
WELL NO. RF 2 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 17.10 Ft. Well Diameter 4"  
Depth to Water 5.27 Ft. Purge Volume 30 gallons

Sampling Data

Time	<u>11:55</u>	<u>12:00</u>	<u>12:05</u>	<u>12:10</u>	<u>12:15</u>	<u>12:20</u>
EC	<u>1490</u>	<u>1520</u>	<u>1530</u>	<u>1540</u>	<u>1540</u>	<u>1540</u>
pH	<u>5.90</u>	<u>5.86</u>	<u>5.86</u>	<u>5.86</u>	<u>5.86</u>	<u>5.86</u>
Temp	<u>78</u>	<u>77.6</u>	<u>77</u>	<u>76.2</u>	<u>76.2</u>	<u>76.2</u>
Gal.	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 6.05 Ft. Total Well Depth 17.10 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 8/20/1992 STATION NO. 054  
PERSONNEL E. GASMAN, T. ROBU  
WELL NO. RS-9 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 15 Ft. Well Diameter 2"  
Depth to Water 2.83 Ft. Purge Volume 8 gallons

Sampling Data

Time	<u>10:50</u>	<u>10:55</u>	<u>11:00</u>	<u>11:05</u>	<u>11:10</u>	_____	_____
EC	<u>1180</u>	<u>1170</u>	<u>1170</u>	<u>1170</u>	<u>1170</u>	_____	_____
pH	<u>6.77</u>	<u>6.50</u>	<u>6.32</u>	<u>6.30</u>	<u>6.30</u>	_____	_____
Temp	<u>75</u>	<u>74</u>	<u>74</u>	<u>74</u>	<u>74</u>	_____	_____
Gal.	<u>1</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	_____	_____
Time	_____	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 3.20 Ft. Total Well Depth 15 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 8/20/92 STATION NO. 054  
PERSONNEL E. GALMAN, J. ROW  
WELL NO. RS-8 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAILET

Before Sampling

Total Well Depth 25.20 Ft. Well Diameter 2"  
Depth to Water 9.63 Ft. Purge Volume 10 gallons

Sampling Data

Time	<u>9:45</u>	<u>9:50</u>	<u>9:55</u>	<u>10:00</u>	<u>10:05</u>	_____	_____
EC	<u>1990</u>	<u>1900</u>	<u>1630</u>	<u>1630</u>	<u>1680</u>	_____	_____
pH	<u>6.40</u>	<u>6.30</u>	<u>6.20</u>	<u>6.20</u>	<u>6.20</u>	_____	_____
Temp	<u>72</u>	<u>71.7</u>	<u>71.6</u>	<u>71.6</u>	<u>71.6</u>	_____	_____
Gal.	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>10</u>	_____	_____
Time	_____	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 10.10 Ft. Total Well Depth 25.20 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 8/20/92 STATION NO. 054  
 PERSONNEL E. GASMAN, T. ROSE  
 WELL NO. RS-10 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILED

Before Sampling

Total Well Depth 24.45 Ft. Well Diameter 2'  
 Depth to Water 7.50 Ft. Purge Volume 14 gallons

Sampling Data

Time	<u>8:50</u>	<u>8:55</u>	<u>9:00</u>	<u>9:05</u>	<u>9:10</u>	<u>9:15</u>
EC	<u>6670</u>	<u>6340</u>	<u>6220</u>	<u>6220</u>	<u>6220</u>	<u>6220</u>
pH	<u>5.90</u>	<u>5.80</u>	<u>5.79</u>	<u>5.77</u>	<u>5.77</u>	<u>5.77</u>
Temp	<u>79</u>	<u>77</u>	<u>76</u>	<u>75</u>	<u>75</u>	<u>75</u>
Gal.	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>10</u>	<u>11</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 8.30 Ft. Total Well Depth 24.45 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 7/30/92 STATION NO. 054  
PERSONNEL E. GASMAN, T. ROFU  
WELL NO. RES WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAUER

Before Sampling

Total Well Depth 18.25 Ft. Well Diameter 4"  
Depth to Water 5.30 Ft. Purge Volume 34 gallons

