

THRIFTY OIL CO. ENVIRONMENTAL PROTECTION

00 JAN 25 AM 9:02

January 19, 2000

O.00383

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

LDP 3871
R005

RE: **Thrifty Oil Co. Station #063**
6125 Telegraph Avenue
Oakland, CA 94609
4th Quarter 1999, Status Report

Dear Ms. Hugo:

Presented herewith is the Fourth Quarter 1999, Status Report for Former Thrifty Oil Co. Station #063 located at 6125 Telegraph Avenue, Oakland, California.

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

Sincerely,



Chris Panaitescu

General Manager
Environmental Affairs

cc: ARCO Products Company
File



LOP - RECORD CHANGE REQUEST FORM

printed:
04/24/2000

**Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)**

Insp: SH

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 3871 LOC: 12/13/1994
SITE NAME: Thrifty Oil Co. #063 DATE REPORTED : 06/21/1986
ADDRESS : 6125 Telegraph Ave DATE CONFIRMED: 06/21/1986
CITY/ZIP : Oakland 94609 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: S CONTRACT STATUS: 4 PRIOR CODE:2B3 EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 03/27/1992
PRELIMINARY ASMNT: U DATE UNDERWAY: 12/08/1989 DATE COMPLETED:
REM INVESTIGATION: DATE UNDERWAY: DATE COMPLETED:
REMEDIAL ACTION: DATE UNDERWAY: DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 03/27/1992
LUFT FIELD MANUAL CONSID: HSGWA
CASE CLOSED: DATE CASE CLOSED:
DATE EXCAVATION STARTED : REMEDIAL ACTIONS TAKEN: UK

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Chris Panaitescu
COMPANY NAME: Thrifty Oil Co.
ADDRESS: 13539 E. Foster Road
CITY/STATE: Santa Fe Springs, Ca 90670

INSPECTOR VERIFICATION:		
NAME _____	SIGNATURE _____	DATE _____
DATA ENTRY INPUT:		
Name/Address Changes Only	Case Progress Changes	
ANNPGMS _____	LOP _____	DATE _____
	LOP _____	DATE _____

THRIFTY OIL CO.

January 17, 2000

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

RE: **Former Thrifty Oil Co. Station #063**
6125 Telegraph Avenue
Oakland, CA
4th Quarter 1999, Status Report

Dear Ms. Hugo:

Presented herein is the Fourth Quarter 1999, Status Report prepared for Former Thrifty Oil Co. (Thrifty) Station #063 located at 6125 Telegraph Avenue, Oakland, California (**Figure 1**). Presented in this report are the results of the site monitoring efforts conducted on October 7, 1999 in the Fourth Quarter 1999. Thrifty has retained the services of Earth Management Company (EMC) to conduct quarterly monitoring and sampling activities at this site.

Groundwater Monitoring

Depth to groundwater is measured in each monitoring well on a quarterly basis. In general, groundwater occurs under water table conditions beneath the station at depths ranging from 12.15 feet below surface grade (bsg) in monitoring well MW-1 to 16.89 feet (bsg) in monitoring well MW-4 (**Appendix A**). A groundwater elevation contour map based on the October 7, 1999 data is presented in **Figure 2**. The groundwater is flowing to the north and east at a gradient ranging from approximately 0.04 feet/foot to 0.08 feet/foot.

Quarterly Groundwater Sampling

As part of the ongoing groundwater monitoring program, groundwater samples were obtained from monitoring wells MW-1, MW-4, MW-5, and MW-6 on October 7, 1999. Groundwater samples were obtained by EMC and delivered in a chilled state following strict Chain-of-Custody procedures to a state-certified laboratory and analyzed for total petroleum hydrocarbons (TPH-g) EPA method



8015 modified for gasoline. Volatile aromatic compounds of benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tert-butyl ether (MTBE) were analyzed for by EPA method 8020. A summary of historical analytical sampling results are provided in **Table 1**. Copies of the EMC Field Status Reports are presented in **Appendix A**, and copies of the laboratory analytical reports are contained in **Appendix B**.

TPH-g, benzene, and MTBE concentrations appear in **Table 1** and **Appendix B**. The TPH-g, benzene, and MTBE isoconcentration maps are presented in **Figures 3, 4, and 5**. The highest laboratory concentration results for TPH-g, benzene, and MTBE were detected in monitoring well MW-4, as follows: 2,500 ug/L TPH-g, <1.5 ug/L benzene, and 4,800 MTBE.

Remediation Status

Site remedial activities were initiated in April 1991. Presently, the remediation system consists of a Groundwater Treatment System with carbon connected to groundwater monitoring well MW-3. System operational data is included in **Appendix C**. During this reporting period, the groundwater treatment system processed 2,928 gallons of groundwater, and has treated approximately 1,059,395 gallons of groundwater since start up (through December 31, 1999). The groundwater system was non-operational for a total of 32 days during the period of October 21 through November 24, 1999, for maintenance and carbon change out.

Influent, intermediate, and effluent water samples were collected on October 7, 1999 from the treatment unit, and the samples collected by EMC were sent to American Analytics for analysis. The samples were analyzed for TPH-g by EPA method 8015, and BTEX/MTBE was analyzed by using EPA method 8020. All laboratory results for effluent samples for TPH-g and benzene were below laboratory detection limits, and the MTBE concentration was 11 ug/L. The carbon change out was performed on October 28, 1999, soon after the water analysis results were known. A copy of the laboratory analytical reports is included in **Appendix D**.

Previous Major Site Activities

As per our conversation, the following is a summary of recent significant site assessment activities. The underground storage tanks (UST's) were removed on February 4, 1998, and approximately 977 tons of petroleum hydrocarbon impacted soil was removed from the site (Underground Storage Tank Removal Report, August 31, 1998). The source has been removed from the site. Monitoring well MW-2 was abandoned due to the tank removal operation, and the well abandonment drilling permit application is inclosed in **Appendix E**.

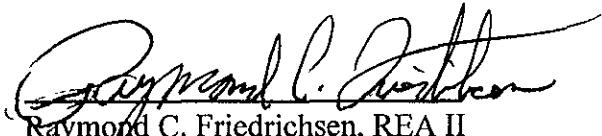
Other Activities

The groundwater monitoring wells, and the treatment unit, will be monitored and sampled for the next quarter. All site monitoring/sampling data generated during the next quarter will be reported

in the First Quarter 2000 monitoring report.

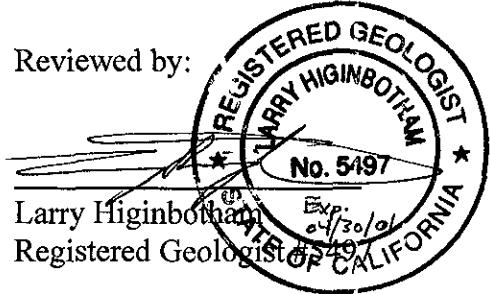
Interpretations expressed herein are based upon data collected by EMC.

