

THRIFTY OIL CO. ENVIRONMENTAL PROTECTION

97 MAR 26 PM 2:08

March 24, 1997

Ms. Madhulla Logan
Department of Environmental Health
1131 Harbor Bay Parkway
Room 250
Alameda, California 94502

RE: Thrifty Oil Company #052
20200 Hesperian Boulevard
Hayward, Ca
4th Quarter Report, 1996

Dear Ms. Logan:

Attached is the 4th Quarter Report 1996, for Thrifty Oil Company Station #052, 20200 Hesperian Boulevard, Hayward, Ca.

I certify under the penalty of law that this document and all attachments are prepared under my direction in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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

Respectfully,



PETER D'AMICO
Manager
Environmental Affairs



THRIFTY OIL CO.

March 21, 1997

Ms. Madhulla Logan
Department of Environmental Health
1131 Harbor Bay Parkway
Rm 250
Alameda, California 94502

RE: Thrifty Oil Co. Station #052
20200 Hesperian Boulevard
Hayward, California
4th QUARTER REPORT, 1996

Dear Ms. Logan,

This letter serves as a progress monitoring report for Thrifty Oil Co. Station #052 located at 20200 Hesperian Boulevard (**Figure 1**). This status report presents site monitoring efforts for the 4th quarter 1996. Thrifty Oil Co. has retained Earth Management Co. (EMC) to conduct quarterly monitoring and sampling activities at the site. The data collected by EMC is reported by Thrifty in-house environmental staff shown in **Table 1**.

GROUNDWATER MONITORING

Groundwater depth measurements were obtained from the on and off-site wells (**Figure 2**) by a representative from Earth Management Co. (EMC). An Oil Recovery Marine Moisture Tape was used to collect depth to groundwater information. The depth to groundwater data was recorded by EMC on a project status sheet. Copies of the project status reports for the site visits are presented in **Appendix A**.

GROUNDWATER SAMPLING

On October 29, 1996, each groundwater monitoring well was sounded for depth to groundwater and depth to well bottom by EMC personnel. With this information, the casing volume of each well was established for the purpose of sample collection. Groundwater was purged using a teflon bailer cleaned with a solution of Alconox and water. Purged water was stored in 55-gallon D.O.T. approved drums pending proper disposal.

Groundwater samples were collected after the groundwater recovered to at least 80 percent of its initial level after waiting at least two hours. Each sample was collected using a 350 cc teflon bailer. The collected sample was transferred into laboratory supplied vials, labeled and chilled until delivery to American Analytics for analysis. The water samples were logged on a Chain-of-



Custody form to be analyzed for total hydrocarbons (TPH) for gasoline and diesel using EPA method 8015, volatile aromatic compounds (BTEX) using EPA method 8020, and Methyl Tert Butyl Ether using EPA method 8020 modified. A copy of the chain-of-custody card and analytical results are presented in **Appendix B**.

FINDINGS

On October 29, 1996, depth to groundwater beneath the site ranged from 9.80 to 14.10 feet below ground surface. Using recent survey data and the depth to water information, the groundwater flow direction was estimated to be westerly and is shown on **Figure 2**. No free product, sheen, or film was noted on the groundwater in any of the wells in the sampling period.

Detectable concentrations of TPH were found in various groundwater samples collected which ranged from <50 to 670 ug/L. Benzene was also found ranging from <0.3 to 1.7 ug/L. MTBE was not detected at or above the value of 20 ug/L in any well sampled. The analytical results are shown in **Table 2**. **Figure 3** presents the TPH isoconcentrations, and **Figure 4** presents the Benzene isoconcentrations established during this reporting period.

CLEAN-UP STATUS

ARCO Products Company was undertaking the remediation process at this site with vapor extraction, air sparging and Groundwater treatment. On August 28, 1995 ARCO removed their remediation equipment from these premises, and Thrifty Oil Co. assumed control of the site remediation. As per our phone conversation, Thrifty and the Alameda County Health Department agreed that Thrifty should do at least two quarterly sampling periods before installing any remediation equipment on the site. This time frame gives Thrifty a chance to review the data and determine the most effective means for remediation of the site. Thrifty did not receive the historical data until the third quarter, therefore, it is not possible at this time to determine a remediation plan.

This is Thrifty's fourth quarterly report for this site and is now complete with all the historical data from the site. In the near future Thrifty will submit a closure report for the site.

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

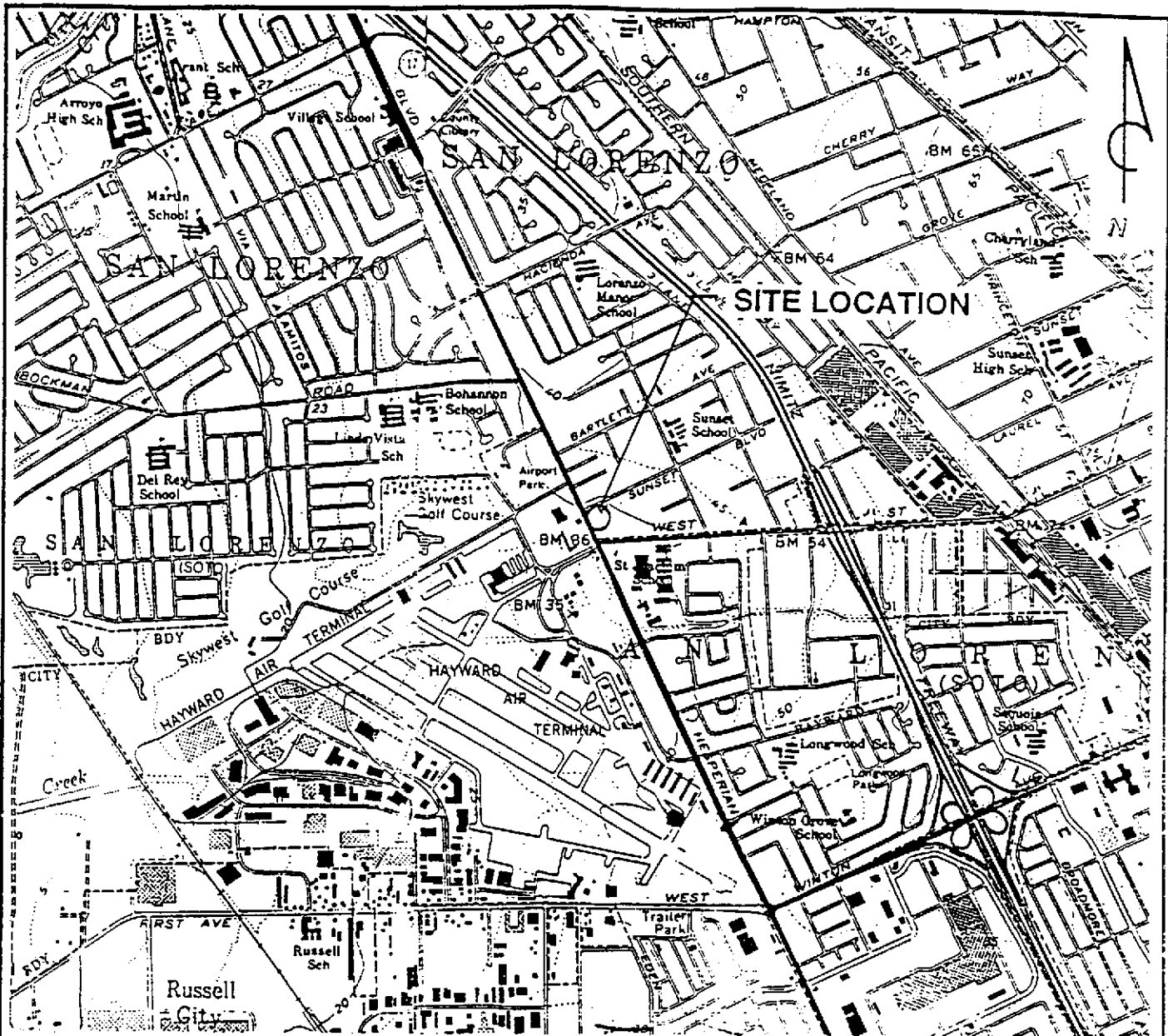
Respectfully,



Peter D'Amico
Manager
Environmental Affairs



FIGURES

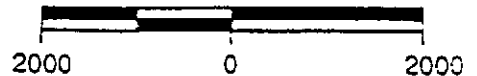


QUADRANGLE LOCATION

REFERENCES:

USGS 7.5 MIN. TOPOGRAPHIC MAP
 TITLED: HAYWARD, CALIFORNIA
 DATED: 1959 REVISED: 1980
 TITLED: SAN LEANDRO, CALIFORNIA
 DATED: 1959 REVISED: 1980