Sampling Data

Time	<u>12:50</u>	<u>1:00</u>	<u>1:10</u>	<u>1:20</u>	<u>1:30</u>	<u>1:40</u>	<u>1:50</u>
EC	<u>1570</u>	<u>1510</u>	<u>1480</u>	<u>1480</u>	<u>1480</u>	<u>1480</u>	<u>1480</u>
PH	<u>6.90</u>	<u>6.85</u>	<u>6.70</u>	<u>6.60</u>	<u>6.60</u>	<u>6.60</u>	<u>6.60</u>
Temp	<u>74</u>	<u>73</u>	<u>72</u>	<u>72</u>	<u>72</u>	<u>72</u>	<u>72</u>
Gal.	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>34</u>
Time	_____	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____	_____
PH	_____	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____	_____

After Sampling

Depth to Water 6.10 Ft. Total Well Depth 18.25 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 7/30/92 STATION NO. 054  
PERSONNEL E. GASMAN, J. ROSU  
WELL NO. R.E 2 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAKER

Before Sampling

Total Well Depth 17.10 Ft. Well Diameter 4"  
Depth to Water 5.19 Ft. Purge Volume 31 gallons

Sampling Data

Time	<u>11:40</u>	<u>11:50</u>	<u>12:00</u>	<u>12:10</u>	<u>12:20</u>	<u>12:20</u>	
EC	<u>1580</u>	<u>1570</u>	<u>1580</u>	<u>1520</u>	<u>1520</u>	<u>1520</u>	
pH	<u>7.67</u>	<u>7.40</u>	<u>7.35</u>	<u>7.34</u>	<u>7.34</u>	<u>7.34</u>	
Temp	<u>74.5</u>	<u>72.5</u>	<u>72</u>	<u>71</u>	<u>71</u>	<u>71</u>	
Gal.	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>31</u>	
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 6.20 Ft. Total Well Depth 17.10 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 7/30/92 STATION NO. 054  
PERSONNEL E. GASMAN, T. ROW  
WELL NO. RS-9 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 15 Ft. Well Diameter 2"  
Depth to Water 2.70 Ft. Purge Volume 8 gallons

Sampling Data

Time	<u>10:55</u>	<u>11:00</u>	<u>11:05</u>	<u>11:10</u>	<u>11:15</u>		
EC	<u>1230</u>	<u>1230</u>	<u>1230</u>	<u>1230</u>	<u>1230</u>		
pH	<u>7.99</u>	<u>7.62</u>	<u>7.53</u>	<u>7.53</u>	<u>7.53</u>		
Temp	<u>75.4</u>	<u>74.5</u>	<u>73.3</u>	<u>73.3</u>	<u>73.3</u>		
Gal.	<u>2</u>	<u>4</u>	<u>6</u>	<u>7</u>	<u>8</u>		
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 2.95 Ft. Total Well Depth 15 Ft.

**FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM**

DATE 7/30/92 STATION NO. 054  
 PERSONNEL E. GARMAN, T. ROBU  
 WELL NO. RS-10 WEATHER SUNNY  
 SAMPLE EQUIPMENT TEFLON BAILER

**Before Sampling**

Total Well Depth 24.45 Ft. Well Diameter 2"  
 Depth to Water 7.84 Ft. Purge Volume 11 gallons

**Sampling Data**

Time	9:25	9:30	9:35	9:40	9:45	9:50	
EC	6580	6510	6470	6370	6370	6370	
pH	6.50	6.60	7.00	7.14	7.14	7.14	
Temp	71.4	70.5	70.5	70.5	70.5	70.5	
Gal.	1	3	5	7	9	11	
Time							
EC							
pH							
Temp							
Gal.							

**After Sampling**

Depth to Water 8.00 Ft. Total Well Depth 24.45 Ft.



FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

DATE 7/30/1992 STATION NO. 054  
PERSONNEL E. GASMAN, T. ROSE  
WELL NO. RS-8 WEATHER SUNNY  
SAMPLE EQUIPMENT TEFLON BAILER

Before Sampling

Total Well Depth 25.20 Ft. Well Diameter 2"  
Depth to Water 9.55 Ft. Purge Volume 10 gallons

Sampling Data

Time	10:15	10:20	10:25	10:30	10:35		
EC	1810	1690	1620	1620	1620		
pH	7.70	7.62	7.62	7.62	7.62		
Temp	70.9	70.7	70.5	70.5	70.5		
Gal.	2	4	6	8	10		
Time							
EC							
pH							
Temp							
Gal.							

After Sampling

Depth to Water 10:30 Ft. Total Well Depth 25.20 Ft.



