BROWN AND CALDWELL

new monitors for all wells in the corner A Street / Hesperian

July 2, 1996

Ms. Karen Petryna
Program Engineer
Texaco Environmental Services
108 Cutting Boulevard
Richmond, California 94804

11-3095-20

Subject: First Quarter 1996, Regional Groundwater Monitoring Report for Sites in the Vicinity of Hesperian Boulevard and West A Street, Hayward, California

Dear Ms. Petryna:

This letter report summarizes the first quarter 1996 groundwater monitoring activities conducted at five separate leaking underground fuel tank sites located at or near the intersection of Hesperian Boulevard and West A Street in Hayward, California. This report includes information collected at the following five sites: ARCO/Former Thrifty Station No. 052 at 20200 Hesperian Boulevard, Alliance Service Station at 20450 Hesperian Boulevard, Former Texaco/Former Exxon Service Station at 20499 Hesperian Boulevard, the Former Shell Service Station at 20500 Hesperian Boulevard, and Former Unocal Station No. 5590 at 20501 Hesperian Boulevard. This joint monitoring and reporting effort is being conducted as a result of the request made by the Alameda County District Attorney's office for a joint study of the apparent commingled plumes in the vicinity of the intersection at Hesperian Boulevard and West A Street in Hayward, California.

Groundwater monitoring and sampling activities were conducted at the five subject sites on February 14 and 15, 1996. Sampling activities for the five sites were performed by different environmental consultants hired by each of the responding parties and included collecting depth-to-water measurements, purging and sampling selected groundwater monitoring wells, and submitting the groundwater samples to different analytical laboratories for analysis.

Field and Analytical Methods

The following describes the general procedures followed during monitoring and sampling at the Former Texaco/Former Exxon station. Initially, depth-to-water and free product measurements were collected from all monitoring wells by Blaine Tech Services Inc. using an electronic water level probe. Wells not containing free product were then purged of a minimum of three well volumes, or until evacuated, using a Teflon bailer or submersible pump. After purging, each monitoring well was sampled using a Teflon bailer. Samples were transferred to appropriate laboratory-supplied

Environmental Engineering And Consulting • Analytical Services
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containers, placed in a cooler containing crushed ice, and submitted under appropriate chain of custody to BC Analytical (BCA) for analysis total petroleum hydrocarbons as gasoline (TPH-G) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) following EPA Methods 8015 Modified and 8020, respectively. BCA is located in Concord, California, and is certified by the State of California Department of Health Services for analysis of hazardous materials. Wells containing a measurable quantity of free product were neither purged nor sampled during this monitoring event. Groundwater sample collection records and chain-of-custody documentation for this quarters' sampling event for the Former Texaco/Former Exxon site are included as Attachment I. Monitoring and sampling procedures and groundwater sample collection records for the remaining four sites were not available for inclusion into this report.

First Quarter 1996 Monitoring Results

Depth-to-water measurements and calculated groundwater elevations for the five sites are summarized in Attachment A, Table 1. Field data sheets for the five sites, if available, are included in Attachments G through K. The local groundwater flow direction is known to be to the west, towards San Francisco Bay. Because of the local variations in groundwater elevations and flow directions, a singular hydraulic gradient cannot be calculated for this event. However, groundwater elevation data does show a drop in the groundwater surface of 5.79 between ARCO well A-10 and Texaco well MW-4G. and 0.39 feet between Texaco wells MW-4D and MW-4I. These correspond to groundwater gradients of approximately 0.03 feet per foot and 0.003 feet per foot and represent the maximum and minimum gradients identified in the study area. Groundwater elevations and flow directions for this sampling event are shown on Figure 1 included in Attachment A.

Analytical results of groundwater samples are summarized in Table 1. TPH-G and benzene isoconcentration maps for this quarters' sampling event are included as Figures 2 and 3 in Attachment A, respectively. Analytical laboratory reports for the February sampling event are included in Attachments G through K. TPHg was identified in all six of the Texaco wells, one of the two Alliance Station wells, four of the ten Unocal wells, and two of the twelve ARCO wells sampled. Benzene was identified in three of the six Texaco wells, both Alliance Station wells, four of the ten Unocal wells, and one of the twelve ARCO wells sampled. In addition, free product was identified in three of the off-site Texaco wells (Wells MW-4G, MW-4H, and MW-4J). Detectable concentrations TPH-G and benzene ranged from 99 micrograms per liter (µg/L) and 0.75 µg/L on the ARCO site to 64,000 µg/L and 2,500 µg/L north of the Former Texaco/Former Exxon site, respectively.