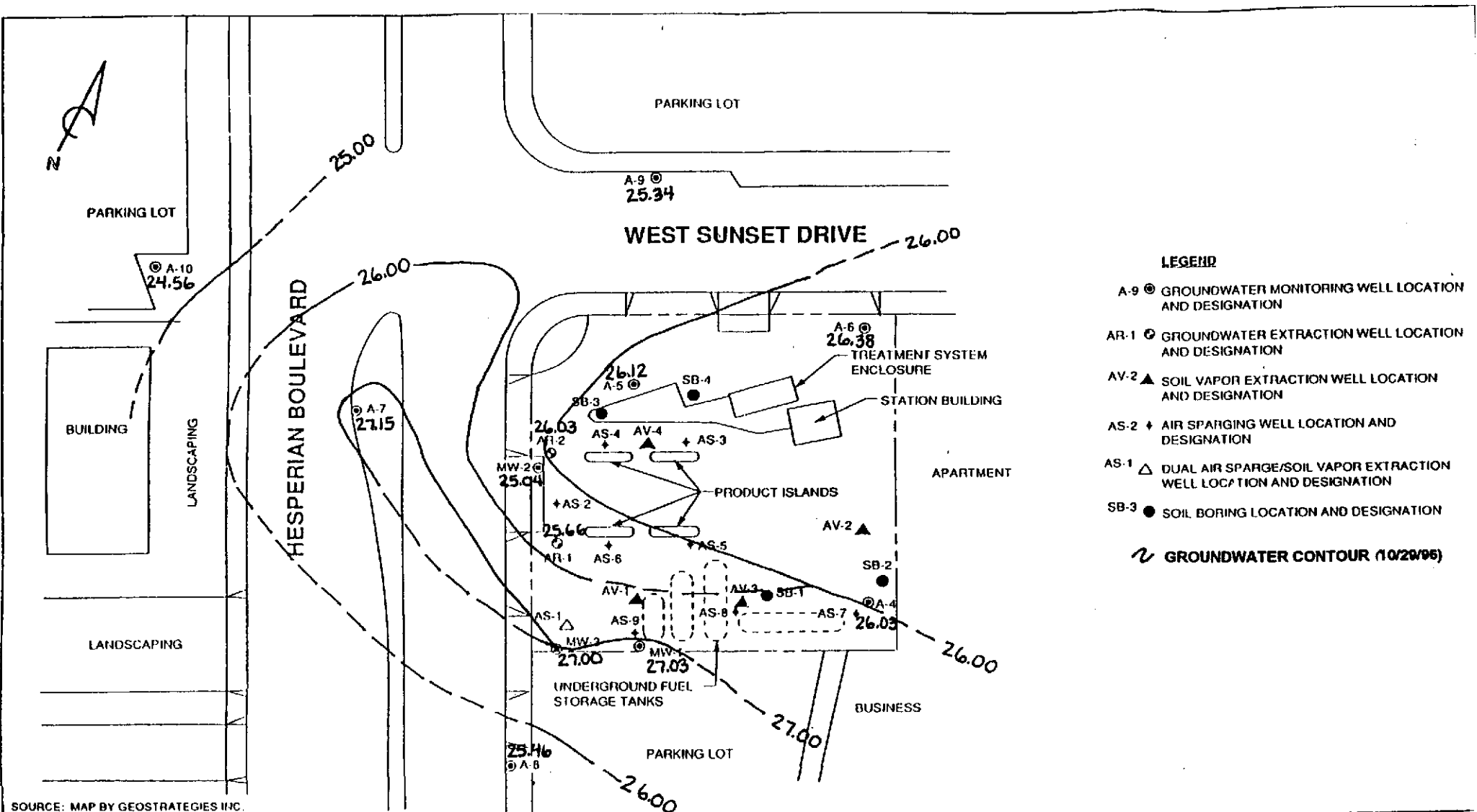
SCALE IN FEET



ARCO SERVICE STATION 5387
 20200 Hesperian Boulevard at West Sunset Drive
 Hayward, California

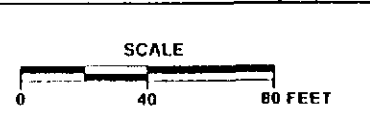
SITE LOCATION MAP

FIGURE:
 1
 PROJECT:
 330-110.5A



- LEGEND**
- A-9 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
 - AR-1 ● GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
 - AV-2 ▲ SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
 - AS-2 + AIR SPARGING WELL LOCATION AND DESIGNATION
 - AS-1 ▲ DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
 - SB-3 ● SOIL BORING LOCATION AND DESIGNATION
 - ~ GROUNDWATER CONTOUR (10/29/95)

SOURCE: MAP BY GEOSTRATEGIES INC.

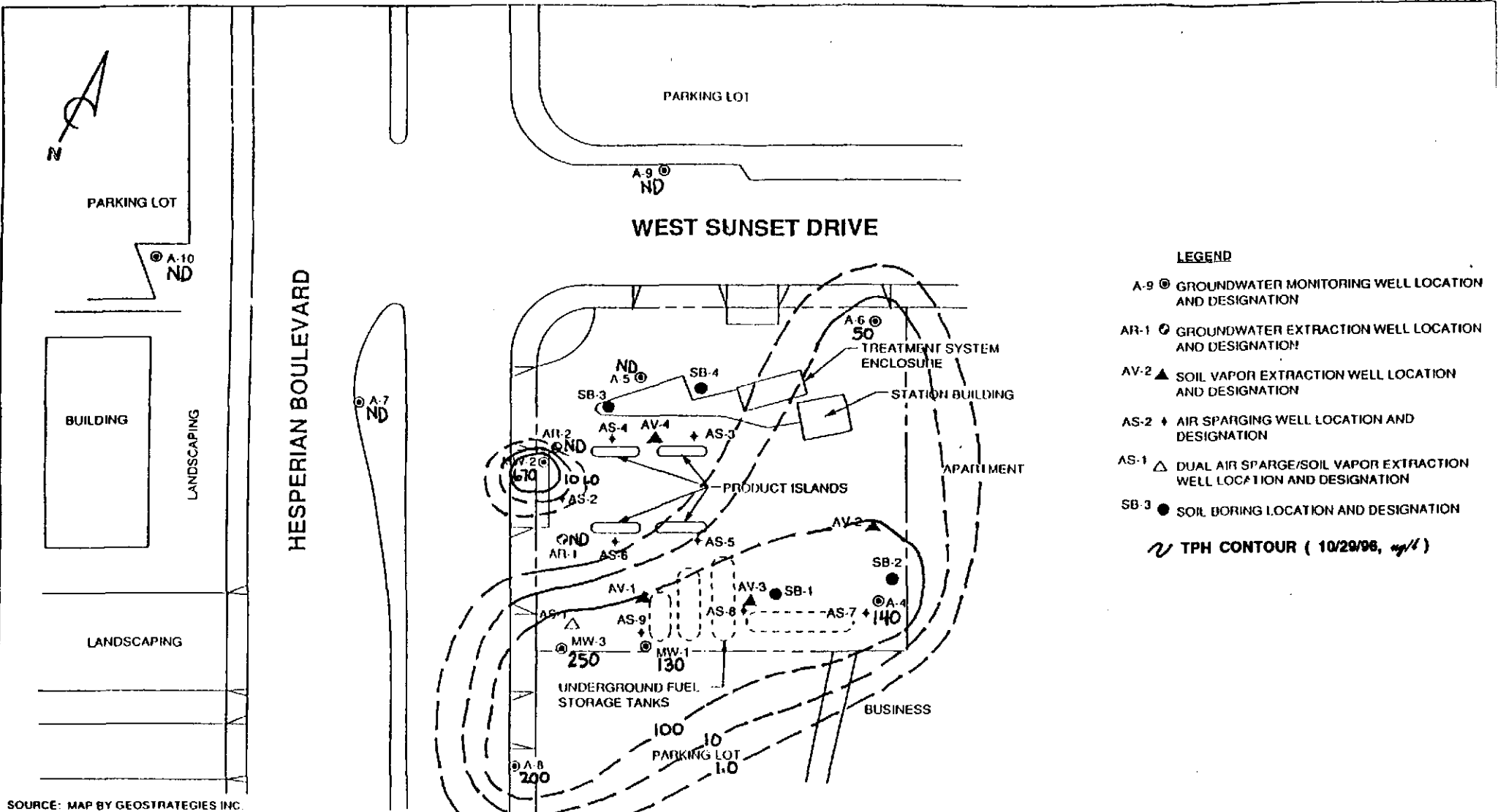


GROUNDWATER CONTOUR MAP

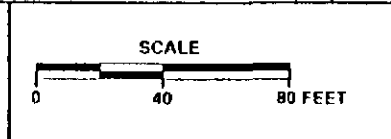
20200 Hesperian Boulevard at West Sunset Drive
Hayward, California