Written by:



Raymond C. Friedrichsen, REA II
Project Manager
Senior Hydrogeologist

Reviewed by:



Larry Higinbotham

Registered Geologist

FIGURES

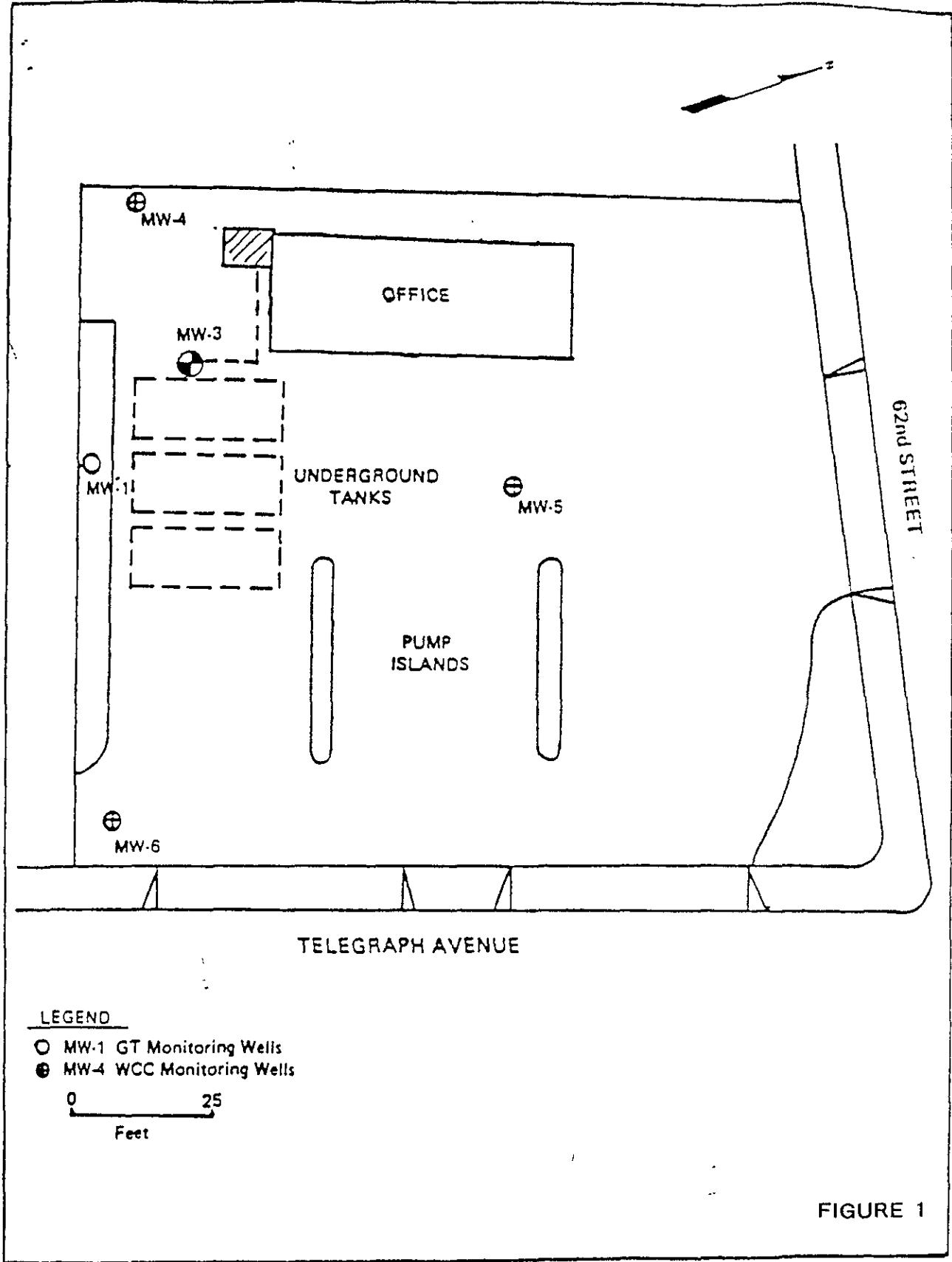
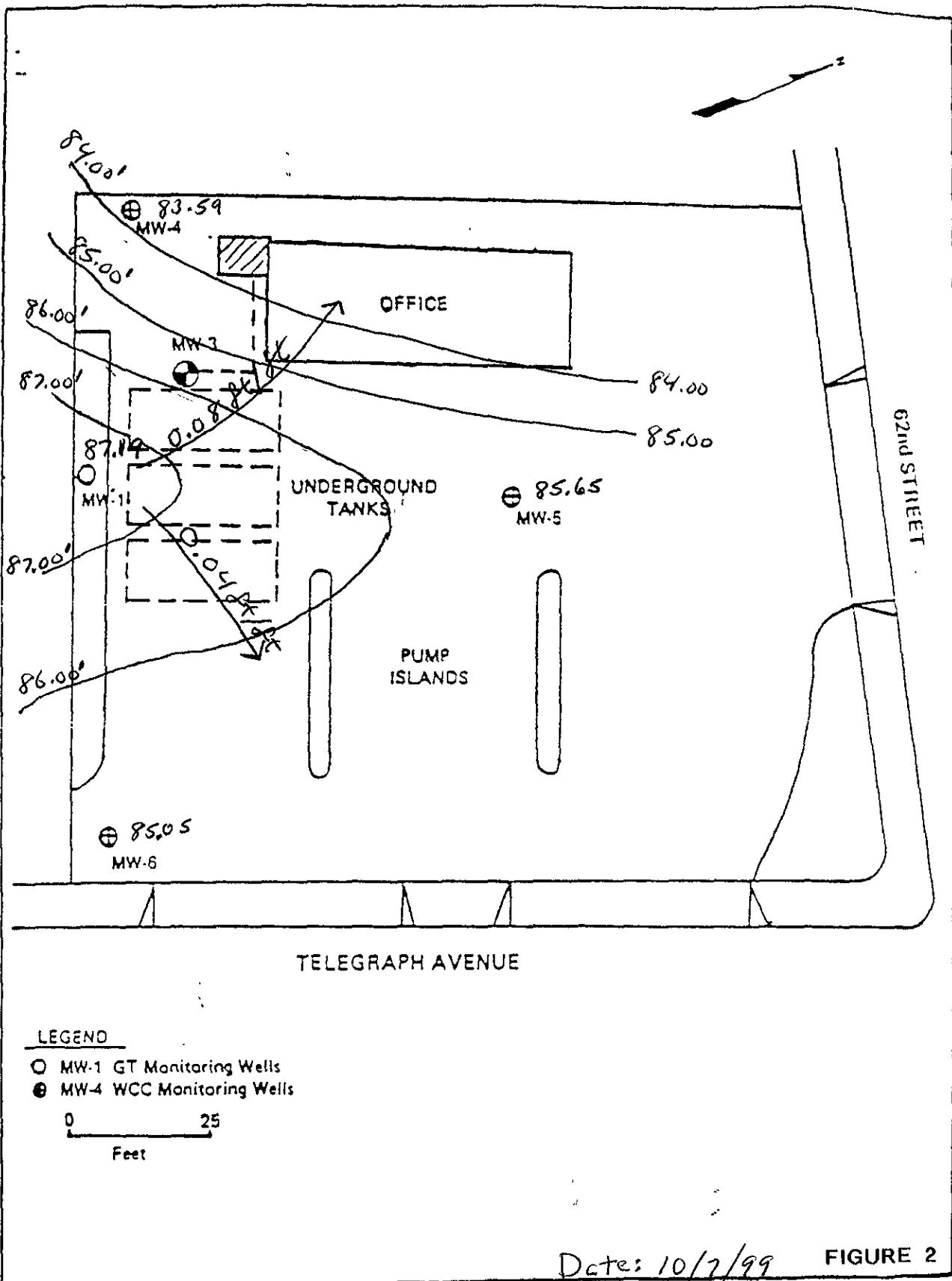