Historical Results

In order for all interested parties to better understand historical and current conditions surrounding this joint investigation we have included, as Figures 4 through 33 (Attachments B thru E), shallow groundwater surface contour maps, total petroleum hydrocarbons as diesel fuel isoconcentration maps, TPH-G isoconcentration maps, and benzene isoconcentration maps for the entire study area for the years 1988 through 1995 (one map per element per year). Data used to construct these maps are included in Attachment F, Tables 2 through 6.

If you have any questions regarding this quarterly monitoring report, please contact me at (510) 210-2278.

Sincerely,

BROWN AND CALDWELL

Todd Miller
California Registered Geologist No. 6328

TM:jm
Attachments

SUMMARY OF ATTACHMENTS

Attachment A	Summary of First Quarter 1996 Groundwater Monitoring and Sampling Results
Attachment B	Historical Groundwater Surface Elevation Contour Maps
Attachment C	Historical Total Petroleum Hydrocarbons as Diesel Fuel Isoconcentration Maps
Attachment D	Historical Total Petroleum Hydrocarbons as Gasoline Isoconcentration Maps
Attachment E	Historical Benzene Isoconcentration Maps
Attachment F	Summary of Historical Groundwater Elevation and Analytical Laboratory Results
Attachment G	First Quarter 1996 Analytical Results for ARCO/Former Thrifty Station No. 052
Attachment H	First Quarter 1996 Field Data Sheets and Analytical Results for Alliance Service Station
Attachment I	First Quarter 1996 Field Data Sheets and Analytical Results for Former Texaco/ Former Exxon Service Station
Attachment J	First Quarter 1996 Field Data Sheets and Analytical Results for Former Shell Service Station
Attachment K	First Quarter 1996 Field Data Sheets and Analytical Results for Former Unocal Station No. 5590