WELL LOCATION MAP

FIGURE
2



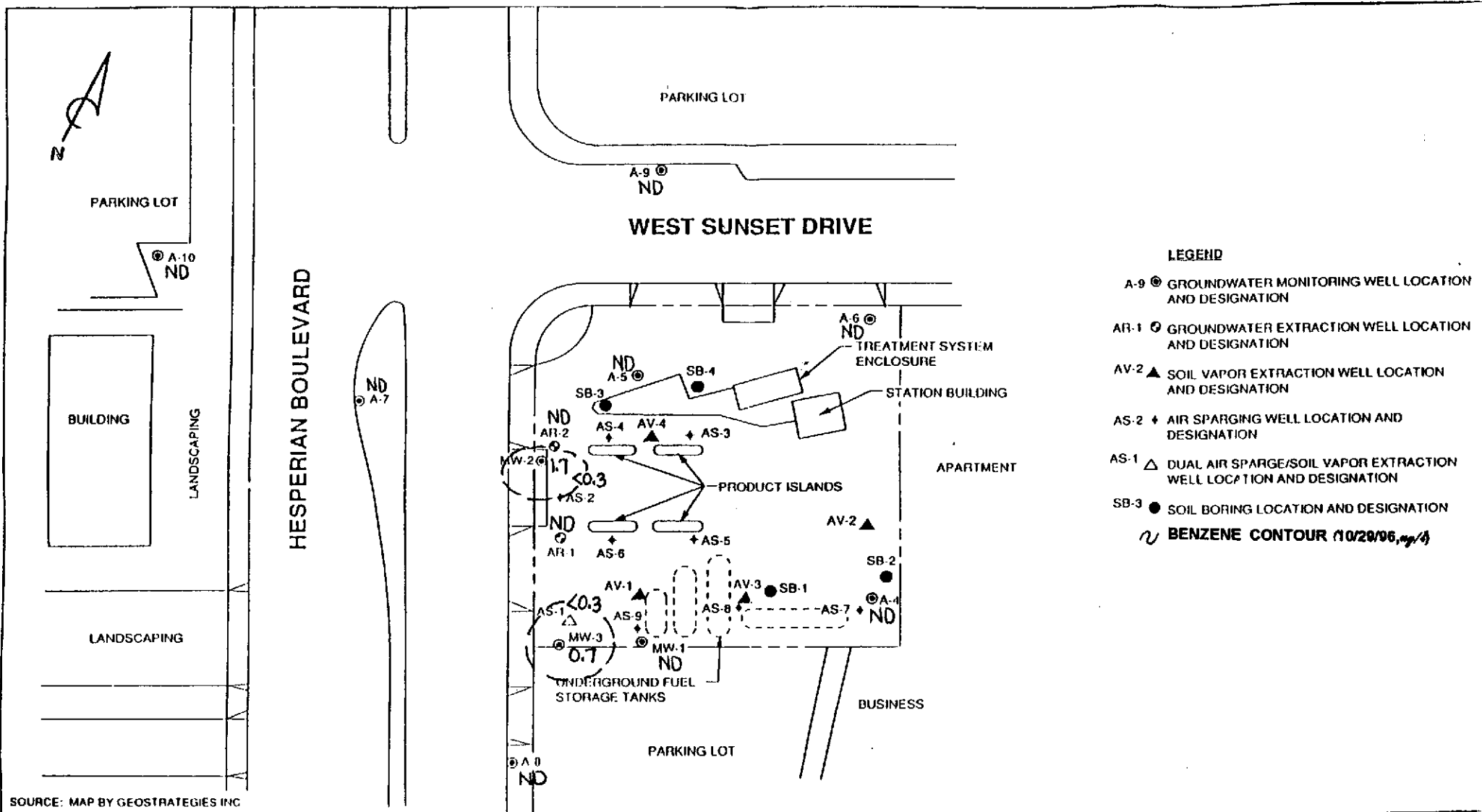
SOURCE: MAP BY GEOSTRATEGIES INC.



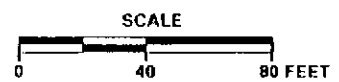
TPH-g (ppB) ISOCONCENTRATION DIAGRAM
 20200 Hesperian Boulevard at West Sunset Drive
 Hayward, California

WELL LOCATION MAP

FIGURE
3



SOURCE: MAP BY GEOSTRATEGIES INC



BENZENE (ppB) ISOCONCENTRATION DIAGRAM
 20200 Hesperian Boulevard at West Sunset Drive
 Hayward, California

FIGURE
4

WELL LOCATION MAP

TABLES

PROJECT STATUS REPORT

CLIENT: T.O.C.

LOCATION: SS #52

DATE: 10-29-96

OBSERVATION WELLS

ID	SWE	DTW	DTP	PT	CDTW	ELEV-W	DTB
A-4	39.53	13.50				26.03	34.40
A-5	38.47	12.35				26.12	29.20
A-6	38.78	12.40				26.38	34.25
A-7	39.38	12.23				27.15	34.85
A-8	36.76	11.30				25.46	33.60
A-9	38.19	12.85				25.34	33.50
A-10	38.66	14.10				24.56	34.15
AR-1	37.46	11.80				25.66	34.00
AR-2	37.98	11.95				26.03	34.60
MW-1	37.26	10.23				27.03	28.00
MW-2	37.99	12.95				25.04	26.40
MW-3	36.80	9.80				27.00	27.40

EXPLANATION

- SWE - Surveyed Well Elevation
- DTW - Depth to Water from Surface
- DTP - Depth to Product
- PT - Product Thickness
- CDTW - Corrected Depth to Water = $DTW - (.80 \times PT)$
- ELEV-W - Relative Elevation of Water
- DTB - Depth to Bottom

REMARKS: _____

DATA RECORDED BY: E.M.C.

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #052**

DATE SAMPLED	TPHg	TPHM	ANALYTICAL PARAMETERS					TOP OF CASING ELEVATION (feet)	DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CORRECTED GROUNDWATER ELEVATION (feet)
			BENZENE	TOLUENE	ETHYL-BENZENE	XYLENE	MTBE					
<i>Monitoring Well A-4</i>												
Mar 06, 1991	3400	NA	11000	870	2500	2100	NA	39.46	13.22	NP	0.00	26.24
Dec 24, 1991	1900	NA	29	1.9	25	29	NA	39.86*	17.60	NP	0.00	22.26
Mar 10, 1992	7400	NA	37	<0.60	11	73	NA	*	14.76	NP	0.00	25.1
Jun 9, 1992	4500	NA	3.2	1.5	37	16	NA	*	13.63	NP	0.00	24.23
Sep 14, 1992	1300	NA	<2.5	2.5	61	6.8	NA	*	16.83	NP	0.00	23.03
Nov 12, 1992	610	NA	7.2	0.98	34	0.97	NA	*	16.97	NP	0.00	22.89
Feb 11, 1993	740	NA	2.4	<0.5	5	3.5	NA	*	13.43	NP	0.00	26.43
Apr 14, 1993	380	NA	<0.5	<0.5	10	1.6	NA	*	13.06	NP	0.00	26.8
Aug 12, 1993	1200	NA	0.93	<0.5	0.91	<0.5	NA	*	14.94	NP	0.00	24.92
Oct 26, 1993	160	NA	<0.5	<0.5	1.0	<0.5	NA	*	13.52	NP	0.00	24.34
Feb 17, 1994	320	NA	0.5	<0.5	28	0.9	NA	39.46	14.02	NP	0.00	23.44
May 03, 1994	130	NA	<0.5	<0.5	1.1	<0.5	NA	*	13.85	NP	0.00	25.61
Aug 17, 1994	62	NA	<0.5	<0.5	<0.5	<0.5	NA	39.53	14.93	NP	0.00	24.58
Nov 18, 1994	98	NA	1.3	0.6	<0.5	<0.5	NA	*	14.46	NP	0.00	23.07
Dec 6, 1995	ND	NA	0.6	ND	ND	ND	NA	*	13.82	NP	0.00	23.64
Feb 14, 1996	ND	ND	ND	2.3	ND	0.71	ND	*	11.24	NP	0.00	28.22
Oct 29, 1996	140	NA	ND	ND	ND	ND	ND	*	13.50	NP	0.00	26.03
<i>Monitoring Well A-5</i>												
Dec 24, 1991	1600	NA	21	<0.30	32	52	NA	<38.94*	16.85	NP	0.00	22.09
Mar 10, 1992	1000	NA	1.6	<0.30	43	100	NA	*	13.83	NP	0.00	25.11
Jun 9, 1992	680	NA	34	<1.5	34	16	NA	*	14.91	NP	0.00	24.03
Sep 14, 1992	770	NA	12	<0.3	51	65	NA	*	16.14	NP	0.00	22.8
Nov 12, 1992	520	NA	3	<2.5	29	36	NA	*	16.35	NP	0.00	22.59
Feb 11, 1993	150	NA	1.6	0.96	5.1	1.5	NA	*	13.21	NP	0.00	25.73
Apr 14, 1993	190	NA	5.4	<0.5	1.5	0.97	NA	*	12.97	NP	0.00	25.97
Aug 12, 1993	230	NA	1.7	<0.5	5.3	0.94	NA	*	14.12	NP	0.00	24.82
Oct 26, 1993	190	NA	2.8	<0.5	5.5	2.0	NA	*	14.72	NP	0.00	24.22
Feb 17, 1994	340	NA	<0.5	<0.5	13	2.9	NA	38.47	13.20	NP	0.00	25.27
May 03, 1994	170	NA	1.4	<0.5	4.0	1.9	NA	*	13.08	NP	0.00	23.39
Aug 17, 1994	270	NA	0.6	<0.5	7.3	1.1	NA	38.54	14.18	NP	0.00	24.36
Nov 18, 1994	338	NA	<0.5	<0.5	4.6	<0.5	NA	*	13.73	NP	0.00	24.81
Sep 26, 1995	ND	NA	0.63	1.1	ND	1.3	NA	38.47	12.44	NP	0.00	26.03
Dec 6, 1995	ND	NA	ND	ND	ND	ND	NA	*	12.92	NP	0.00	23.55
Feb 14, 1996	ND	ND	ND	2.0	ND	1.1	ND	*	10.76	NP	0.00	27.71
Oct 29, 1996	ND	NA	ND	ND	ND	ND	ND	*	12.35	NP	0.00	26.12
<i>Monitoring Well A-6</i>												
Dec 24, 1991	<30	NA	<0.3	<0.3	<0.3	<0.3	NA	39.07*	16.88	NP	0.00	22.19
Mar 10, 1992	<30	NA	<0.3	<0.3	<0.3	<0.3	NA	*	13.73	NP	0.00	23.34
Jun 9, 1992	<30	NA	<0.3	<0.3	<0.3	<0.3	NA	*	14.95	NP	0.00	24.12
Sep 14, 1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	16.2	NP	0.00	22.87
Nov 12, 1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	16.35	NP	0.00	22.72
Feb 11, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	13.04	NP	0.00	26.03
Apr 14, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	12.23	NP	0.00	26.84
Aug 12, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	14.18	NP	0.00	24.89
Oct 26, 1993	<50	NA	<0.5	<0.3	<0.5	<0.5	NA	*	14.85	NP	0.00	24.22
Feb 17, 1994	NM	NA					NA	*	NM	NP	0.00	NM
May 03, 1994	<50	NA	<0.5	<0.3	<0.5	<0.5	NA	*	13.66	NP	0.00	25.41
Aug 17, 1994	<50	NA	<0.5	<0.3	<0.5	<0.5	NA	38.78	14.34	NP	0.00	24.44
Nov 18, 1994	<50	NA	<0.5	<0.3	<0.5	<0.5	NA	*	13.76	NP	0.00	25.02
Sep 26, 1995	ND	NA	ND	ND	ND	ND	NA	38.78	12.56	NP	0.00	25.26
Dec 6, 1995	ND	NA	ND	ND	ND	ND	NA	*	13.18	NP	0.00	25.60
Feb 14, 1996	ND	ND	ND	2.0	ND	ND	ND	*	12.46	NP	0.00	26.32
Oct 29, 1996	50	NA	ND	ND	ND	ND	ND	*	12.40	NP	0.00	26.38