FIGURE 1

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



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

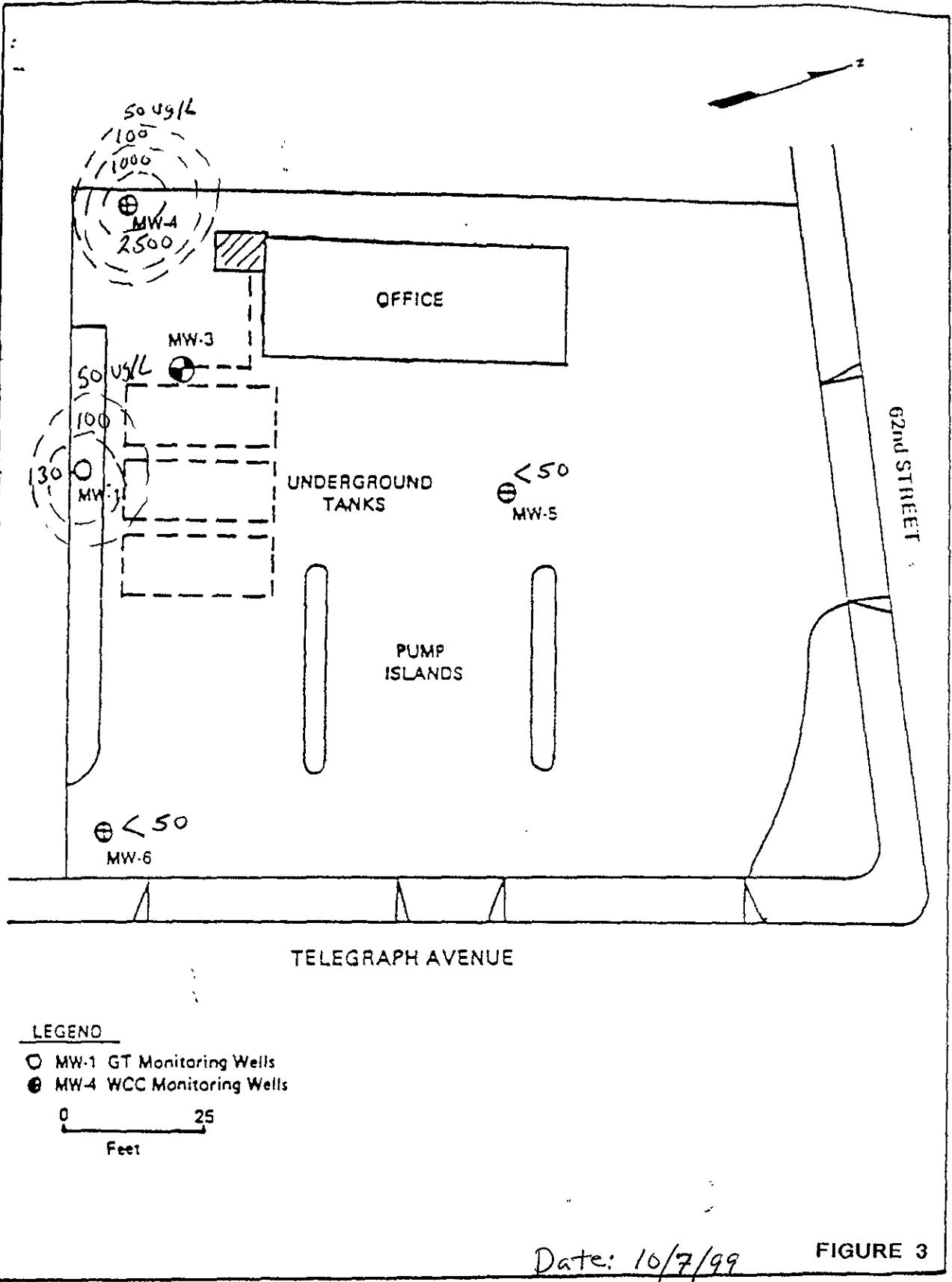
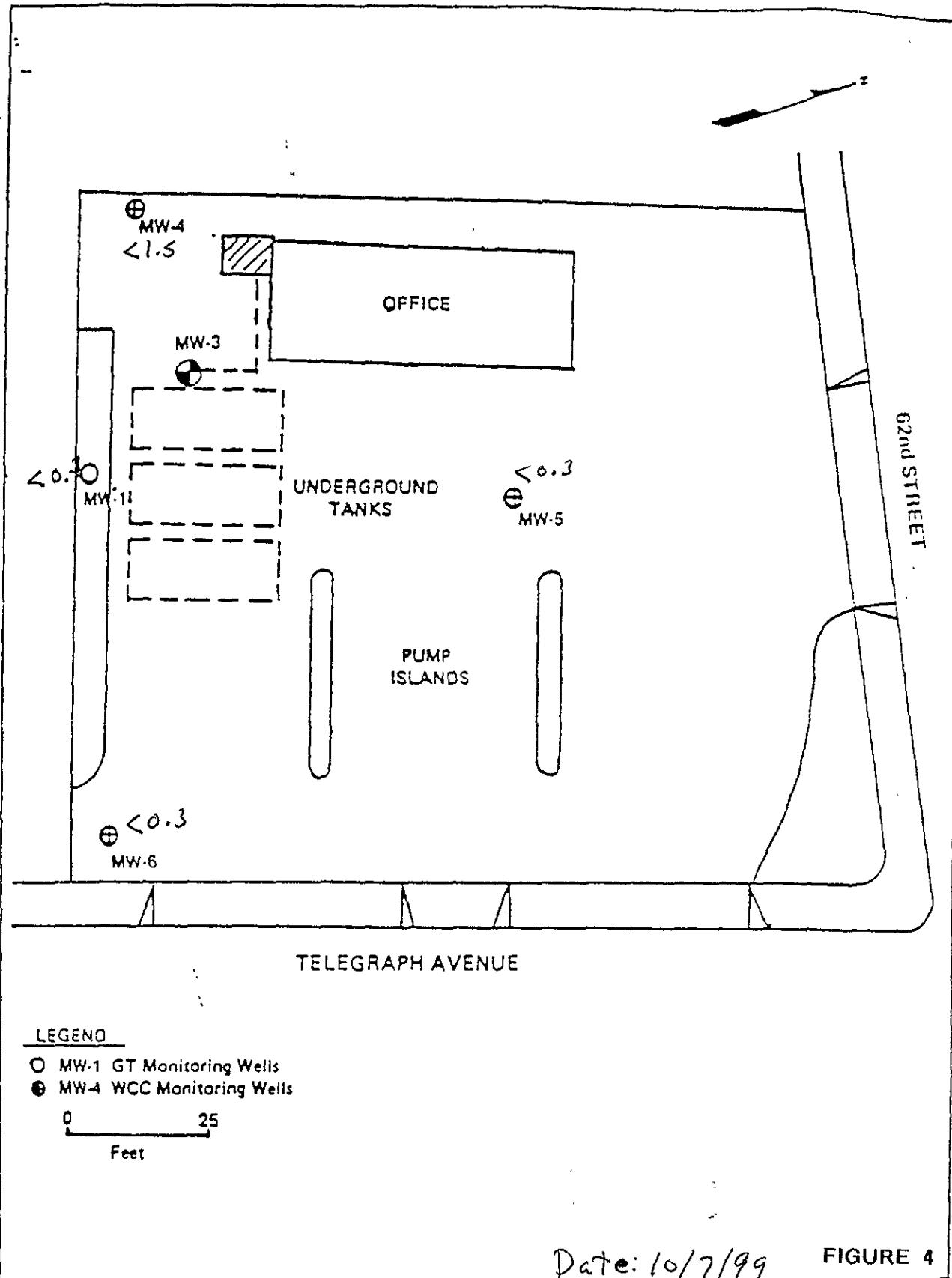