ATTACHMENT A

SUMMARY OF FIRST QUARTER 1996
GROUNDWATER MONITORING AND SAMPLING RESULTS

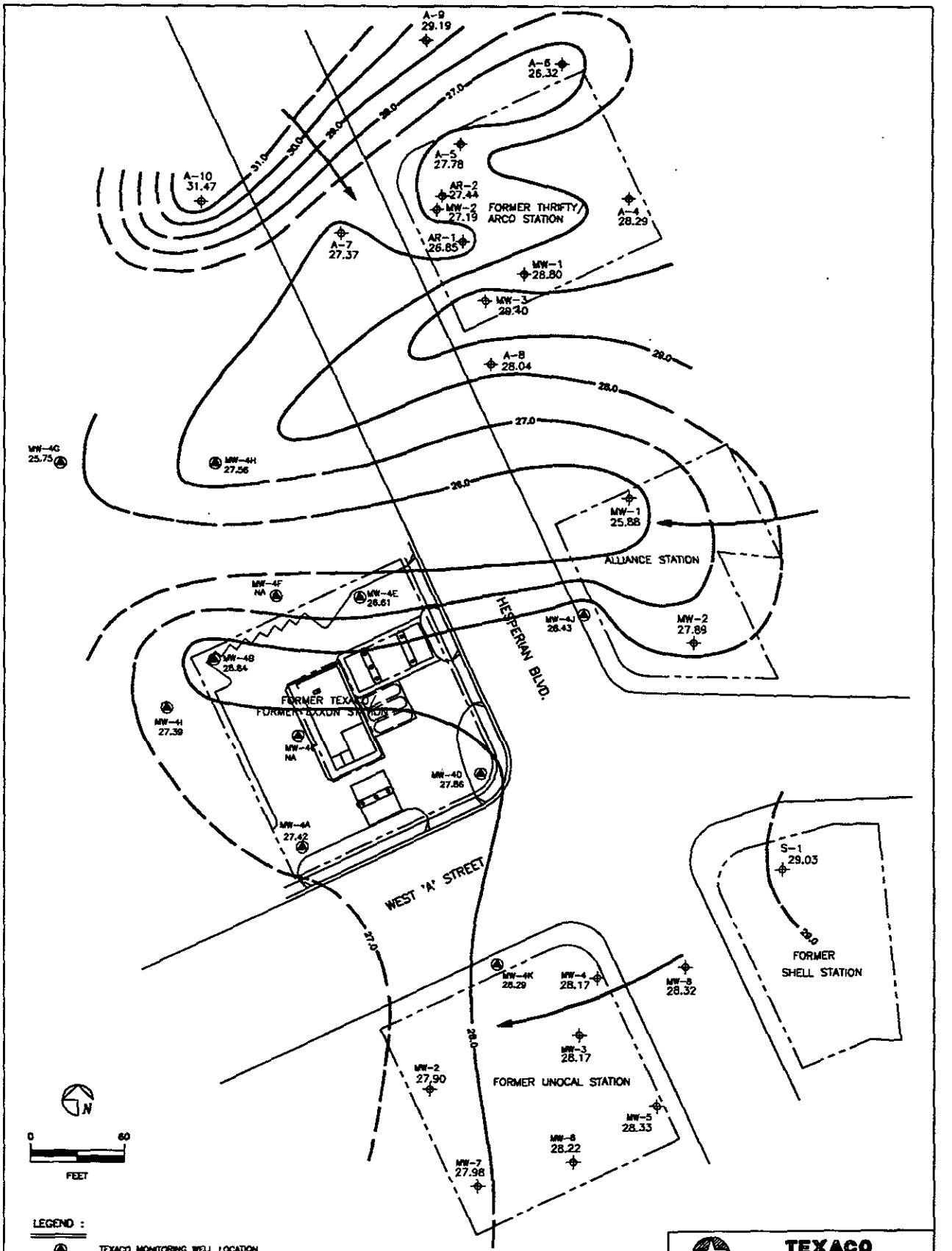
Table 1. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected During First Quarter 1996 Near Hesperian Boulevard/West A Street Intersection, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
Texaco/Exxon											
MW-4A	2/14/96	35.73	8.26		27.47	na[5]	5,900	<0.5	<0.5	25	9.0
MW-4B	2/14/96	37.39	8.55		28.84	na	7,300	190	<3	550	25
MW-4C	2/14/96	36.88	-		-	Not Monitored					
MW-4D	2/14/96	37.50	9.53		27.97	na	200	<0.5	<0.5	1.2	2.1
MW-4E	2/14/96	37.39	8.87		28.52	na	64,000	2,500	2,900	2,900	12,000
MW-4F	2/14/96	35.48	-		-	Not Monitored					
MW-4G	2/14/96	35.19	9.47	0.04	25.75	Free Product in Well - Not Sampled					
MW-4H	2/14/96	36.04	8.63	0.22	27.56	Free Product in Well - Not Sampled					
MW-4I	2/14/96	34.27	6.88		27.39	na	1,800	<0.5	<0.5	2.8	5.4
MW-4J	2/14/96	36.74	8.36	0.22	28.53	Free Product in Well - Not Sampled					
MW-4K	2/14/96	36.34	8.25		28.09	na	920	0.96	<0.5	0.59	1.3
Alliance											
MW-1	2/14/96	37.13	11.25		25.88	na	1,600	350	220	22.0	76
MW-2	2/14/96	37.88	9.99		27.89	na	<50	0.80	0.61	<0.5	<0.5
Unocal											
MW-2	2/14/96	37.20	9.30		27.9	na	220	1.8	0.97	<0.5	1.9
MW-3	2/14/96	37.57	9.40		28.17	na	210	1.6	<0.5	2.1	0.66
MW-4	2/14/96	36.82	8.65		28.17	na	2,600	20	8.2	<0.5	3.0
MW-5	2/14/96	37.30	8.97		28.33	na	<50	<0.5	<0.5	<0.5	<0.5
MW-6	2/14/96	38.12	9.90		28.22	na	<50	<0.5	<0.5	<0.5	<0.5
MW-7	2/14/96	36.70	8.72		27.98	na	<50	<0.5	<0.5	<0.5	<0.5
MW-8	2/14/96	38.47	10.15		28.32	na	2,100	20	12	6.4	11
ES-1	2/14/96		-		-	na	<50	<0.5	<0.5	<0.5	<0.5
ES-2	2/14/96		-		-	na	<50	<0.5	<0.5	<0.5	<0.5
EW-3	2/14/96		-		-	na	<50	<0.5	<0.5	<0.5	<0.5

Table 1. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected During First Quarter 1996 Near Hesperian Boulevard/West A Street Intersection, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
Shell											
S-1	2/14/96	36.56	7.53		29.03	80	<50	<0.5	<0.5	<0.5	<0.5
ARCO/Thrifty[6]											
A-4	2/14/96	39.53	11.24		28.29	<1000	<50	<0.3	2.3	<0.3	0.71
A-5	2/14/96	38.54	10.76		27.78	<1000	<50	<0.3	2.0	<0.3	1.1
A-6	2/14/96	38.78	12.46		26.32	<1000	<50	<0.3	2.0	<0.3	<0.5
A-7	2/14/96	39.45	12.38		27.07	<1000	<50	<0.3	1.1	<0.3	0.59
A-8	2/14/96	36.84	8.80		28.04	<1000	<50	<0.3	0.48	<0.3	<0.5
A-9	2/14/96	38.24	9.05		29.19	<1000	<50	<0.3	1.8	0.49	0.82
A-10	2/14/96	38.24	6.70		31.54	<1000	<50	<0.3	<0.3	<0.3	<0.5
AR-1	2/14/96	37.33	10.48		26.85	<1000	<50	<0.3	0.99	<0.3	0.52
AR-2	2/14/96	38.18	10.74		27.44	<1000	<50	<0.3	0.53	<0.3	0.76
MW-1	2/15/96	37.33	8.53		28.80	<1000	<50	<0.3	0.56	<0.3	0.82
MW-2	2/15/96	38.06	10.87		27.19	5500	420	0.75	0.54	0.64	0.53
MW-3	2/15/96	36.87	7.47		29.40	1500	99	<0.3	0.49	0.46	<0.5