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #052**

DATE SAMPLED	TPH _g	TPH _l	ANALYTICAL PARAMETERS					TOP OF CASING ELEVATION (feet)	DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CORRECTED GROUNDWATER ELEVATION (feet)
			BENZENE	TOLUENE	ETHYL-BENZENE	XYLENE	MIBE					
<i>Monitoring Well A-7</i>												
Dec 24, 1991	10000	NA	88	16	170	610	NA	39.95*	18.11	NP	0.00	21.84
Mar 18, 1992	320	NA	9.3	0.54	8.8	34	NA	*	15.30	NP	0.00	24.63
Jun 9, 1992	340	NA	11	1.1	8.9	26	NA	*	16.12	NP	0.00	23.83
Sep 14, 1992	510	NA	12	<2.0	30	51	NA	*	17.35	NP	0.00	22.60
Nov 12, 1992	760	NA	17	0.83	50	73	NA	*	17.47	NP	0.00	22.48
Feb 11, 1993	260	NA	20	1	11	21	NA	*	13.80	NP	0.00	26.13
Apr 14, 1993	1300	NA	89	2.1	48	87	NA	*	13.60	NP	0.00	26.35
Aug 12, 1993	360	NA	9	<0.30	13	9.8	NA	*	13.54	NP	0.00	24.41
Oct 26, 1993	99	NA	1.7	<0.30	4.0	3.0	NA	*	16.28	NP	0.00	23.67
Feb 17, 1994	1300	NA	38	<1	35	25	NA	39.38	14.44	NP	0.00	24.94
May 03, 1994	330	NA	8.1	<0.5	7.8	3.7	NA	*	14.34	NP	0.00	25.04
Aug 17, 1994	350	NA	2.2	<0.5	9.6	3.6	NA	39.45	13.40	NP	0.00	24.05
Nov 18, 1994	412	NA	1.3	<0.5	6.2	2.0	NA	*	14.95	NP	0.00	24.50
Sep 26, 1995	ND	NA	ND	ND	ND	ND	NA	39.38	13.92	NP	0.00	25.46
Dec 6, 1995	ND	NA	ND	ND	ND	ND	NA	*	14.42	NP	0.00	24.96
Feb 14, 1996	ND	ND	ND	1.1	ND	0.59	ND	*	12.38	NP	0.00	27.00
Oct 29, 1996	ND	NA	ND	ND	ND	ND	ND	*	12.33	NP	0.00	27.15
<i>Monitoring Well A-8</i>												
Sep 14, 1992	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	37.23*	14.19	NP	0.00	23.04
Nov 12, 1992	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	*	14.35	NP	0.00	22.88
Feb 11, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	*	11.25	NP	0.00	23.98
Apr 14, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	*	12.33	NP	0.00	24.90
Aug 12, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	*	12.41	NP	0.00	24.82
Oct 26, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	*	13.02	NP	0.00	24.21
Feb 17, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	36.76	11.47	NP	0.00	23.29
May 03, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	ND	*	11.35	NP	0.00	23.41
Aug 17, 1994	<50	NA	<0.5	1.7	<0.5	1.4	ND	36.84	12.34	NP	0.00	24.50
Nov 18, 1994	<50	NA	1.0	<0.5	<0.5	<0.5	ND	*	11.9	NP	0.00	24.94
Sep 26, 1995	ND	NA	ND	ND	ND	ND	NA	36.76	10.94	NP	0.00	23.82
Dec 6, 1995	ND	NA	ND	ND	ND	ND	NA	*	11.42	NP	0.00	25.34
Feb 14, 1996	ND	ND	ND	0.48	ND	ND	ND	*	8.80	NP	0.00	27.96
Oct 29, 1996	200	NA	ND	ND	ND	ND	ND	*	11.30	NP	0.00	23.46
<i>Monitoring Well A-9</i>												
Sep 14, 1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	38.71*	16.12	NP	0.00	22.59
Nov 12, 1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	16.29	NP	0.00	22.42
Feb 11, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	12.31	NP	0.00	26.40
Apr 14, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	12.01	NP	0.00	26.70
Aug 12, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	13.90	NP	0.00	24.81
Oct 26, 1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	14.86	NP	0.00	23.85
Feb 17, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	38.19	12.99	NP	0.00	25.20
May 03, 1994	ND	NA	ND	ND	ND	ND	NA	*	ND	ND	0.00	ND
Aug 17, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	38.24	14.03	NP	0.00	24.21
Nov 18, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	13.44	NP	0.00	24.80
Sep 26, 1995	ND	NA	<0.5	ND	ND	ND	NA	38.10	12.43	NP	0.00	25.76
Dec 6, 1995	ND	NA	<0.5	ND	ND	ND	NA	*	13.14	NP	0.00	25.05
Feb 14, 1996	ND	ND	ND	1.8	0.49	0.82	ND	*	9.05	NP	0.00	29.14
Oct 29, 1996	ND	NA	ND	ND	ND	ND	ND	*	12.85	NP	0.00	25.34
<i>Monitoring Well A-10</i>												
Dec 07, 1992	660	NA	30	<2.5	<2.5	<2.5	NA	38.94*	16.81	NP	0.00	22.13
Feb 11, 1993	210	NA	<0.5	0.97	<0.5	<0.5	NA	*	13.15	NP	0.00	25.79
Apr 14, 1993	770	NA	<0.5	3.0	0.76	1.9	NA	*	12.93	NP	0.00	26.01
Aug 12, 1993	390	NA	<0.5	<0.5	<0.5	0.84	NA	*	14.87	NP	0.00	24.07
Oct 26, 1993	290	NA	<0.5	<0.5	<0.5	<0.5	NA	*	15.65	NP	0.00	23.29
Feb 17, 1994	52	NA	<0.5	<0.5	<0.5	<0.5	NA	38.66	14.16	NP	0.00	24.50
May 03, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	14.00	NP	0.00	24.66
Aug 17, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	38.72	13.08	NP	0.00	23.64
Nov 18, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	*	14.68	NP	0.00	24.04
Sep 26, 1995	ND	NA	ND	ND	ND	ND	NA	38.66	13.58	NP	0.00	25.08
Dec 6, 1995	ND	NA	ND	ND	ND	ND	NA	*	14.24	NP	0.00	24.42
Feb 14, 1996	ND	ND	ND	ND	ND	ND	ND	*	6.70	NP	0.00	31.96
Oct 29, 1996	ND	NA	ND	ND	ND	1.1	ND	*	14.10	NP	0.00	24.56