FIGURE 3

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



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

FIGURE 4

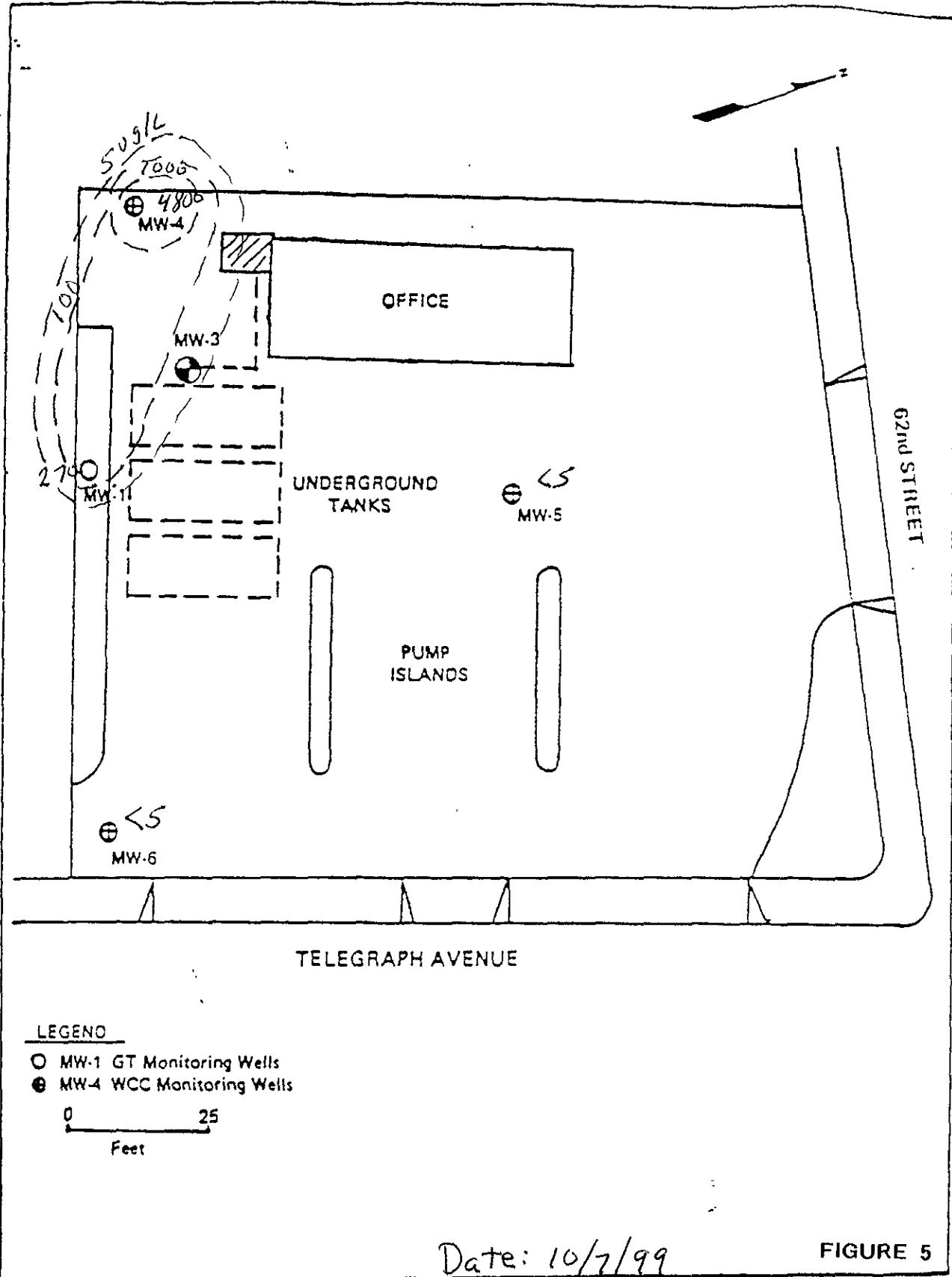


FIGURE 5

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

TABLES

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

DATE SAMPLED	ANALYTICAL PARAMETERS					DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)	
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthyBenzene (ug/L)	XYLENE (ug/L)						
MONITORING WELL ##MW-1											
11/21/86	-	-	-	-	-	15.42	NP	0.00	99.34	83.92	
07/22/91	-	-	-	-	-	20.41	FILM	0.00	99.34	78.93	
10/24/91	-	-	-	-	-	19.06	SHEEN	0.00	99.34	80.28	
01/22/92	-	-	-	-	-	18.78	SHEEN	0.00	99.34	80.56	
03/24/92	-	-	-	-	-	13.55	SHEEN	0.00	99.34	85.79	
07/15/92	-	-	-	-	-	18.90	FILM	0.00	99.34	80.44	
10/05/92	-	-	-	-	-	20.50	FILM	0.00	99.34	78.84	
01/06/93	-	-	-	-	-	14.93	FILM	0.00	99.34	84.41	
07/13/93	-	-	-	-	-	15.44	FILM	0.00	99.34	83.90	
10/11/93	-	-	-	-	-	20.36	FILM	0.00	99.34	78.98	
01/11/94	-	-	-	-	-	19.50	FILM	0.00	99.34	79.84	
04/12/94	-	-	-	-	-	18.10	FILM	0.00	99.34	81.24	
07/14/94	-	-	-	-	-	20.03	FILM	0.00	99.34	79.31	
01/15/96	11,000	2,800	150	780	770	-	19.02	NP	0.00	99.34	80.32
04/15/96	17,000	3,600	330	1,500	3,400	-	18.82	NP	0.00	99.34	80.52
07/15/96	12,000	1,300	200	1,200	4,600	250	-	NP	-	-	-
10/09/96	-	-	-	-	-	-	14.87	NP	0.00	99.34	84.47
01/13/97	27,000	810	6,000	570	4,100	2,700	10.20	NP	0.00	99.34	89.14
04/14/97	2,900	3.0	2.9	<0.3	1.7	9,900	-	NP	-	-	-
07/07/97	5,200	0.57	0.57	<0.3	0.71	16,000	18.75	NP	0.00	99.34	80.59
10/16/97	680	<0.3	0.55	<0.3	<0.5	-	17.92	NP	0.00	99.34	81.42
01/07/98	42,000	980	2,800	1,200	5,200	1.3	9.80	NP	0.00	99.34	89.54
04/06/98	7,100	700	340	170	2,600	1,000	9.60	NP	0.00	99.34	89.74
07/14/98	19,000	2,100	400	890	5,800	1,600	13.70	NP	0.00	99.34	85.64
10/15/98	490	<0.3	<0.3	<0.3	<0.5	1,300	15.25	NP	0.00	99.34	84.09
01/20/99	350	<0.3	<0.3	<0.3	<0.5	* 670 / 820	12.20	NP	0.00	99.34	87.14
04/16/99	320	<0.3	<0.3	<0.3	<0.5	* 540 / 630	12.20	NP	0.00	99.34	87.14
07/14/99	290	<0.3	<0.3	<0.3	<0.5	* 590 / 580	13.75	NP	0.00	99.34	85.59
10/07/99	130	<0.3	<0.3	<0.3	<0.5	270	12.15	NP	0.00	99.34	87.19
MONITORING WELL # MW-2											
11/21/86	-	-	-	-	-	-	14.90	0.11	14.79	100.01	96.28
07/22/91	-	-	-	-	-	-	17.84	0.38	17.46	100.01	95.35
10/24/91	-	-	-	-	-	-	17.00	16.97	0.03	100.01	83.03

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

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
01/22/92	-	-	-	-	-	-	16.72	FILM	0.00	100.01	83.29
03/24/92	-	-	-	-	-	-	15.81	11.98	3.83	100.01	87.09
07/15/92	-	-	-	-	-	-	16.37	FILM	0.00	100.01	83.64
10/05/92	-	-	-	-	-	-	18.41	18.09	0.32	100.01	81.84
01/06/93	-	-	-	-	-	-	12.37	FILM	0.00	100.01	87.64
07/13/93	-	-	-	-	-	-	15.19	FILM	0.00	100.01	84.82
10/11/93	-	-	-	-	-	-	18.05	0.10	17.95	100.01	95.51
01/11/94	-	-	-	-	-	-	16.98	0.03	16.95	100.01	95.83
04/12/94	-	-	-	-	-	-	15.54	FILM	0.00	100.01	84.47
07/14/94	-	-	-	-	-	-	17.93	FILM	0.00	100.01	82.08
01/15/96	7,100	720	280	48	660	-	17.20	NP	0.00	100.01	82.81
04/15/96	11,000	600	59	420	870	-	17.26	NP	0.00	100.01	82.75
07/15/96	19,000	360	51	610	1,600	<250	-	-	-	-	-
10/09/96	-	-	-	-	-	-	14.42	NP	0.00	100.01	85.59
01/13/97	11,000	230	30	91	700	56	10.25	NP	0.00	100.01	89.76
04/14/97	141	1.2	0.33	0.44	<0.5	20	-	-	-	-	-
07/07/97	<50	<0.3	<0.3	<0.3	<0.5	<20	17.20	NP	0.00	100.01	82.81
10/16/97	<50	<0.3	<0.3	<0.3	<0.5	-	16.20	NP	0.00	100.01	83.81
01/30/98	Abandoned 1/30/98										