[1]Relative to lower mean sea level.
[2]Below ground surface.
[3]Total Petroleum Hydrocarbons as diesel fuel
[4]Total Petroleum Hydrocarbons as gasoline.
[5]constituent not analyzed for
[6]Results for MTBE all below the method detection limit of 5 µg/L, except MW-2 which had a positive result of 18 µg/L



LEGEND :

- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-7 — ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
- 27.0 — GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE. CONTOUR INTERVAL=1.0 FOOT
- GROUNDWATER FLOW DIRECTION
- NA — NOT AVAILABLE
- * — NOT USED IN CONTOURING
- 2-14-96 — SAMPLING DATE

ALL WELLS RESURVEYED TO A COMMON DATUM ON 8/03/94.

SOURCE : MATTESON ENGINEERING SURVEY CONDUCTED 08/03/1994

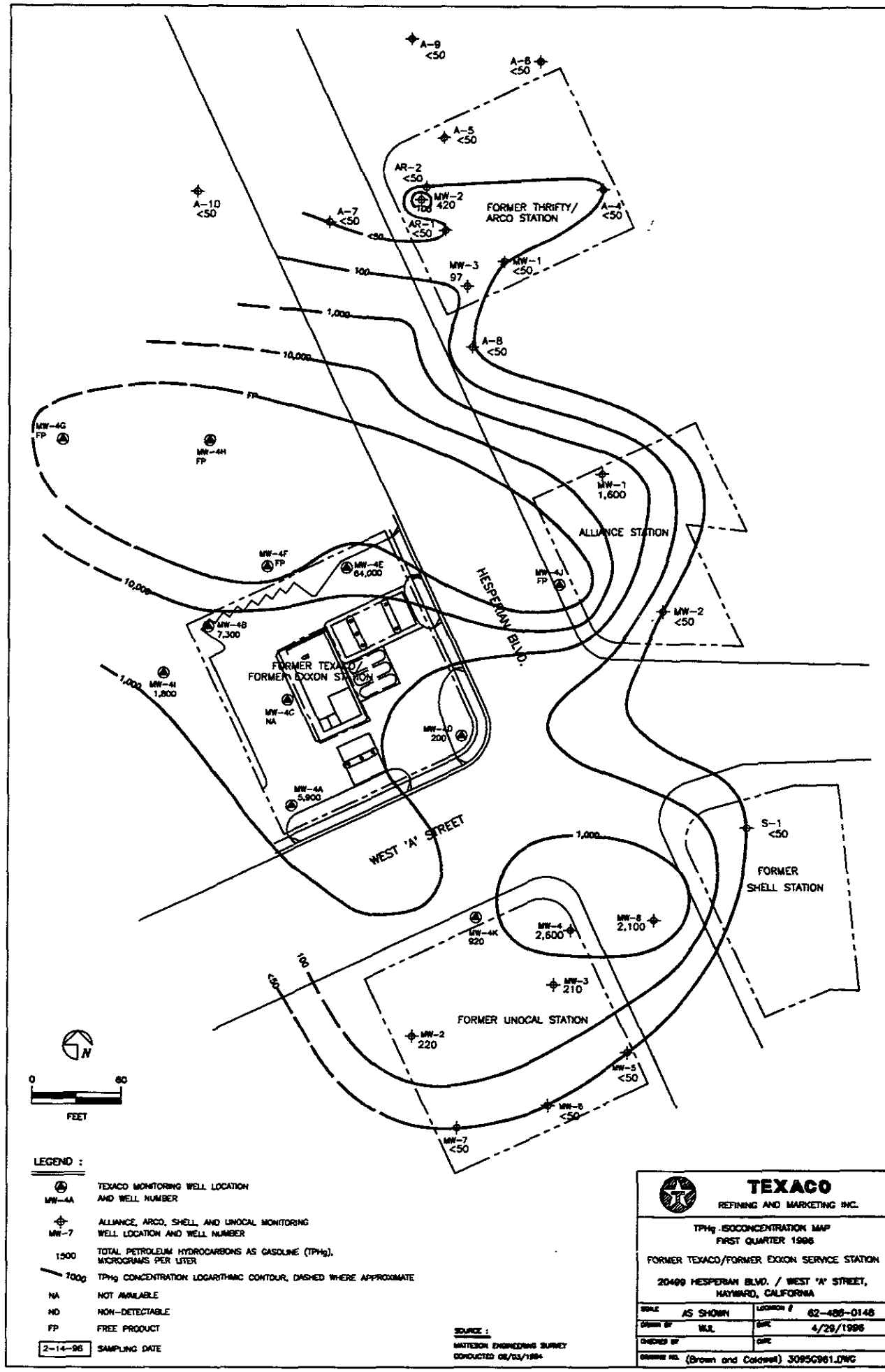
TEXACO
REFINING AND MARKETING INC.