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #052**

DATE SAMPLED	TPEg	TPEM	ANALYTICAL PARAMETERS					TOP OF CASING ELEVATION (feet)	DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CORRECTED GROUNDWATER ELEVATION (feet)
			BENZENE	TOLUENE	ETHYL-BENZENE	XYLENE	MIBE					
<i>Monitoring Well AR-1</i>												
Sep 14, 1992	820	NA	67	<1.0	8.8	6.7	NA	38.11*	15.21	NP	0.00	22.90
Nov 12, 1992	140	NA	66	<0.50	4.3	3.7	NA	*	15.36	NP	0.00	22.75
Feb 11, 1993	360	NA	190	<2.5	8.6	<2.5	NA	*	12.81	NP	0.00	25.30
Apr 14, 1993	420	NA	240	5.2	30	8.7	NA	*	11.77	NP	0.00	26.34
Aug 12, 1993	370	NA	150	<2	11	<2	NA	*	13.55	NP	0.00	24.56
Oct 26, 1993	240	NA	98	<2	11	<2	NA	*	13.98	NP	0.00	24.13
Feb 17, 1994	4700	NA	1100	<10	140	26	NA	37.46	12.15	NP	0.00	25.31
May 03, 1994	620	NA	130	1.3	48	4.3	NA	NA	12.03	NP	0.00	25.43
Aug 17, 1994	3600	NA	630	<5**	200	12	NA	37.33	12.92	NP	0.00	24.41
Nov 18, 1994	12100	NA	720	6.1	337	15	NA	NA	12.41	NP	0.00	24.92
Sep 26, 1995	ND	NA	8.3	ND	ND	ND	NA	37.46	11.34	NP	0.00	26.12
Dec 6, 1995	120	NA	20	ND	20	0.6	NA	NA	11.87	NP	0.00	25.59
Feb 14, 1996	ND	ND	ND	0.99	ND	0.52	ND	ND	10.48	NP	0.00	26.98
Oct 29, 1996	ND	NA	ND	ND	ND	ND	ND	ND	11.80	NP	0.00	25.66
<i>Monitoring Well AR-2</i>												
Mar 30, 1993	390	NA	4.1	1.6	<0.5	47	NA	38.39*	11.53	NP	0.00	26.86
Apr 14, 1993	310	NA	18	<0.5	0.67	36	NA	*	11.87	NP	0.00	26.52
Aug 12, 1993	130	NA	16	<0.5	1.7	0.57	NA	*	13.59	NP	0.00	24.80
Oct 26, 1993	110	NA	15	<0.5	1.8	<0.5	NA	*	14.25	NP	0.00	24.14
Feb 17, 1994	130	NA	2.9	<0.5	15	0.8	NA	37.98	12.76	NP	0.00	25.22
May 03, 1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	12.60	NP	0.00	25.38
Aug 17, 1994	3000	NA	140	<5**	220	91	NA	38.18	13.86	NP	0.00	24.32
Nov 18, 1994	623	NA	10.5	<0.5	27.9	8.0	NA	NA	13.33	NP	0.00	24.85
Sep 26, 1995	ND	NA	ND	ND	ND	ND	NA	37.98	11.67	NP	0.00	26.31
Dec 6, 1995	320	NA	12	ND	23	2.1	NA	NA	12.32	NP	0.00	25.66
Feb 14, 1996	ND	ND	ND	0.53	ND	0.76	ND	ND	10.74	NP	0.00	27.24
Oct 29, 1996	ND	NA	ND	ND	ND	ND	ND	ND	11.95	NP	0.00	26.03
<i>Monitoring Well MW-1</i>												
Aug 08, 1986	7040	NA	132	8.7	439	230	NA	38.36*	11.25	NP	0.00	27.11
Dec 24, 1991	2200	NA	190	8.5	6.9	2.6	NA	*	16.12	NP	0.00	22.24
Mar 10, 1992	2800	NA	170	29	56	39	NA	*	13.34	NP	0.00	25.02
Jun 9, 1992	2900	NA	960	27	99	63	NA	*	14.12	NP	0.00	24.24
Sep 14, 1992	2600	NA	450	<5.0	45	21	NA	*	15.34	NP	0.00	23.02
Nov 12, 1992	1600	NA	310	7.2	22	8.9	NA	*	15.46	NP	0.00	22.90
Feb 11, 1993	4000	NA	510	47	200	91	NA	*	11.95	NP	0.00	26.41
Apr 14, 1993	1700	NA	260	20	100	70	NA	*	11.65	NP	0.00	26.71
Aug 12, 1993	830	NA	60	3.8	39	3.6	NA	*	12.93	NP	0.00	25.43
Oct 26, 1993	8800	NA	140	<10	41	<10	NA	*	14.13	NP	0.00	24.23
Feb 17, 1994	1200	NA	130	12	54	38	NA	37.26	11.86	NP	0.00	25.40
May 03, 1994	NA	NA	NA	NA	NA	NA	NA	NA	11.58	NP	0.00	25.68
Aug 17, 1994	3900	NA	86	5.1	78	9.4	NA	37.33	12.78	NP	0.00	24.55
Nov 18, 1994	6350	NA	112	8.4	107	35	NA	NA	12.31	NP	0.00	25.02
Sep 26, 1995	ND	NA	ND	ND	ND	ND	NA	37.26	11.26	NP	0.00	26.00
Dec 6, 1995	4100	NA	0.86	0.46	0.38	0.92	NA	NA	12.16	NP	0.00	25.10
Feb 14, 1996	ND	ND	ND	0.56	ND	0.82	ND	ND	8.53	NP	0.00	28.73
Oct 29, 1996	130	NA	ND	ND	ND	ND	ND	ND	10.23	NP	0.00	27.03

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #052

DATE SAMPLED	TPH _g	TPH _h	ANALYTICAL PARAMETERS					TOP OF CASING ELEVATION (feet)	DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CORRECTED GROUNDWATER ELEVATION (feet)
			BENZENE	TOLUENE	ETHYL- BENZENE	XYLENE	MTBE					
<i>Monitoring Well MW-2</i>												
Aug 08, 1986	1910	NA	20.1	2.8	1.8	NA	NA	38.58*	11.62	NP	0.00	26.96
Dec 24, 1991	23000	NA	1500	1100	480	1400	NA	*	16.50	NP	0.00	22.08
Mar 10, 1992	210000	NA	44000	3900	1700	5800	NA	*	13.50	NP	0.00	25.08
Jun 09, 1992	33000	NA	2300	370	780	2600	NA	*	14.52	NP	0.00	24.06
Sep 14, 1992	16000	NA	3700	100	470	1000	NA	*	15.78	NP	0.00	22.80
Nov 12, 1992	16000	NA	3800	86	470	910	NA	*	15.98	NP	0.00	22.60
Feb 11, 1993	27000	NA	3500	720	1600	3800	NA	*	12.27	NP	0.00	26.31
Apr 14, 1993	27000	NA	3500	220	2200	5100	NA	*	12.01	NP	0.00	26.57
Aug 12, 1993	16000	NA	1600	27	1300	1200	NA	*	13.81	NP	0.00	24.77
Oct 26, 1993	12000	NA	1200	<2.5	510	330	NA	*	14.53	NP	0.00	24.05
Feb 17, 1994	13000	NA	1800	21	850	540	NA	*	12.81	NP	0.00	25.18
May 03, 1994	NA	NA	NA	NA	NA	NA	NA	*	12.63	NP	0.00	25.36
Aug 17, 1994	14000	NA	850	13	640	270	NA	37.99	13.69	NP	0.00	24.37
Aug 17, 1994 (14000	NA	860	14	630	280	NA	*		NP	0.00	
Nov 18, 1994	14900	NA	640	3.4	532	156	NA	38.06	13.18	NP	0.00	27.88
Nov 18, 1994 (14500	NA	680	6.1	528	155	NA	*		NP	0.00	
Sep 26, 1995	3100	NA	40	25	2.5	18	NA	37.99	12.23	NP	0.00	25.76
Dec 6, 1995	810	NA	34	23	11	11	NA		12.82	NP	0.00	25.17
Feb 14, 1996	420	5500	0.75	.54	0.64	.53	ND		10.87	NP	0.00	23.12
Oct 29, 1996	670	NA	1.7	1.3	0.6	0.8	ND		12.95	NP	0.00	25.04
<i>Monitoring Well MW-3</i>												
Aug 08, 1986	7450	NA	510	549	409	1380	NA	37.77*	10.61	NP	0.00	27.16
Dec 24, 1991	6800	NA	450	10	610	45	NA	*	15.60	NP	0.00	22.17
Mar 10, 1992	11000	NA	2500	75	400	560	NA	*	12.90	NP	0.00	24.87
Jun 9, 1992	16000	NA	2000	69	1300	2600	NA	*	13.60	NP	0.00	24.17
Sep 14, 1992	14000	NA	630	<30	1500	2400	NA	*	14.78	NP	0.00	22.99
Nov 12, 1992	7400	NA	400	<2.5	860	330	NA	*	14.92	NP	0.00	22.85
Feb 11, 1993	8600	NA	580	<2.0	710	300	NA	*	11.65	NP	0.00	26.12
Apr 14, 1993	6900	NA	300	8.8	580	99	NA	*	11.16	NP	0.00	26.61
Aug 12, 1993	3400	NA	56	<5	190	<5	NA	*	12.82	NP	0.00	24.95
Oct 26, 1993	2900	NA	42	<1.0	76	<1.0	NA	*	13.60	NP	0.00	24.17
Feb 17, 1994	3100	NA	160	<1.0	36	8.6	NA	36.80	11.53	NP	0.00	25.27
May 03, 1994	2300	NA	44	<2.5	8.0	<2.5	NA		11.36	NP	0.00	25.44
Aug 17, 1994	1900	NA	7.0	<0.5*	4.4	<0.5**	NA	36.87	12.38	NP	0.00	24.49
Nov 18, 1994	909	NA	1.1	<0.5	0.9	4.0	NA		11.93	NP	0.00	24.94
Sep 26, 1995	410	NA	1.3	1.9	2.3	3.3	NA	36.80	10.96	NP	0.00	25.84
Dec 6, 1995	ND	NA	0.9	4.6	3.0	4.3	NA		11.56	NP	0.00	25.24
Feb 14, 1996	99	1500	ND	0.49	0.46	ND	ND		7.47	NP	0.00	29.33
Oct 29, 1996	250	NA	0.7	0.6	ND	ND	ND		9.80	NP	0.00	27.00