LABORATORY ANALYSIS RESULTS

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

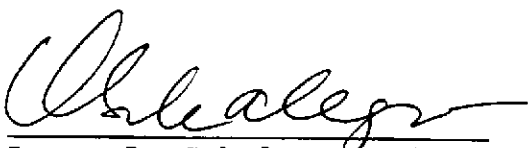
AA Project No.: A135054-4  
Date Sampled: 7/30/92  
Date Received: 8/3/92  
Date Analyzed: 8/4,10,12,13/92  
Units:  $\mu\text{g/L}$   
Date Reported: 8/17/92

---

AA I.D.#	Client I.D.	Results (ppb)			
		Benzene	Ethylbenzene	Toluene	Xylenes
10217	RE2	7.7	3.2	8.6	1.7
10218	RE5	2	1.9	1.8	6.4
10219	RS8	1.1	ND	4.2	3
Detection Limits:		0.5	0.5	0.5	0.5
<hr/>					
10220	RS9	20	39	ND	80
Detection Limits:		10	10	10	10
<hr/>					
10221	RS10	ND	ND	0.5	1
10222	Trip Blank	ND	ND	ND	ND
Detection Limits:		0.5	0.5	0.5	0.5

---

ND: Not detected at or above the concentration of detection limits

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff




LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135054-4  
Date Sampled: 7/30/92  
Date Received: 8/3/92  
Date Analyzed: 8/4,10/92  
Units: mg/L  
Date Reported: 8/17/92

AA ID No.	Client ID	Total Petroleum Hydrocarbon Results (ppm)	Detection Limits (ppm)
10217	RE2	0.5	0.2
10218	RE5	ND	0.2
10219	RS8	ND	0.2
10220	RS9	3.6	0.2
10221	RS10	ND	0.2
10222	Trip Blank	ND	0.2

ND: Not detected at or above the concentration of detection limits

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020(BTEX), QC, Spike  
AA Project No.: A135054-4


Sample Matrix: Water  
Date Analyzed: 8/4/92  
Date Reported: 8/17/92

---

Compound	Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
Benzene	92	90	2.2
Toluene	97	96	1
Ethyl Benzene	86	86	0
Total Xylenes	99	101	2

---

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/((x_1 + x_2)/2)]$

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



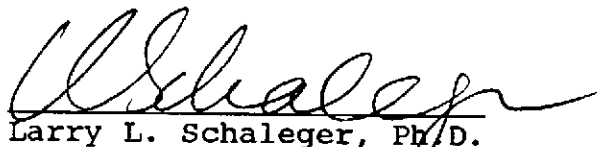
LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
 Method: EPA 8020(BTEX), QC, Spike  
 AA Project No.: A135054-4

Sample Matrix: Water  
 Date Analyzed: 8/10/92  
 Date Reported: 8/17/92

Compound	Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
Benzene	91	101	10.4
Toluene	98	110	11.5
Ethyl Benzene	87	98	11.9
Total Xylenes	102	114	11.1

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/((x_1 + x_2)/2)]$

  
 Larry L. Schaleger, Ph.D.  
 Laboratory Director

ff



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
AA Project No.: A135054-4

Sample Matrix: Water  
Date Analyzed: 8/12/92  
Date Reported: 8/17/92


---

Compound	Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
Benzene	82	96	15.7
Toluene	43	59	31.4
Ethyl Benzene	17	24	34
Total Xylenes	103	110	6.6

---

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/\{(x_1 + x_2)/2\}]$

Note: Quality Control Standard is within the Laboratory control limit.

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
AA Project No.: A135054-4


Sample Matrix: Water  
Date Analyzed: 8/13/92  
Date Reported: 8/17/92

---

Compound	Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
Benzene	95	93	2.1
Toluene	82	84	2.4
Ethyl Benzene	82	78	5
Total Xylenes	87	80	8.4

---

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/((x_1 + x_2)/2)]$

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8015M(Gasoline), QC, Spike  
AA Project No.: A135054-4

Sample Matrix: Water  
Date Analyzed: 8/4/92  
Date Reported: 8/17/92

---

Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
70	62	12

---

---

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/\{(x_1 + x_2)/2\}]$

  
Larry L. Schalegen, Ph.D.  
Laboratory Director

ff





LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8015M(Gasoline), QC, Spike  
AA Project No.: A135054-4

Sample Matrix: Water  
Date Analyzed: 8/10/92  
Date Reported: 8/17/92


---

Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
111	104	6.5

---

---

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/((x_1 + x_2)/2)]$

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



# 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: 7/30/92

PAGE \_\_\_\_\_ OF \_\_\_\_\_

AA Client <b>THRIFTY OIL CO</b>	Phone <b>(310) 923-9876</b>	Sampler's Name <b>EUGENIU GARMAN</b>
Project Manager <b>MICHAEL ROSBY</b>	P.O. No.	Sampler's Signature <i>Eugeniu Gorman</i>
Project Name <b>SS # 054</b>	Project No.	Project Manager's Signature