GROUNDWATER ELEVATION MAP
FIRST QUARTER 1996

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095W961.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), MICROGRAMS PER LITER
100	TPHg CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
2-14-96	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

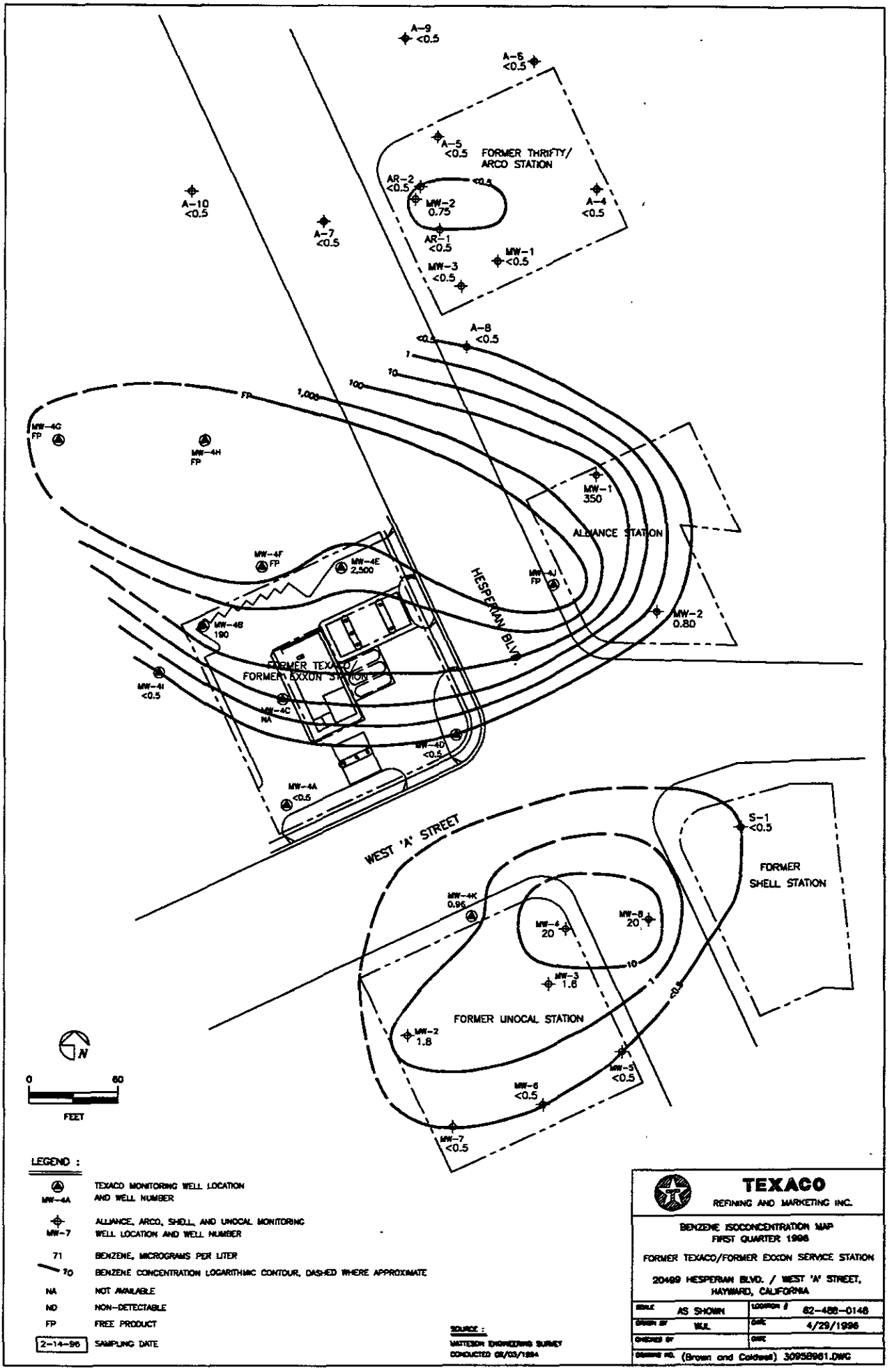
TEXACO
REFINING AND MARKETING INC.