Benzene, toluene, ethylbenzene, and xylene analyzed by EPA method 8020 and concentrations reported in ug/L.

Total petroleum hydrocarbons analyzed by EPA method 8015 for Gasoline (TPH_g) and Diesel (TPH_h) and concentrations reported in ug/L.

Methyl Tertiary Butyl Ether (MTBE) analyzed by EPA method 8020 modified and concentrations reported in ug/L.

*Measurement taken from top of well box.

(D) - Duplicate sample

NA - not analyzed

ND - not detected

- - No data

NP - Not monitored

NP - No free hydrocarbon product detected.

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

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

(Table 2 Continued)

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

APPENDIX A



PROJECT STATUS REPORT
 THRIFTY OIL CO. S.S. #052
 20200 HESPERIAN BLVD.
 HAYWARD, CALIF. 94541

DATE: 10-29-1996

OBSERVATION WELLS

NO.	DTW	DTP	PT	DTB	DIA.	ODORS			F/P	
						YES	NO	S	YES	NO
A-4	13.50			34.40	3"		X			X
A-5	12.35			29.20	3"		X			X
A-6	12.40			34.25	3"		X			X
A-7	12.23			34.85	3"		X			X
A-8	11.30			33.60	2"		X			X
A-9	12.85			33.50	2"		X			X
A-10	14.10			34.15	2"		X			X
AR-1	11.80			34.00	6"		X			X
AR-2	11.95			34.60	6"		X			X
MW-1	10.23			29.00	2"		X			X
MW-2	12.95			26.40	2"		X			X
MW-3	9.80			27.40	2"		X			X

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE S - SLIGHT DTP - DEPTH TO PRODUCT FROM SURFACE
 PT - PRODUCT THICKNESS DTB - DEPTH TO BOTTOM DIA. - DIAMETER
 MEASUREMENTS IN FEET
 REMARKS: _____
 FREE PRODUCT REMOVED: APPROX. _____ GALLONS WATER REMOVED: APPROX. 450 GALLONS
 DATA RECORDED BY: [Signature] INPUT BY: _____

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 052</u>	Date <u>10-24-1996</u>
Address _____	
Personnel <u>SERBANY P-</u>	Weather <u>SUNNY DAY</u>
Well No. <u>A-4</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>34.40</u>	ft.	Well Diameter <u>3⁴</u>
Depth to Water	<u>13.50</u>	ft.	Est. Purge Vol. <u>30¹</u>

Sampling Data						
	Initial Turbidity			Final Turbidity		
Time	<u>11:33</u>	<u>11:39</u>	<u>11:44</u>	<u>11:50</u>	<u>11:57</u>	<u>12:05</u>
EC	<u>1480</u>	<u>1470</u>	<u>1460</u>	<u>1450</u>	<u>1460</u>	<u>1460</u>
pH	<u>6.41</u>	<u>6.39</u>	<u>6.37</u>	<u>6.33</u>	<u>6.31</u>	<u>6.29</u>
Temp	<u>71.3</u>	<u>71.1</u>	<u>70.9</u>	<u>70.7</u>	<u>70.6</u>	<u>70.5</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 Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____
	ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site	00 # 052	Date	10-29-1996
Address			
Personnel	SERRAN P.	Weather	SUNNY DAY
Well No.	A-5	Equip.	BAILER

Before Purging			
Total Well Depth	29.20	ft.	Well Diameter
			3'
Depth to Water	12.35	ft.	Est. Purge Vol.
			24

Sampling Data						
Initial Turbidity			Final Turbidity			
Time	12:15	12:20	12:25	12:28	12:34	12:40
EC	1680	1660	1670	1640	1630	1640
pH	6.21	6.19	6.16	6.13	6.09	6.07
Temp	71.5	71.3	71.1	70.9	70.7	70.5
Gal	4	8	12	16	20	24
Time						
EC						
pH						
Temp						
Gal.						

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SD # 052</u>	Date <u>10-29-1991</u>
Address _____	
Personnel <u>SERBAN P.</u>	Weather <u>SUNNY DAY</u>
Well No. <u>A-6</u>	Equip. <u>BAILER</u>

Before Purging				
Total Well Depth	<u>34.25</u>	ft.	Well Diameter	<u>3⁴</u>
Depth to Water	<u>12.40</u>	ft.	Est. Purge Vol.	<u>31</u>

Sampling Data						
Initial Turbidity						Final Turbidity
Time	<u>13:05</u>	<u>13:09</u>	<u>13:14</u>	<u>13:18</u>	<u>13:23</u>	<u>13:30</u>
EC	<u>720</u>	<u>710</u>	<u>690</u>	<u>670</u>	<u>660</u>	<u>630</u>
pH	<u>6.18</u>	<u>6.13</u>	<u>6.09</u>	<u>6.03</u>	<u>5.93</u>	<u>2.89</u>
Temp	<u>71.1</u>	<u>70.9</u>	<u>70.6</u>	<u>70.4</u>	<u>70.1</u>	<u>69.4</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 Purging/Before Sample Collection		
Depth to Water	_____	ft.
Total Well Depth	_____	ft.

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 052</u>	Date <u>10-29-1991</u>
Address _____	
Personnel <u>SERBAN P.</u>	Weather <u>SUNNY DAY</u>
Well No. <u>A-7</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>34.85</u>	ft.	Well Diameter <u>3"</u>
Depth to Water	<u>12.23</u>	ft.	Est. Purge Vol. <u>33</u>

Sampling Data						
Initial Turbidity				Final Turbidity		
Time	<u>13:42</u>	<u>13:48</u>	<u>13:54</u>	<u>14:01</u>	<u>14:08</u>	<u>14:15</u>
EC	<u>2110</u>	<u>2100</u>	<u>1990</u>	<u>1970</u>	<u>1940</u>	<u>1920</u>
pH	<u>6.22</u>	<u>6.18</u>	<u>6.13</u>	<u>6.09</u>	<u>6.05</u>	<u>6.03</u>
Temp	<u>71.3</u>	<u>71.1</u>	<u>70.9</u>	<u>70.8</u>	<u>70.7</u>	<u>70.5</u>
Gal.	<u>5</u>	<u>11</u>	<u>16</u>	<u>22</u>	<u>27</u>	<u>33</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site SS# 052 Date 10-29-1991
Address _____
Personnel SERBAN D. Weather SUNNY DAY
Well No. A-8 Equip. BAILER

Before Purging
Total Well Depth 33.60 ft. Well Diameter 2"
Depth to Water 11.30 ft. Est. Purge Vol. 14