Job Name and Address <b>SS # 054</b>	<b>ANALYSIS REQUIRED</b>		Test Requirements
	Detection Limits		

AA ID.#	Client's ID.	Date	Time	Sample Type	Number of Containers	Test Name		ANALYSIS REQUIRED										
10217	REZ	7/30/92	4:00P	GRAB	2	✓	X	X	→ 1 vial broken / 1 intact									
10218	RE 5	7/30/92	4:40P	GRAB	2	✓	X	X										
10219	RS 8	7/30/92	2:50P	GRAB	2	✓	X	X										
10220	RS 9	7/30/92	3:30P	GRAB	2	✓	X	X										
10221	RS 10	7/30/92	2:30P	GRAB	2	✓	X	X										
10222	TRIP BLANK	7/30/92	7:00P	GRAB	2	✓	X	X										

<b>SAMPLE INTEGRITY-TO BE FILLED IN BY RECEIVING LAB</b> Samples Intact <i>see above</i> Yes _____ No <input checked="" type="checkbox"/> Samples Properly Cooled Yes <input checked="" type="checkbox"/> No _____ Samples Accepted Yes _____ No <input checked="" type="checkbox"/> If Not Why: _____ AA Project No. <b>A135054-4</b>	Relinquished by: <i>Eugeniu Gorman</i>	Date	Time	Received by:
	Relinquished by:	Date	Time	Received by:
	Relinquished by:	Date	Time	Received by:
	Relinquished by:	Date	Time	Received by:



LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135054-5  
Date Sampled: 8/20/92  
Date Received: 8/24/92  
Date Analyzed: 8/27-28/92  
Units: µg/L  
Date Reported: 9/1/92

~~~~~

| AA I.D.#          | Client I.D. | Benzene | Results<br>Ethylbenzene | Toluene | Xylenes |
|-------------------|-------------|---------|-------------------------|---------|---------|
| 10565             | RE2         | 6.6     | 2.7                     | 4.5     | 2.0     |
| 10566             | RE5         | 1.7     | 0.7                     | 3.3     | 12      |
| Detection Limits: |             | 0.5     | 0.5                     | 0.5     | 0.5     |
| 10567             | RE6         | 630     | 23                      | 17      | 22      |
| Detection Limits: |             | 5       | 5                       | 5       | 5       |
| 10568             | RS8         | 2       | ND                      | 4.7     | 5.7     |
| 10569             | RS9         | 0.7     | 2.0                     | 5.2     | 5.3     |
| 10570             | RS10        | ND      | ND                      | ND      | ND      |
| 10571             | Trip Blank  | ND      | ND                      | 0.6     | 0.6     |
| Detection Limits: |             | 0.5     | 0.5                     | 0.5     | 0.5     |

~~~~~

ND: Not detected at or above the concentration of the detection limits.

  
Larry L. Schaleger, Ph. D.  
Laboratory Director

ff



LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135054-5  
Date Sampled: 8/20/92  
Date Received: 8/24/92  
Date Analyzed: 8/27/92  
Units: mg/L  
Date Reported: 9/1/92

~~~~~

| AA ID No. | Client ID  | Total Petroleum Hydrocarbon Results | Detection Limits |
|-----------|------------|-------------------------------------|------------------|
| 10565     | RE2        | 1.1                                 | 0.2              |
| 10566     | RE5        | 0.3                                 | 0.2              |
| 10567     | RE6        | 2.8                                 | 0.2              |
| 10568     | RS8        | ND                                  | 0.2              |
| 10569     | RS9        | 3                                   | 0.2              |
| 10570     | RS10       | ND                                  | 0.2              |
| 10571     | Trip Blank | ND                                  | 0.2              |

~~~~~

ND: Not detected at or above the concentration of the detection limits.