MONITORING WELL #MW-3											
11/21/86	-	100	5.1	<10	25	-	16.25	0.10	16.15	99.76	95.70
07/22/91	-	-	-	-	-	-	24.00	NP	0.00	99.76	75.76
10/24/91	-	-	-	-	-	-	18.10	NP	0.00	99.76	81.66
01/22/92	-	-	-	-	-	-	25.80	SHEEN	0.00	99.76	73.96
03/24/92	-	-	-	-	-	-	15.60	NP	0.00	99.76	84.16
07/15/92	-	-	-	-	-	-	25.10	FILM	0.00	99.76	74.66
10/05/92	-	-	-	-	-	-	25.20	NP	0.00	99.76	74.56
01/06/93	-	-	-	-	-	-	25.45	NP	0.00	99.76	74.31
07/13/93	-	-	-	-	-	-	14.24	NP	0.00	99.76	85.52
10/11/93	-	-	-	-	-	-	25.60	NP	0.00	99.76	74.16
01/11/94	-	-	-	-	-	-	25.90	NP	0.00	99.76	73.86
04/12/94	-	-	-	-	-	-	25.70	NP	0.00	99.76	74.06
07/14/94	-	-	-	-	-	-	25.10	NP	0.00	99.76	74.66
01/15/96	-	-	-	-	-	-	26.04	NP	0.00	99.76	73.72
04/15/96	-	-	-	-	-	-	21.03	NP	0.00	99.76	78.73

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

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/15/96	5,900	240	30	270	730	780	-	-	-	-	-
10/09/96	-	-	-	-	-	-	21.43	NP	0.00	99.76	78.33
01/13/97	-	-	-	-	-	-	11.20	NP	0.00	99.76	88.56
07/07/97	-	-	-	-	-	-	23.40	NP	0.00	99.76	76.36
10/16/97	-	-	-	-	-	-	22.30	NP	0.00	99.76	77.46
01/07/98	-	-	-	-	-	-	20.10	NP	0.00	99.76	79.66
07/14/98	-	-	-	-	-	-	14.40	NP	0.00	99.76	85.36
10/15/98	-	-	-	-	-	-	-	-	-	-	-
01/20/99	-	-	-	-	-	-	-	-	-	-	-
04/16/99	-	-	-	-	-	-	11.20	NP	0.00	99.76	88.56
07/14/99	5,600	9.6	1.3	3.5	8.1	*14,000 / 14,000	25.87	NP	0.00	99.76	73.89
10/07/99	-	-	-	-	-	-	15.40	NP	0.00	99.76	84.36

MONITORING WELL #MW-1

11/21/86	100,000	3,200	2,700	2,400	14,000	-	16.22	FILM	0.00	99.48	83.26
07/22/91	-	-	-	-	-	-	21.80	21.35	0.45	99.48	78.02
10/24/91	-	-	-	-	-	-	20.02	SHEEN	0.00	99.48	79.46
01/22/92	-	-	-	-	-	-	19.78	SHEEN	0.00	99.48	79.70
03/24/92	-	-	-	-	-	-	13.94	FILM	0.00	99.48	85.54
07/15/92	-	-	-	-	-	-	19.27	FILM	0.00	99.48	80.21
10/05/92	-	-	-	-	-	-	21.44	FILM	0.00	99.48	78.04
01/06/93	-	-	-	-	-	-	14.08	FILM	0.00	99.48	85.40
07/13/93	-	-	-	-	-	-	16.09	FILM	0.00	99.48	83.39
10/11/93	-	-	-	-	-	-	21.33	FILM	0.00	99.48	78.15
01/11/94	-	-	-	-	-	-	20.45	FILM	0.00	99.48	79.03
04/12/94	-	-	-	-	-	-	19.05	FILM	0.00	99.48	80.43
07/14/94	-	-	-	-	-	-	20.41	FILM	0.00	99.48	79.07
01/15/96	5,000	370	38	300	390	-	19.89	NP	0.00	99.48	79.59
04/15/96	38,000	300	78	540	470	-	19.62	NP	0.00	99.48	79.86
07/15/96	13,000	880	69	820	1,100	3,600	-	-	-	-	-
10/09/96	-	-	-	-	-	-	15.32	NP	0.00	99.48	84.16
01/13/97	47,000	2,500	2,500	1,100	2,800	70,000	10.80	NP	0.00	99.48	88.68
04/14/97	8,700	<0.3	0.45	<0.3	0.64	29,000	-	-	-	-	-
07/07/97	12,000	<0.3	<0.3	<0.3	<0.5	-	18.80	NP	0.00	99.48	80.68
10/16/97	770	<0.3	<0.3	<0.3	<0.5	-	17.76	NP	0.00	99.48	81.72

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

DATE SAMPLED	ANALYTICAL PARAMETERS					DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOluene (ug/L)	EthyBenzene (ug/L)	XYLENE (ug/L)					
01/07/98	75,000	3,000	900	1,400	2,500	110	11.60	NP	0.00	99.48
04/08/98	18,000	1,200	130	710	1,400	22,000	10.10	NP	0.00	99.48
07/14/98	21,000	1,300	58	1,200	1,100	23,000	16.30	NP	0.00	99.48
10/15/98	9,100	1.1	0.62	<0.3	<0.5	30,000	16.90	NP	0.00	99.48
01/20/99	16,000	<0.3	0.91	0.72	1.4	* 43,000 / 42,000	15.35	NP	0.00	100.48
04/16/99	17,000	0.48	0.92	0.54	1.4	* 28,000 / 26,000	15.30	NP	0.00	100.48
07/14/99	8,500	<6	<6	<6	<10	* 21,000 / 16,000	18.40	NP	0.00	100.48
10/07/99	2,500	<1.5	3.1	<1.5	<2.5	4,800	16.89	NP	0.00	100.48
MONITORING WELL #MW-5										
11/21/86	<1,000	4.8	2.1	<0.5	7.4	-	16.10	NP	0.00	100.98
07/22/91	-	<0.5	1.6	<1.0	2.0	-	18.20	NP	0.00	100.98
10/24/91	-	-	-	-	-	-	17.67	NP	0.00	100.98
01/22/92	600	21.0	8.0	2.0	17.0	-	-	-	-	-
03/24/92	-	-	-	-	-	-	12.98	NP	0.00	100.98
07/15/92	<200	<0.5	<0.5	<0.5	<0.5	-	17.29	NP	0.00	100.98
10/05/92	-	-	-	-	-	-	18.92	NP	0.00	100.98
01/06/93	300	2.7	<0.5	1.3	26.0	-	13.12	NP	0.00	100.98
07/13/93	<100	1.1	0.5	1.0	1.5	-	16.15	NP	0.00	100.98
10/11/93	130	1.2	<0.3	<0.3	<0.6	-	18.75	NP	0.00	100.98
01/11/94	<50	1.5	<0.3	<0.3	<0.5	-	17.80	NP	0.00	100.98
04/12/94	<50	<0.3	<0.3	<0.3	<0.5	-	13.59	NP	0.00	100.98
07/14/94	<50	0.42	<0.3	<0.3	<0.5	-	18.26	NP	0.00	100.98
07/15/95	100	1.2	<0.5	0.8	<1	-	-	-	-	-
01/15/96	1,900	21	13	6.2	6.8	-	13.09	NP	0.00	100.98
04/15/96	250	5.1	2.7	1.7	1.1	-	13.16	NP	0.00	100.98
07/15/96	270	6.5	1.4	1.8	1.4	230	-	NP	-	-
10/09/96	-	-	-	-	-	-	15.37	NP	0.00	100.98
01/13/97	25,000	780	5,700	560	4,000	24,000	10.90	NP	0.00	100.98
04/14/97	6,300	260	1,600	28	550	9,000	-	-	-	-
07/07/97	7,500	300	1,500	12	110	16,000	14.70	NP	0.00	100.98
10/16/97	4,600	<0.3	0.65	<0.3	<0.5	-	13.60	NP	0.00	100.98
01/07/98	2,700	33	11	37	580	7.3	10.97	NP	0.00	100.98
04/08/98	300	9.1	<0.3	<0.3	<0.5	650	10.90	NP	0.00	100.98
07/14/98	670	5.9	<0.3	<0.3	0.53	2,300	15.20	NP	0.00	100.98