Sampling Data

	Initial Turbidity		Final Turbidity			
Time	<u>14:14</u>	<u>14:17</u>	<u>14:20</u>	<u>14:23</u>	<u>14:26</u>	<u>14:30</u>
EC	<u>1710</u>	<u>1690</u>	<u>1680</u>	<u>1670</u>	<u>1660</u>	<u>1660</u>
pH	<u>6.13</u>	<u>6.09</u>	<u>6.07</u>	<u>6.07</u>	<u>6.03</u>	<u>5.97</u>
Temp	<u>70.1</u>	<u>69.9</u>	<u>69.7</u>	<u>69.6</u>	<u>69.4</u>	<u>69.3</u>
Gal.	<u>2</u>	<u>4</u>	<u>6</u>	<u>9</u>	<u>11</u>	<u>14</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SD # 052</u>	Date <u>10-29-1991</u>
Address _____	
Personnel <u>SERBATA P.</u>	Weather <u>SUNNY DAY</u>
Well No. <u>A-9</u>	Equip. <u>BHILLER</u>

Before Purging			
Total Well Depth	<u>33.50</u>	ft.	Well Diameter <u>2"</u>
Depth to Water	<u>12.85</u>	ft.	Est. Purge Vol. <u>13</u>

Sampling Data						
	Initial Turbidity			Final Turbidity		
Time	<u>14:38</u>	<u>14:40</u>	<u>14:42</u>	<u>14:44</u>	<u>14:47</u>	<u>14:50</u>
EC	<u>680</u>	<u>660</u>	<u>630</u>	<u>610</u>	<u>580</u>	<u>540</u>
pH	<u>6.09</u>	<u>6.05</u>	<u>6.01</u>	<u>5.97</u>	<u>5.93</u>	<u>5.91</u>
Temp	<u>71.3</u>	<u>71.1</u>	<u>70.9</u>	<u>70.7</u>	<u>70.4</u>	<u>70.1</u>
Gal.	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>10</u>	<u>13</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SB # 052</u>	Date <u>10-29-1996</u>
Address _____	
Personnel <u>SERBAN D.</u>	Weather <u>SUNNY DAY</u>
Well No. <u>A-10</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>34.15</u>	ft.	Well Diameter <u>2"</u>
Depth to Water	<u>14.10</u>	ft.	Est. Purge Vol. <u>13</u>

Sampling Data						
Initial Turbidity	Final Turbidity					
Time	<u>14:50</u>	<u>14:53</u>	<u>14:56</u>	<u>14:59</u>	<u>15:02</u>	<u>15:05</u>
EC	<u>1790</u>	<u>1760</u>	<u>1760</u>	<u>1720</u>	<u>1720</u>	<u>1710</u>
pH	<u>6.07</u>	<u>6.03</u>	<u>7.94</u>	<u>7.87</u>	<u>5.91</u>	<u>5.79</u>
Temp	<u>71.2</u>	<u>70.9</u>	<u>70.6</u>	<u>70.4</u>	<u>70.1</u>	<u>69.9</u>
Gal.	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>10</u>	<u>13</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SD 052</u>	Date <u>10-29-1991</u>
Address _____	
Personnel <u>SERBAMIP-</u>	Weather <u>SUNNY DAY</u>
Well No. <u>AR-1</u>	Equip. <u>BULLER</u>

Before Purging	
Total Well Depth <u>34.00</u> ft.	Well Diameter <u>6"</u>
Depth to Water <u>11.80</u> ft.	Est. Purge Vol. <u>130</u>

Sampling Data						
	Initial Turbidity			Final Turbidity		
Time	<u>15:32</u>	<u>15:45</u>	<u>15:58</u>	<u>16:12</u>	<u>16:26</u>	<u>16:38</u>
EC	<u>1760</u>	<u>1740</u>	<u>1730</u>	<u>1710</u>	<u>1710</u>	<u>1700</u>
pH	<u>6.21</u>	<u>6.18</u>	<u>6.16</u>	<u>6.14</u>	<u>6.11</u>	<u>6.09</u>
Temp	<u>71.4</u>	<u>71.2</u>	<u>71.1</u>	<u>70.9</u>	<u>70.7</u>	<u>70.2</u>
Gal.	<u>13</u>	<u>26</u>	<u>39</u>	<u>52</u>	<u>65</u>	<u>78</u>
Time	<u>16:54</u>	<u>17:06</u>	<u>17:20</u>	<u>17:40</u>	_____	_____
EC	<u>1640</u>	<u>1670</u>	<u>1660</u>	<u>1620</u>	_____	_____
pH	<u>6.07</u>	<u>6.03</u>	<u>5.97</u>	<u>5.93</u>	_____	_____
Temp	<u>70.3</u>	<u>70.1</u>	<u>69.8</u>	<u>69.6</u>	_____	_____
Gal.	<u>91</u>	<u>104</u>	<u>117</u>	<u>130</u>	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS H052</u>	Date <u>10-30-1996</u>
Address _____	
Personnel <u>SERBATA P.</u>	Weather <u>SUNNY DAY</u>
Well No. <u>AR-2</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>34.60</u>	ft.	Well Diameter <u>6"</u>
Depth to Water	<u>11.95</u>	ft.	Est. Purge Vol. <u>133</u>

Sampling Data						
	Initial Turbidity			Final Turbidity		
Time	<u>7:31</u>	<u>7:45</u>	<u>7:57</u>	<u>8:11</u>	<u>8:24</u>	<u>8:36</u>
EC	<u>1810</u>	<u>1790</u>	<u>1770</u>	<u>1760</u>	<u>1750</u>	<u>1730</u>
pH	<u>6.13</u>	<u>6.09</u>	<u>6.05</u>	<u>6.01</u>	<u>5.93</u>	<u>5.87</u>
Temp	<u>71.6</u>	<u>71.4</u>	<u>71.1</u>	<u>70.9</u>	<u>70.8</u>	<u>70.7</u>
Gal.	<u>13</u>	<u>26</u>	<u>39</u>	<u>53</u>	<u>66</u>	<u>79</u>
Time	<u>8:48</u>	<u>8:50</u>	<u>9:00</u>	<u>9:30</u>	_____	_____
EC	<u>1710</u>	<u>1690</u>	<u>1670</u>	<u>1660</u>	_____	_____
pH	<u>5.84</u>	<u>5.79</u>	<u>5.76</u>	<u>5.73</u>	_____	_____
Temp	<u>70.5</u>	<u>70.1</u>	<u>69.9</u>	<u>69.7</u>	_____	_____
Gal.	<u>93</u>	<u>106</u>	<u>119</u>	<u>133</u>	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SB 052</u>	Date <u>10-20-1996</u>
Address _____	
Personnel <u>SERBANO</u>	Weather <u>SUNNY DAY</u>
Well No. <u>MW-1</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>28.00</u>	ft.	Well Diameter <u>2</u>
Depth to Water	<u>12.95</u>	ft.	Est. Purge Vol. <u>8</u>

Sampling Data						
Initial Turbidity						Final Turbidity
Time	<u>9:40</u>	<u>9:42</u>	<u>9:44</u>	<u>9:46</u>	<u>9:48</u>	<u>9:50</u>
EC	<u>1710</u>	<u>1690</u>	<u>1670</u>	<u>1630</u>	<u>1610</u>	<u>1610</u>
pH	<u>6.18</u>	<u>6.13</u>	<u>6.09</u>	<u>6.03</u>	<u>5.92</u>	<u>5.87</u>
Temp	<u>71.1</u>	<u>70.9</u>	<u>70.7</u>	<u>70.4</u>	<u>70.3</u>	<u>70.1</u>
Gal.	<u>1</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>6</u>	<u>8</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS # 052</u>	Date <u>10-30-1996</u>
Address _____	
Personnel <u>DERBAH P.</u>	Weather <u>SUNNY</u>
Well No. <u>MW-2</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>26.40</u>	ft.	Well Diameter <u>2'</u>
Depth to Water	<u>12.95</u>	ft.	Est. Purge Vol. <u>8</u>

Sampling Data						
Initial Turbidity						Final Turbidity
Time	<u>10:00</u>	<u>10:02</u>	<u>10:04</u>	<u>10:06</u>	<u>10:08</u>	<u>10:10</u>
EC	<u>1670</u>	<u>1660</u>	<u>1660</u>	<u>1650</u>	<u>1640</u>	<u>1630</u>
pH	<u>6.16</u>	<u>6.13</u>	<u>6.09</u>	<u>6.02</u>	<u>6.03</u>	<u>6.01</u>
Temp	<u>71.4</u>	<u>71.2</u>	<u>70.9</u>	<u>70.8</u>	<u>70.2</u>	<u>70.3</u>
Gal.	<u>1</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>6</u>	<u>8</u>
Time	_____	_____	_____	_____	_____	_____
EC	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Temp	_____	_____	_____	_____	_____	_____
Gal.	_____	_____	_____	_____	_____	_____

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

FIELD DATA - GROUNDWATER SAMPLING PROGRAM

Site <u>SS 052</u>	Date <u>10-30-1996</u>
Address _____	
Personnel <u>SERBAN P.</u>	Weather <u>SUNNY DAY</u>
Well No. <u>MW-3</u>	Equip. <u>BAILER</u>

Before Purging			
Total Well Depth	<u>27.40</u>	ft.	Well Diameter <u>24</u>
Depth to Water	<u>9.80</u>	ft.	Est. Purge Vol. <u>11</u>

Sampling Data						
Initial Turbidity						Final Turbidity
Time	<u>10:10</u>	<u>10:12</u>	<u>10:14</u>	<u>10:16</u>	<u>10:18</u>	<u>10:20</u>
EC	<u>1480</u>	<u>1460</u>	<u>1460</u>	<u>1430</u>	<u>1410</u>	<u>1410</u>
pH	<u>6.18</u>	<u>6.15</u>	<u>6.18</u>	<u>6.07</u>	<u>6.03</u>	<u>5.97</u>
Temp	<u>71.3</u>	<u>71.1</u>	<u>70.9</u>	<u>70.7</u>	<u>70.5</u>	<u>70.3</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 Purging/Before Sample Collection	
Depth to Water _____	ft. Total Well Depth _____ ft.