TPHg ISOCONCENTRATION MAP
FIRST QUARTER 1996

FORMER TEXACO/FORMER EXXON SERVICE STATION

20409 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-486-0148
DRAWN BY	W.R.	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095C961.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER
10	BENZENE CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
2-14-96	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 02/03/1994

TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
FIRST QUARTER 1996

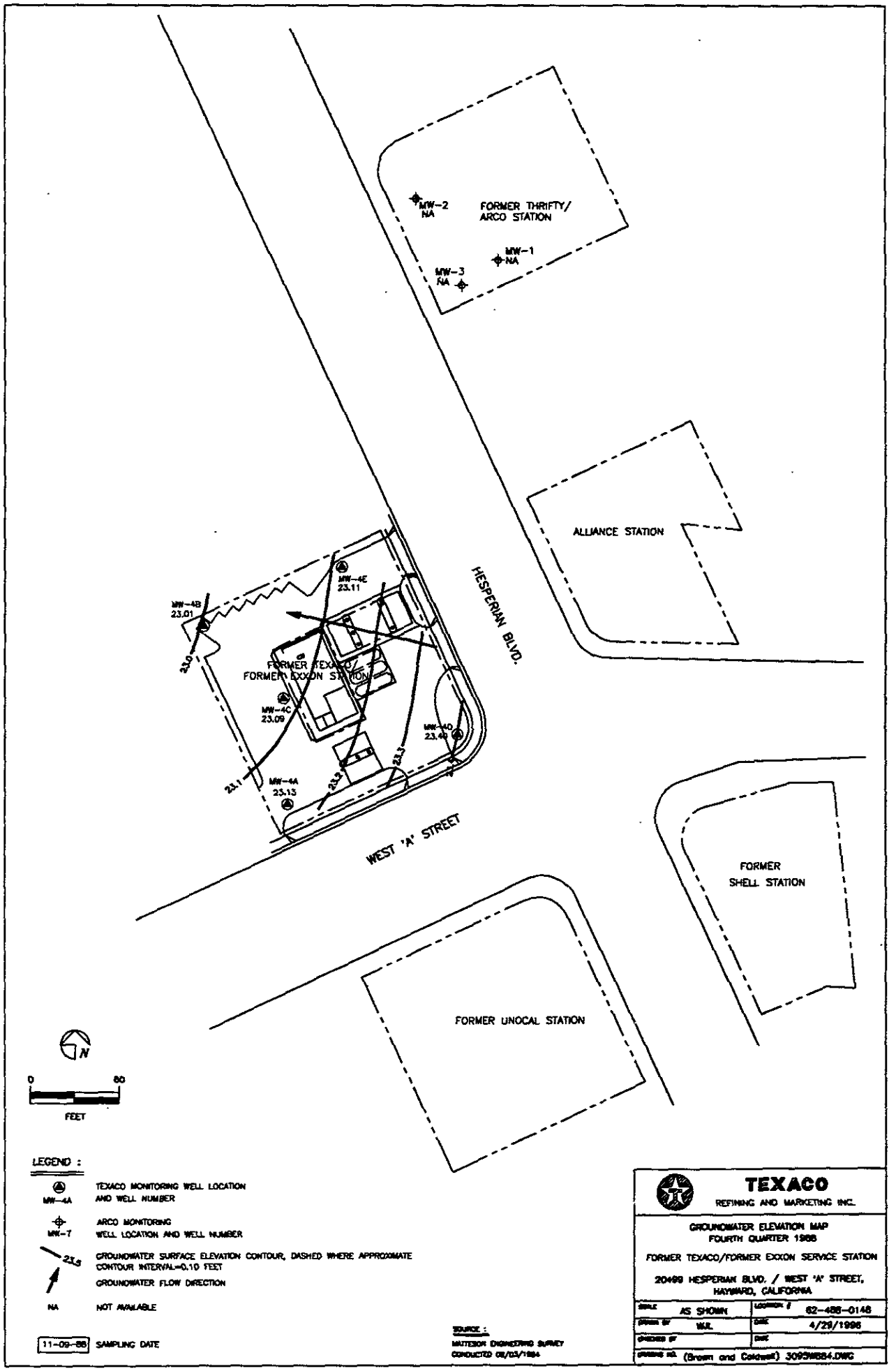
FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30958961.DWG		

ATTACHMENT B

HISTORICAL GROUNDWATER SURFACE ELEVATION CONTOUR MAPS



LEGEND :

- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-7 — ARCO MONITORING WELL LOCATION AND WELL NUMBER
- 23.5 — GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE
  CONTOUR INTERVAL=0.10 FEET
  GROUNDWATER FLOW DIRECTION
- NA — NOT AVAILABLE
- 11-09-88 — SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

TEXACO
REFINING AND MARKETING INC.