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

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthyBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
10/15/98	<50	<0.3	<0.3	<0.3	<0.5	19	15.90	NP	0.00	100.98	85.08
01/20/99	<50	<0.3	<0.3	<0.3	<0.5	<5	15.20	NP	0.00	101.98	86.78
04/16/99	<50	<0.3	<0.3	<0.3	<0.5	<5	15.25	NP	0.00	101.98	86.73
07/14/99	<50	<0.3	<0.3	<0.3	<0.5	<5	15.96	NP	0.00	101.98	86.02
10/07/99	<50	<0.3	<0.3	<0.3	<0.5	<5	16.33	NP	0.00	101.98	85.65
MONITORING WELL #MW-6											
11/21/86	<1,000	<2.0	<2.0	<2.0	<2.0	-	12.64	NP	0.00	99.44	86.80
07/22/91	-	-	-	-	-	-	-	-	-	-	-
01/22/92	<200	<0.5	<0.5	<0.5	1.5	-	-	-	-	-	-
03/24/92	-	-	-	-	-	-	10.04	NP	0.00	99.44	89.40
07/15/92	<200	<0.5	<0.5	<0.5	<0.5	-	13.29	NP	0.00	99.44	86.15
10/05/92	-	-	-	-	-	-	14.69	NP	0.00	99.44	84.75
01/06/93	<200	<0.5	<0.5	<0.5	<1.0	-	10.87	NP	0.00	99.44	88.57
07/13/93	<100	<0.5	<0.5	<0.5	<1.0	-	13.10	NP	0.00	99.44	86.34
10/11/93	<60	<0.3	<0.3	<0.3	<0.6	-	14.43	NP	0.00	99.44	85.01
01/11/94	<50	<0.3	<0.3	<0.3	<0.5	-	13.56	NP	0.00	99.44	85.88
04/12/94	<50	<0.3	<0.3	<0.3	<0.3	-	12.10	NP	0.00	99.44	87.34
07/14/94	<50	<0.3	<0.3	<0.3	<0.3	-	14.16	NP	0.00	99.44	85.28
07/15/95	140	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
01/15/96	56	0.38	0.33	<0.3	<0.5	-	14.29	NP	0.00	99.44	85.15
04/15/96	96	4.5	<0.3	<0.3	0.53	-	14.32	NP	0.00	99.44	85.12
07/15/96	140	2.4	0.44	<0.3	0.70	110	-	-	-	-	-
10/09/96	-	-	-	-	-	-	12.09	NP	0.00	99.44	87.35
01/13/97	210	<0.3	1.2	<0.3	0.68	270	9.85	NP	0.00	99.44	89.59
04/14/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
07/07/97	<50	<0.3	<0.3	<0.3	<0.5	<20	14.20	NP	0.00	99.44	85.24
10/16/97	<50	<0.3	<0.3	<0.3	<0.5	-	13.10	NP	0.00	99.44	86.34
01/07/98	<50	<0.3	<0.3	<0.3	<0.5	0.10	9.80	NP	0.00	99.44	89.64
07/14/98	330	<0.3	<0.3	<0.3	<0.5	380	12.30	NP	0.00	99.44	87.14
10/15/98	<50	<0.3	<0.3	<0.3	<0.5	<5	14.30	NP	0.00	99.44	85.14
01/20/99	<50	0.47	<0.3	<0.3	<0.5	<5	13.60	NP	0.00	100.44	86.84
04/16/99	<50	<0.3	<0.3	<0.3	<0.5	<5	13.50	NP	0.00	100.44	86.94
07/14/99	<50	<0.3	<0.3	<0.3	<0.5	*5.4 / <5	14.65	NP	0.00	100.44	85.79
10/07/99	<50	<0.3	0.96	0.35	1.8	<5	15.39	NP	0.00	100.44	85.05

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

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					

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

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

APPENDIX A



EARTH MANAGEMENT CO.
Environmental Remediation

Environmental Remediation

O B S E R V A T I O N W E L L S

PROJECT STATUS REPORT
THRIFTY OIL CO. S.S. #063
6125 TELEGRAPH AVENUE
OAKLAND, CA 94609
DATE: 10-27-94

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE

DTP - DEPTH TO PRODUCT FROM SURFACE

PT - PRODUCT THICKNESS

S - SLIGHT

MEASUREMENTS IN FEET

REMARKS :

Q.U.S.

FREE PRODUCT REMOVED: APPROX. GALLONS

WATER REMOVED: APPROX. 80 GALLONS

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	20 063	Date:	10-07-99
Address:			
Personnel:	PERIOD	Weather:	SUNNY DRY
Well No:	MW-1	Equip:	BWI-1ER

Before Purging:			
Total Well Depth: (ft.)	29.03	Well Diameter	2 ⁷
Depth to Water (ft)	12.15	Est. Purge Volume:	11

Sampling Data:							
Initial Turbidity:				Final Turbidity:			
Time	9:10	9:12	9:13	9:15	9:16	9:18	9:20
EC	890	880	840	820	790	760	730
pH	6.21	6.18	6.13	6.09	6.04	5.96	5.91
Temp	69.1	69.8	69.6	69.4	69.2	69.1	68.9
Gal.	1	3	4	6	7	9	11

Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection		TIME:	AM/PM ✓
Depth to Water (ft.)	9.22	Total Well Depth(ft.)	29.03

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	→ 063	Date:	10-07-1994
Address:			
Personnel:	STERBORN	Weather:	SUNNY dry
Well No:	MW-4	Equip:	BELLARD

Before Purging:			
Total Well Depth: (ft.)	29.15	Well Diameter	24
Depth to Water (ft)	16.89	Est. Purge Volume:	8

Sampling Data:							
Initial Turbidity:	Final Turbidity:						
Time	9:23	9:24	9:25	9:26	9:27	9:28	9:30
EC	780	240	720	690	660	630	610
pH	6.18	6.13	6.08	6.08	6.03	5.97	5.91
Temp	70.4	70.1	69.9	69.7	69.4	69.2	69.2
Gal.	1	2	3	4	5	6	8

Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection		TIME:	AM/PM
Depth to Water (ft.)	13.42	Total Well Depth(ft.)	29.15

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	SS 063	Date:	10-07-1999
Address:			
Personnel:	SERBON	Weather:	SUNNY Day
Well No:	MW-5	Equip:	802100

Before Purging:

Total Well Depth: (ft.)	26.28	Well Diameter	4"
Depth to Water (ft)	16.33	Est. Purge Volume:	26

Sampling Data:

Time	Initial Turbidity:				Final Turbidity:			
	9:37	9:41	9:45	9:48	9:52	9:56	10:00	
EC	920	930	910	910	880	850	820	
pH	6.13	6.08	6.04	5.96	5.87	5.82	5.78	
Temp.	70.1	69.8	69.6	69.4	69.2	68.9	68.7	
Gal.	3	7	11	14	18	22	26	

Time								
EC								
pH								
Temp.								
Gal.								

After Purging/Before Sample Collection	TIME:	AM/PM	✓
Depth to Water (ft.)	13.46	Total Well Depth(ft.)	26.28

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site:	063	Date:	10-07-1997
Address:			
Personnel:	SERRBORG	Weather:	
Well No:	MW-6	Equip:	

Before Purging:

Total Well Depth: (ft.)	26.87	Well Diameter	44
Depth to Water (ft)	15.39	Est. Purge Volume:	30

Sampling Data:

Initial Turbidity:

Time	8:34	8:38	8:42	8:47	8:51	8:55	9:00
EC	740	760	740	680	630	610	570
pH	6.16	6.13	6.08	6.04	6.01	5.93	5.87
Temp	70.3	70.1	69.7	69.4	69.3	68.9	68.7
Gal.	4	8	12	17	21	25	30

Time							
EC							
pH							
Temp							
Gal.							

After Purging/Before Sample Collection

Depth to Water (ft.)	13.40	TIME:	10:00	AM/PM <input checked="" type="checkbox"/>
Total Well Depth(ft).			26.87	

APPENDIX B



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: EPA 8015M (Gasoline)

AA Project No.: A135063-61
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
96089	MW-6	10/07/99	10/15/99	<50	50
96090	MW-1	10/07/99	10/15/99	130	50
96091	MW-4	10/07/99	10/15/99	2500	50
96092	MW-5	10/07/99	10/15/99	<50	50
96093	Trip Blank	10/07/99	10/15/99	<50	50

MRL: Method Reporting Limit

<: Not detected at or above the value of the concentration indicated.