  
Larry L. Schaleger, Ph. D.  
Laboratory Director

ff



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
AA Project No.: A135054-5


Sample Matrix: Water  
Date Analyzed: 8/27/92  
Date Reported: 9/1/92

~~~~~

| Compound      | Spike Recovery (%) | Spike/Duplicate Recovery (%) | RPD (%) |
|---------------|--------------------|------------------------------|---------|
| Benzene       | 60                 | 59                           | 1.7     |
| Toluene       | 70                 | 69                           | 1.4     |
| Ethylbenzene  | 80                 | 79                           | 1.2     |
| Total Xylenes | 76                 | 75                           | 0.3     |

~~~~~

~~~~~  
RPD = Relative Percent Difference,  $100[(x_1 - x_2) / \{(x_1 + x_2) / 2\}]$   
~~~~~

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
AA Project No.: A135054-5

Sample Matrix: Water  
Date Analyzed: 8/28/92  
Date Reported: 9/1/92

~~~~~

| Compound      | Spike Recovery (%) | Spike/Duplicate Recovery (%) | RPD (%) |
|---------------|--------------------|------------------------------|---------|
| Benzene       | 96                 | 98                           | 2.1     |
| Toluene       | 87                 | 89                           | 2.3     |
| Ethylbenzene  | 78                 | 76                           | 2.6     |
| Total Xylenes | 87                 | 87                           | 0       |

~~~~~

~~~~~  
RPD = Relative Percent Difference,  $100[(x_1 - x_2) / \{(x_1 + x_2) / 2\}]$   
~~~~~

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



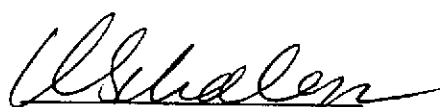
LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8015M (Gasoline), QC, Spike  
A.A. Project No.: A135054-5

Sample Matrix: Water  
Date Analyzed: 8/27/92  
Date Reported: 9/1/92

	Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
	94	96	2.1

RPD = Relative Percent Difference,  $100[(x_1 - x_2)/\{(x_1 + x_2)/2\}]$

  
Larry L. Schaleger, Ph.D.  
Laboratory Director

ff



# 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: \_\_\_\_\_

PAGE \_\_\_\_\_ OF \_\_\_\_\_

AA Client <b>THRIFTY OIL CO</b>	Phone <b>920 923-9816</b>	Sampler's Name <b>EUGENIU GARMAN</b>
Project Manager <b>MICHAEL COSBY</b>	P.O. No.	Sampler's Signature <i>Eugeniu Garmen</i>
Project Name <b>TOC SS # 054</b>	Project No.	Project Manager's Signature

Job Name and Address <b>TOC SS # 054</b>	<b>ANALYSIS REQUIRED</b>		Test Requirements
	Detection Limits		

AA ID.#	Client's ID.	Date	Time	Sample Type	Number of Containers	Test Name										Test Requirements			
						H	P	T	A	B									
10565	RE 2	8-20-92	4:25P	GRAB	2	X	X												
10566	RE 5	8-20-92	5:40P	GRAB	2	X	X												
10567	RE 6	8-20-92	5:00P	GRAB	2	X	X												
10568	RS 8	8-20-92	3:10P	GRAB	2	X	X												
10569	RS 9	8-20-92	3:50P	GRAB	2	X	X												
10570	RS 10	8-20-92	2:30P	GRAB	2	X	X												
10571	TRIP BLANK	8-20-92	7:20A		2	X	X												

<b>SAMPLE INTEGRITY TO BE FILLED IN BY RECEIVING LAB</b>		Relinquished by:	Date	Time	Received by:
Sample Intact	Yes _____ No _____				<i>Fed Express</i>
Sample Properly Cooled	Yes _____ No _____	Relinquished by:	Date	Time	Received by:
Sample Accepted	Yes _____ No _____	<i>Fed Express</i>	<i>8-24-92</i>	<i>12:00</i>	<i>Rough Hawk</i>
# Not Why:		Relinquished by:	Date	Time	Received by:
AA Project No.	<i>A135054-5</i>	Relinquished by:	Date	Time	Received by:





LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135054-6  
Date Sampled: 9/30/92  
Date Received: 10/2/92  
Date Analyzed: 10/7,8/92  
Units: mg/L  
Date Reported: 10/21/92

~~~~~

| AA ID No. | Client ID  | Results | Detection Limits |
|-----------|------------|---------|------------------|
| 11120     | PW1        | 3.4     | 1.0              |
| 11121     | RE2        | 0.5     | 0.2              |
| 11122     | RE5        | 1.9     | 0.2              |
| 11123     | RE6        | 7.8     | 2.0              |
| 11124     | RS8        | --      | 0.2              |
| 11125     | RS9        | 9.2     | 1.0              |
| 11126     | RS10       | --      | 0.2              |
| 11127     | Trip Blank | --      | 0.2              |