GROUNDWATER ELEVATION MAP
FOURTH QUARTER 1998

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
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CHECKED BY		DATE	
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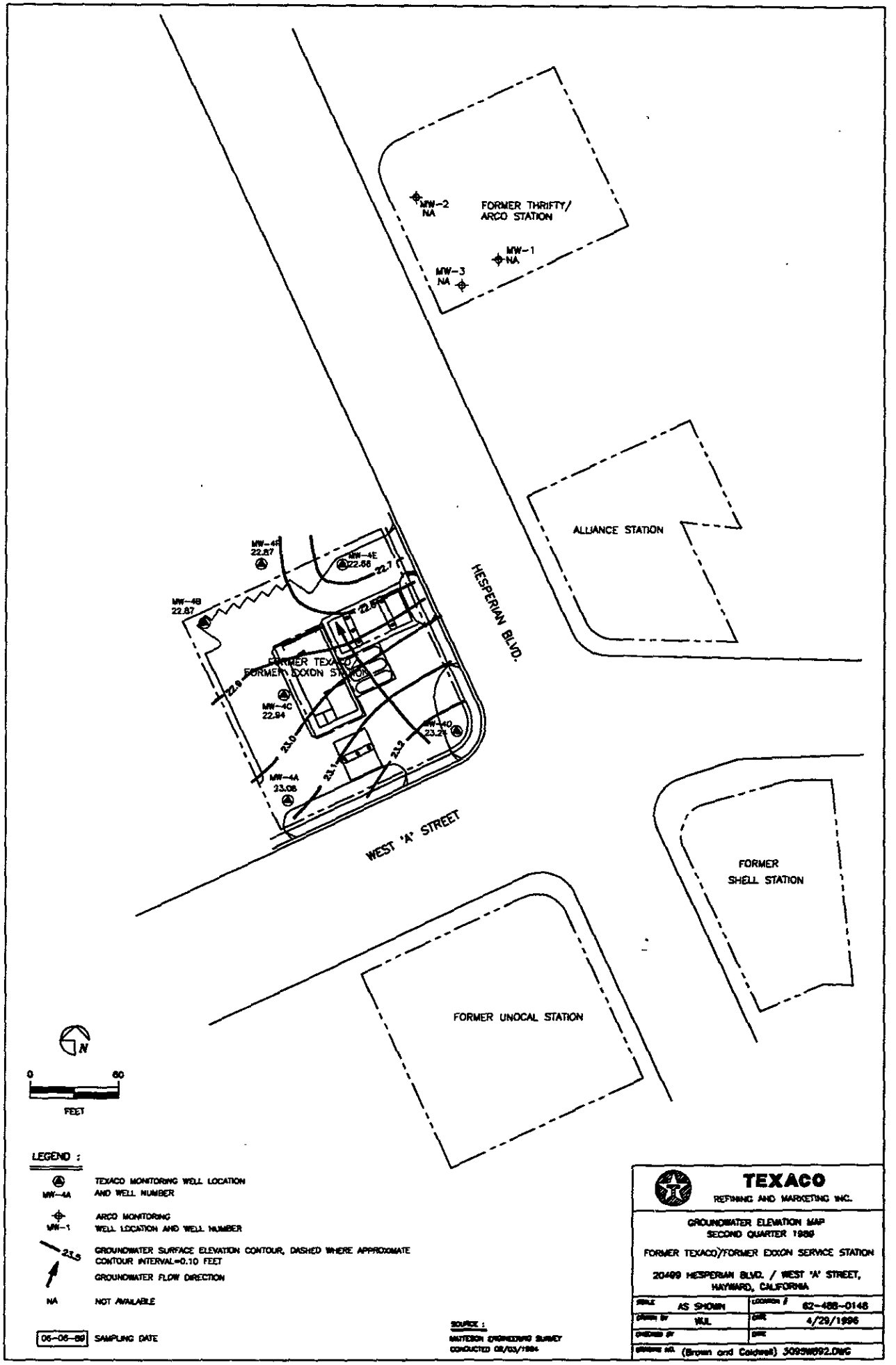


LEGEND :