George Havallas
Laboratory Director



LABORATORY QA/QC REPORT

Page 1

Client: Thrifty Oil Company
Project Name: SS #063
Method: EPA 8015M (Gasoline)
Sample ID: Matrix Spike
Concentration: 500 ug/L

AA ID No.: 95944
Project No.: N/A
AA Project No.: A135063-61
Date Analyzed: 10/15/99
Date Reported: 10/20/99

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	500	100	510	102	2	59 - 149

dkh
George Havallas
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135063-61
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

Date Sampled:	10/07/99	10/07/99	10/07/99	10/07/99	
Date Analyzed:	10/15/99	10/15/99	10/15/99	10/15/99	
AA ID No.:	96089	96090	96091	96092	
Client ID No.:	MW-6	MW-1	MW-4	MW-5	MRL
Compounds:					
Benzene	<0.3	<0.3	<1.5	<0.3	0.3
Ethylbenzene	0.35	<0.3	<1.5	<0.3	0.3
Toluene	0.96	<0.3	3.1	<0.3	0.3
Xylenes	1.8	<0.5	<2.5	<0.5	0.5

clif
George Havallas
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 2

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135063-61
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

Date Sampled:	10/07/99	
Date Analyzed:	10/15/99	
AA ID No.:	96093	
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 Havallas
Laboratory Director



LABORATORY QA/QC REPORT

Page 1

Client: Thrifty Oil Company
Project Name: SS #063
Method: EPA 8020 (BTEX)
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No.: 95944
Project No.: N/A
AA Project No.: A135063-61
Date Analyzed: 10/15/99
Date Reported: 10/20/99

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	20.28	101	20.03	100	1	65 - 135
Ethylbenzene	19.34	97	20.66	103	6	77 - 123
Toluene	19.67	98	20.51	103	5	66 - 134
Xylenes	19.38	97	20.62	103	6	73 - 127

gav
George Havalias
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: MTBE (EPA 8020)

AA Project No.: A135063-61
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
96089	MW-6	10/07/99	10/15/99	<5	5
96090	MW-1	10/07/99	10/15/99	270	5
96091	MW-4	10/07/99	10/15/99	4800	5
96092	MW-5	10/07/99	10/15/99	<5	5
96093	Trip Blank	10/07/99	10/15/99	<5	5

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: 10-07-94

PAGE 1 OF 1

AA Client THRIFTY OIL CO.	Phone (562) 921-3581	Sampler's Name SERBOK P.												
Project Manager JEFF SURYAKUSUMA	P.O. No.	Sampler's Signature 												
Project Name Q-IC-S-	Project No.	Project Manager's Signature 												
Job Name and Address #063-6125 TELEGRAPH AVE OAKLAND, CA. 94609	ANALYSIS REQUIRED													
	Detection Limits	Test Requirements												
A.A. ID.#	Client's ID.	Date	Time	Sample Type	Number of Containers	Test Name TPX BTEX TURBO								
96089	MW-6	10.07.94	12:10	WATER	3	X X X								
96090	MW-1	↑	12:15	A	3	X X X								
96091	MW-4		12:20		3	X X X								
96092	MW-5	↓	12:25		3	X X X								
96093	TRIP BOTTLE		7:30	↓	2	X X								
3 drops 1:1 HCl added														
SAMPLE INTEGRITY-TO BE FILLED IN BY RECEIVING LAB						Relinquished by: 	Date 10.07.94	Time 17:00	Received by: Off. OUEGREG					
Samples Intact Yes / No						Relinquished by: 	Date 10.07.94	Time 17:30	Received by: CIA. OVERIGHT					
Samples Properly Cooled Yes / No						Relinquished by: 	Date 10.07.94	Time 10:30	Received by: 					
Samples Accepted Yes / No						Relinquished by: 	Date 10.07.94	Time 10:30	Received by: 					
If Not Why:						Relinquished by: 	Date 10.07.94	Time 10:30	Received by: 					
AA Project No. A 135063-61						Relinquished by: 	Date 10.07.94	Time 10:30	Received by: 					

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

APPENDIX C

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

NAME OF INSPECTOR: SERBAI P.

DATE OF INSPECTION: 12-30-1999

OBSERVATIONS AND
COMMENTS: Add oil, clean water filter, replace
water cartridge

FLOW METER READING: 49386

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.3

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

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

INSPECTOR'S SIGNATURE: S. Stoye

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

NAME OF INSPECTOR: SERBAAK P.

DATE OF INSPECTION: 12-23-1998

OBSERVATIONS AND
COMMENTS: Hold oil, replace water cartridge filter
clean hoses,

FLOW METER READING: 49116

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.6

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

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

INSPECTOR'S SIGNATURE: J. Stoye

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

NAME OF INSPECTOR: SERBAN P.

DATE OF INSPECTION: 12-17-1999

OBSERVATIONS AND
COMMENTS: Check oil, clean water filter,

FLOW METER READING: 4894.7

SAMPLES OBTAINED: H/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.4

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

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

INSPECTOR'S SIGNATURE: Q. N. P.

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

NAME OF INSPECTOR: SERBONI P.

DATE OF INSPECTION: 12-10-1999

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

FLOW METER READING: 48651

SAMPLES OBTAINED: N/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.4

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

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

INSPECTOR'S SIGNATURE: S. Serboni

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

NAME OF INSPECTOR:

SERBAN P.

DATE OF INSPECTION:

12-02-1999

OBSERVATIONS AND

COMMENTS:

Change oil, replace water filter,

FLOW METER READING:

47969

SAMPLES OBTAINED:

110

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER:

14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER:

11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT:

1.4

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT:

1.1

PRESSURE GAUGE READING DOWN STREAM OF THE THIRD GAC UNIT:

0.8

INSPECTOR'S SIGNATURE:

Serban P.

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

NAME OF INSPECTOR: SERBAN & P.

DATE OF INSPECTION: 11-24-99

OBSERVATIONS AND
COMMENTS: RESTART SYSTEM

FLOW METER READING:

47.283

SAMPLES OBTAINED:

14

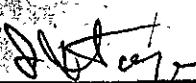
PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.4

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

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

INSPECTOR'S SIGNATURE: 



EARTH MANAGEMENT CO.

Environmental Remediation

(C63)

MAINTENANCE & REPAIR REPORT

A) SS #: 063 SYSTEM TYPE:
B) DEFICIENCY DESCRIPTION:

C) NAME OF REPORTING PARTY AND DATE:
D) DATE SCHEDULED : 11-05-1999

1) NAME: DATE/TIME
2) FINDINGS:

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

4) POST REPAIR TEST RESULTS:

5) THE CAUSE OF THE DEFICIENCY:

BRIEF INSTRUCTIONS FOR PREVENTIVE MAINTENANCE
TO THE TECHNICIAN:

6) OTHER:

REPLACE BAD HOSES, CHANGE OIL IN COMPRESSOR,
CHECK SYSTEM FOR TURB OR WHTL I RECEIVE NEW
CARBON DRUMS -



EARTH MANAGEMENT CO.

Environmental Remediation

(63)

DATE: 10.28.99

START UP / SHUT DOWN REPORT

STATION # 063

SYSTEM TYPE : GM

START UP REPORT:

SHUT DOWN REPORT:

System shut down for change carbon.

SIGNATURE:



EARTH MANAGEMENT CO.

Environmental Remediation

DATE: 10-21-99

START UP / SHUT DOWN REPORT

STATION # 062

SYSTEM TYPE : GM

START UP REPORT:

SHUT DOWN REPORT:

System shut down for carbon change -
47278 - GALLONS -

SIGNATURE:

THRIFTY OIL CO. SERVICE STATION # 063
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBATI P.