~~~~~

--: Not detected at or above the concentration of the detection limits

Larry L. Schaleger, Ph. D.  
Laboratory Director

tjm



LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135054-3  
 Date Sampled: 9/30/92  
 Date Received: 10/2/92  
 Date Analyzed: 10/7,8,9/92  
 Units: µg/L  
 Date Reported: 10/21/92

```

  ~ ~ ~ ~ ~
  AA I.D.#      Client I.D.      Benzene      Toluene      Ethylbenzene      Xylenes
  ~ ~ ~ ~ ~
  11120         PW1              57           --           26              240
  Detection Limits:      2.5         2.5         2.5         5.0
  11121         RE2              5.4          2.4          1.8             4.5
  Detection Limits:      0.5         0.5         0.5             1.0
  11122         RE5              140          --           19              35
  11123         RE6              540          --           12              29
  Detection Limits:      10          10          10             20
  11124         RS8              --           --           --              --
  Detection Limits:      0.5         0.5         0.5             1.0
  11125         RS9              4.8          6.5          12              91
  Detection Limits:      2.5         2.5         2.5             5.0
  11126         RS10             --           --           --              --
  11127         Trip Blank       --           --           --              --
  Detection Limits:      0.5         0.5         0.5             0.5
  
```

---: Not detected at or above the concentration of the detection limits

*Larry L. Schaleger*  
 Larry L. Schaleger, Ph. D.  
 Laboratory Director

tjm



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8015M (Gasoline), QC, Spike  
A.A. Project No.: A135054-6

Sample Matrix: Water  
Date Analyzed: 10/7/92  
Date Reported: 10/21/92

Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
87	97	11

RPD = Relative Percent Difference,  $100[(x_1 - x_2) / \{(x_1 + x_2) / 2\}]$

*L. Schaleger*  
Larry L. Schaleger, Ph.D.  
Laboratory Director

tjm



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8015M (Gasoline), QC, Spike  
A.A. Project No.: A135054-6

Sample Matrix: Water  
Date Analyzed: 10/8/92  
Date Reported: 10/21/92

Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
109	111	1.8

RPD = Relative Percent Difference,  $100[(x_1 - x_2) / \{(x_1 + x_2) / 2\}]$

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LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
A.A. Project No.: A135054-6


Sample Matrix: Water  
Date Analyzed: 10/7/92  
Date Reported: 10/21/92

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|               | Spike<br>Recovery<br>(%) | Spike/Duplicate<br>Recovery<br>(%) | RPD<br>(%) |
|---------------|--------------------------|------------------------------------|------------|
| Benzene       | 96                       | 84                                 | 13         |
| Toluene       | 96                       | 81                                 | 17         |
| Ethylbenzene  | 87                       | 78                                 | 11         |
| Total Xylenes | 82                       | 75                                 | 8.9        |

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RPD = Relative Percent Difference,  $100[(x_1 - x_2) / \{(x_1 + x_2) / 2\}]$   
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Larry L. Schaleger, Ph.D.  
Laboratory Director

tjm



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
A.A. Project No.: A135054-6

Sample Matrix: Water  
Date Analyzed: 10/8/92  
Date Reported: 10/21/92

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|               | Spike<br>Recovery<br>(%) | Spike/Duplicate<br>Recovery<br>(%) | RPD<br>(%) |
|---------------|--------------------------|------------------------------------|------------|
| Benzene       | 110                      | 106                                | 3.7        |
| Toluene       | 112                      | 110                                | 1.8        |
| Ethylbenzene  | 109                      | 108                                | 0.9        |
| Total Xylenes | 118                      | 116                                | 1.7        |

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RPD = Relative Percent Difference,  $100[(x_1 - x_2)/\{(x_1 + x_2)/2\}]$

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Laboratory Director

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LABORATORY QA/QC REPORT

Client: Thrifty Oil Company  
Method: EPA 8020 (BTEX), QC, Spike  
A.A. Project No.: A135054-6

Sample Matrix: Water  
Date Analyzed: 10/9/92  
Date Reported: 10/21/92

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	Spike Recovery (%)	Spike/Duplicate Recovery (%)	RPD (%)
Benzene	112	114	1.8
Toluene	118	119	0.8
Ethylbenzene	116	116	0
Total Xylenes	124	124	0

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RPD = Relative Percent Difference,  $100[(x_1 - x_2)/\{(x_1 + x_2)/2\}]$   
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