APPENDIX B



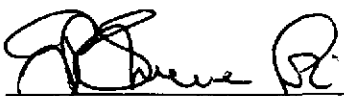
LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #052
Sample Matrix: Water
Method: EPA 8015M (Gasoline)

AA Project No.: A135052-4
Date Received: 11/01/96
Date Reported: 11/05/96
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
51567	A-4	10/30/93	11/03/96	140	50
51568	A-5	10/30/93	11/03/96	<50	50
51569	A-6	10/30/93	11/03/96	50	50
51570	A-7	10/30/93	11/03/96	<50	50
51571	A-8	10/30/93	11/03/96	200	50
51572	A-9	10/30/93	11/03/96	<50	50
51573	A-10	10/30/93	11/03/96	<50	50
51574	AR-1	10/30/93	11/03/96	<50	50
51575	AR-2	10/30/93	11/03/96	<50	50
51576	MW-1	10/30/93	11/03/96	130	50
51577	MW-2	10/30/93	11/03/96	670	50
51578	MW-3	10/30/93	11/03/96	250	50
51579	Trip Blank	10/30/93	11/03/96	<50	50

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


George Havalias
Laboratory Director



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company
Project Name: SS #052
Method: EPA 8015M (Gasoline)
Sample ID: Matrix Spike
Concentration: 500 ug/L

AA ID No.: 51579
Project No.: N/A
AA Project No.: A135052-4
Date Analyzed: 11/03/96
Date Reported: 11/05/96

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept. Rec. Range (%)
Gasoline Range Organics	423	85	468	94	10	59 - 149


George Havalias
Laboratory Director



LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #052
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135052-4
Date Received: 11/01/96
Date Reported: 11/05/96
Units: ug/L

	10/30/93	10/30/93	10/30/93	10/30/93	
Date Sampled:	10/30/93	10/30/93	10/30/93	10/30/93	
Date Analyzed:	11/03/96	11/03/96	11/03/96	11/03/96	
AA ID No.:	51567	51568	51569	51570	
Client ID No.:	A-4	A-5	A-6	A-7	MRL
Compounds:					
Benzene	<0.3	<0.3	<0.3	<0.3	0.3
Ethylbenzene	<0.3	<0.3	<0.3	<0.3	0.3
Toluene	<0.3	<0.3	<0.3	<0.3	0.3
Xylenes	<0.5	<0.5	<0.5	<0.5	0.5


George Havalias
Laboratory Director



LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #052
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135052-4
Date Received: 11/01/96
Date Reported: 11/05/96
Units: ug/L

Date Sampled:	10/30/93	10/30/93	10/30/93	10/30/93	
Date Analyzed:	11/03/96	11/03/96	11/03/96	11/03/96	
AA ID No.:	51571	51572	51573	51574	
Client ID No.:	A-8	A-9	A-10	AR-1	MRL
Compounds:					
Benzene	<0.3	<0.3	<0.3	<0.3	0.3
Ethylbenzene	<0.3	<0.3	<0.3	<0.3	0.3
Toluene	<0.3	<0.3	<0.3	<0.3	0.3
Xylenes	<0.5	<0.5	1.1	<0.5	0.5


George Havalias
Laboratory Director



LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #052
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135052-4
Date Received: 11/01/96
Date Reported: 11/05/96
Units: ug/L

Date Sampled:	10/30/93	10/30/93	10/30/93	10/30/93	
Date Analyzed:	11/03/96	11/03/96	11/03/96	11/03/96	
AA ID No.:	51575	51576	51577	51578	
Client ID No.:	AR-2	MW-1	MW-2	MW-3	MRL
Compounds:					
Benzene	<0.3	<0.3	1.7	0.7	0.3
Ethylbenzene	<0.3	<0.3	0.6	<0.3	0.3
Toluene	<0.3	<0.3	1.3	0.6	0.3
Xylenes	<0.5	<0.5	0.8	<0.5	0.5


George Havalias
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 4

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #052
Sample Matrix: Water
Method: EPA 8020 (BTEX)

AA Project No.: A135052-4
Date Received: 11/01/96
Date Reported: 11/05/96
Units: ug/L

Date Sampled:	10/30/93	
Date Analyzed:	11/03/96	
AA ID No.:	51579	
Client ID No.:	Trip Blank	MRL

<u>Compounds:</u>		
Benzene	<0.3	0.3
Ethylbenzene	<0.3	0.3
Toluene	<0.3	0.3
Xylenes	<0.5	0.5

MRL: Method Reporting Limit

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

George Havalias
Laboratory Director



LABORATORY QA/QC REPORT

Client: Thrifty Oil Company
Project Name: SS #052
Method: EPA 8020 (BTEX)
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No.: 51579
Project No.: N/A
AA Project No.: A135052-4
Date Analyzed: 11/03/96
Date Reported: 11/05/96

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept. Rec. Range (%)
Benzene	21.3	107	21.2	106	1	65 - 135
Ethylbenzene	21.1	106	21.0	105	1	77 - 123
Toluene	21.4	107	21.1	106	1	66 - 134
Xylenes	21.2	106	21.3	107	1	73 - 127


George Havalias
Laboratory Director



LABORATORY ANALYSIS RESULTS

Page 1

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS #052
Sample Matrix: Water
Method: MTBE (EPA 8020)

AA Project No.: A135052-4
Date Received: 11/01/96
Date Reported: 11/05/96
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
51567	A-4	10/30/93	11/03/96	<20	20
51568	A-5	10/30/93	11/03/96	<20	20
51569	A-6	10/30/93	11/03/96	<20	20
51570	A-7	10/30/93	11/03/96	<20	20
51571	A-8	10/30/93	11/03/96	<20	20
51572	A-9	10/30/93	11/03/96	<20	20
51573	A-10	10/30/93	11/03/96	<20	20
51574	AR-1	10/30/93	11/03/96	<20	20
51575	AR-2	10/30/93	11/03/96	<20	20
51576	MW-1	10/30/93	11/03/96	<20	20
51577	MW-2	10/30/93	11/03/96	<20	20
51578	MW-3	10/30/93	11/03/96	<20	20

MRL: Method Reporting Limit

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

George Havalias
Laboratory Director



AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311

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

DATE: 10-30-96

PAGE 1 OF 4

AA Client THRIFTY OIL CO.				Phone (310) 923-9876		Sampler's Name SERBAN D.		
Project Manager CHRIS PANAITESCU				P.O. No.		Sampler's Signature <i>[Signature]</i>		
Project Name Quarterly water sampling.				Project No.		Project Manager's Signature		
Job Name and Address SS # 052 20200 HESPERIAN Blvd HAYWARD, 95541				ANALYSIS REQUIRED				
				Detection Limits			Test Requirements	
				Test Name				
AA ID.#	Client's ID.	Date	Time	Sample Type	Number of Containers	TPH	BIEX	MTBE
51567	A-4	10-30-96		WATER	3	X	X	X
51568	A-5	↑		↑	↑	X	X	X
51569	A-6	↑		↑	↑	X	X	X
51570	A-7	↑		↑	↑	X	X	X
51571	A-8	↑		↑	↑	X	X	X
51572	A-9	↑		↑	↑	X	X	X
51573	A-10	↑		↑	↑	X	X	X
51574	AR-1	↑		↑	↑	X	X	X
51575	AR-2	↑		↑	↑	X	X	X
51576	MW-1	↑		↑	↑	X	X	X
51577	MW-2	↑		↑	↑	X	X	X
51578	MW-3	↓		↓	↓	X	X	X
51579	TRIP BLANK		6:30		2	X	X	
SAMPLE INTEGRITY-TO BE FILLED IN BY RECEIVING LAB				Relinquished by: <i>[Signature]</i>		Date	Time	Received by:
Samples Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Relinquished by: CA. OVERNIGHT		10-30-96	17:00	CA. OVERNIGHT
Samples Properly Cooled Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Relinquished by: CA. OVERNIGHT		10-30-96	17:30	
Samples Accepted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Relinquished by:		11/1/96	8:00 ^A	<i>[Signature]</i>
If Not Why: _____				Relinquished by:		Date	Time	Received by:
AA Project No. A135052-4								