DATE OF INSPECTION: 10-14-1999

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

clean water filter,

FLOW METER READING: 47063

SAMPLES OBTAINED: 4/0

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 14

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 12

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.6

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

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

INSPECTOR'S SIGNATURE: S. D. Stoyek

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

NAME OF INSPECTOR: SPERON P.

DATE OF INSPECTION: 10-06-99

OBSERVATIONS AND
COMMENTS: CHECK OIL, BELT, HOSES, (CLOTH)
FILTERS

FLOW METER READING: 46.809

SAMPLES OBTAINED: Yes

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 13

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.7

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.3

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

INSPECTOR'S SIGNATURE: 

THRIFTY OIL CO. SERVICE STATION 063
6125 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA
GROUNDWATER EXTRACTION/TREATMENT SYSTEM INSPECTION FORM

NAME OF INSPECTOR: SERBAN P.

DATE OF INSPECTION: 9-30-1999

OBSERVATIONS AND
COMMENTS: CHECK BELT, ADD OIL, CLEAN

WATER PUMP, REPLACE WATER CARTRIDGE.

FLOW METER READING: 46458

SAMPLES OBTAINED: H/A

PRESSURE GAUGE READING UP STREAM OF THE BAG FILTER: 16

PRESSURE GAUGE READING DOWN STREAM OF THE CARTRIDGE FILTER: 11

PRESSURE GAUGE READING DOWN STREAM OF THE PRIMARY GAC UNIT: 1.8

PRESSURE GAUGE READING DOWN STREAM OF THE SECONDARY GAC UNIT: 1.3

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

INSPECTOR'S SIGNATURE: Serban P.

APPENDIX D



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: EPA 8015M (Gasoline)

AA Project No.: A135063-62
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
96094	Intermed.	10/07/99	10/18/99	64	50
96095	Effluent	10/07/99	10/18/99	<50	50
96096	Influent	10/07/99	10/18/99	65	50
96097	Trip Blank	10/07/99	10/18/99	<50	50

MRL: Method Reporting Limit

<: Not detected at or above the value of the concentration indicated.

George Havalas
Laboratory Director



LABORATORY QA/QC REPORT

Page 1

Client: Thrifty Oil Company
Project Name: SS #063
Method: EPA 8015M (Gasoline)
Sample ID: Matrix Spike
Concentration: 500 ug/L

AA ID No.: 95955
Project No.: N/A
AA Project No.: A135063-62
Date Analyzed: 10/18/99
Date Reported: 10/21/99

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	460	92	500	100	8	59 - 149

dhf
George Havallas
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135063-62
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

Date Sampled:	10/07/99	10/07/99	10/07/99	10/07/99	
Date Analyzed:	10/18/99	10/18/99	10/18/99	10/18/99	
AA ID No.:	96094	96095	96096	96097	MRL
Client ID No.:	Intermed.	Effluent	Influent	Trip Blank	
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

MRL: Method Reporting Limit

<: Not detected at or above the value of the concentration indicated.

George Havallas
Laboratory Director



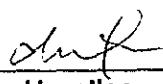
LABORATORY QA/QC REPORT

Page 1

Client: Thrifty Oil Company
Project Name: SS #063
Method: EPA 8020 (BTEX)
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No.: 95955
Project No.: N/A
AA Project No.: A135063-62
Date Analyzed: 10/18/99
Date Reported: 10/21/99

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	19.19	96	18.52	93	3	65 - 135
Ethylbenzene	19.71	99	20.29	101	2	77 - 123
Toluene	19.52	98	20.12	101	3	66 - 134
Xylenes	19.41	97	20.17	101	4	73 - 127


George Havallas
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #063
Sample Matrix: Water
Method: MTBE (EPA 8020)

AA Project No.: A135063-62
Date Received: 10/14/99
Date Reported: 10/21/99
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
96094	Intermed.	10/07/99	10/18/99	120	5
96095	Effluent	10/07/99	10/18/99	11	5
96096	Influent	10/07/99	10/18/99	120	5

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: 10-07-99

PAGE 1 OF 1

AA Client	THRIFTY OIL CO.		Phone	562/932-3581	Sampler's Name	SERRATO P.			
Project Manager	JEFF SURYAKRUSUMA		P.O. No.		Sampler's Signature	<i>J. Suryakrusuma</i>			
Project Name	Q.U.C.		Project No.		Project Manager's Signature				
Job Name and Address	→ 063 6125 TELEGRAPH AVE OAKLAND, CA 94609		ANALYSIS REQUIRED						
AA ID #	Client's ID:	Date	Time	Sample Type	Number of Containers	Detection Limits	Test Requirements		
						TRY		BESTY	MARSH
960974	EFFLUENT	10/07/99	10:10	WATER	3	X X X	3 dilution 1:1 HCL ADDED		
960954	INTERMEDIATE	1	10:15	↑	3	X X X			
960961	INFLUENT		10:20	↓	3	X X X			
960977	TRIP BOTTLE	↓	7:30	↓	2	X X			
SAMPLE INTEGRITY TO BE FILLED IN BY RECEIVING LAB						Reinquished by:	Date	Time	Received by:
Samples Intact Yes _____ No _____						<i>C. Overnight</i>	10/07/99	17:00	C. OVERNIGHT
Samples Properly Cooled Yes _____ No _____						Reinquished by: <i>C. Overnight</i>	Date	Time	Received by:
Samples Accepted Yes _____ No _____						Reinquished by: <i>C. Overnight</i>	10/07/99	17:30	Received by:
If Not Why: _____						Reinquished by: <i>C. Overnight</i>	Date	Time	Received by: <i>C. Overnight</i>
AA Project No. A135063-62						Reinquished by:	Date	Time	Received by:

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

APPENDIX E

FROM : JHN-28 30 WED 10:46 1998 15:16 #255 P.02/02
JAN-28-98 WED 15:16
-----JAN-29-98 FRI 10:41 ID:ALAMEDA CO PUBLIC WK FAX NO:510/678-5262 P-02



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94541-2651
PHONE (510) 678-5575 ANDREAS GODFREY FAX (510) 678-5572
(510) 678-5262 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 6125 TELEGRAPH, AVE
OAKLAND, CALIFORNIA
THRIFTY SERVICE STATION #103

California Coordinates Source _____ R. Accuracy ± _____
CCN _____ R. GCE _____ R.
APN _____

CLIENT Name THRIFTY OIL CO ATTN: CHRIS PANAITESCI
Address 10000 WOODWOOD BLVD. Phone (310) 923-9376
City DOWNEY, CA Zip 90240

APPLICANT Name PACIFIC ENVIRONMENTAL GROUP, INC.
AT&T PLAZA, ELETRICAS Pm 140844 TS 39
Address 12025 GATEWAY PL STE 100 Phone (408) 441-1500
City SAN JOSE, CA Zip 95110

TYPE OF PROJECT

Well Construction Geotechnical Investigation
Cathodic Protection General
Water Supply Contamination
Monitoring Wall Destruction

PROPOSED WATER SUPPLY WELL USE

New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other _____

DRILLING METHOD:

Mud Rotary Air Rotary Auger
Cable Other OVERDRILL

DRILLER'S LICENSE NO.

CS7-672617
Mitchell Drilling

WELL PROJECTS

Drill Hole Diameter 75 in. Maximum Depth 30 ft.
Casing Diameter 2 in. Number _____
Surface Seal Depth 7 in.

GEOTECHNICAL PROJECTS

Number of Boring 1 in. Maximum Depth 10 ft.
Hole Diameter 10 in.

ESTIMATED STARTING DATE

1/30/98

ESTIMATED COMPLETION DATE

1/30/98

I hereby agree to comply with all requirements of this permit and
Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Alvin Kan DATE 1/29/98
Public Works Dept.

1998-02-25 15:16 #255 P.02/02

P-02
#255 P.02

FOR OFFICE USE

PERMIT NUMBER 98WR044
WELL NUMBER MW-2
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACWA office five days prior to proposed starting date.
2. Submit to ACWA within 50 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC

Fill hole above anode zone with concrete placed by tremie.

F. WALL DESTRUCTION

See attached.

G. SPECIAL CONDITIONS

APPROVED A. Kan

DATE 1/29/98