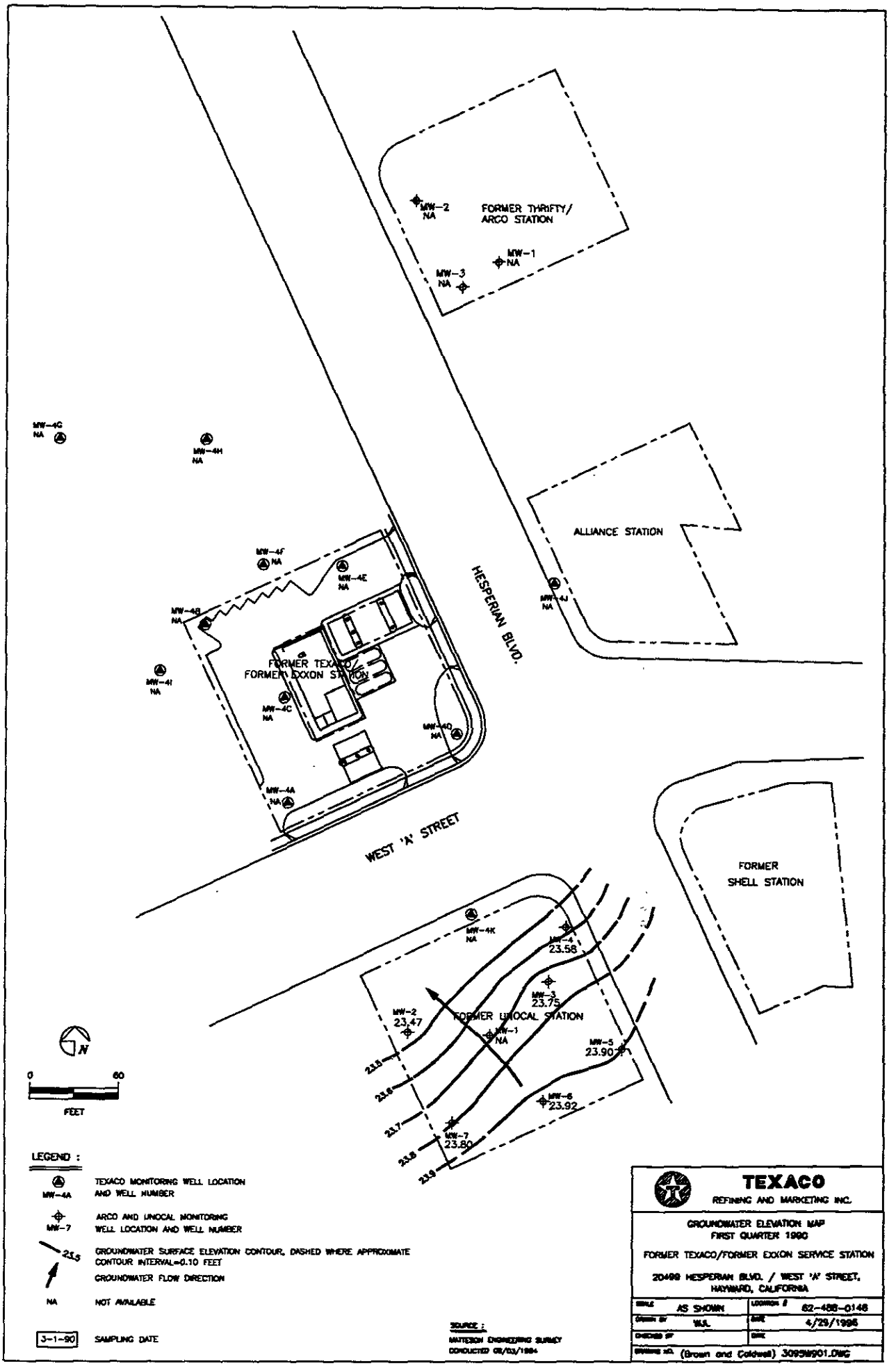
- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-1 — ARCO MONITORING WELL LOCATION AND WELL NUMBER
- 23.5 — GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE. CONTOUR INTERVAL=0.10 FEET
- GROUNDWATER FLOW DIRECTION
- NA — NOT AVAILABLE
- 06-06-89 — SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 06/03/1994

TEXACO
REFINING AND MARKETING INC.

GROUNDWATER ELEVATION MAP
SECOND QUARTER 1996
FORMER TEXACO/FORMER EXXON SERVICE STATION
20409 HESPERIAN BLVD. / WEST "A" STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-486-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095W092.DWG		



LEGEND :

- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-7 — ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
- 23.5 — GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE; CONTOUR INTERVAL=0.10 FEET
- GROUNDWATER FLOW DIRECTION
- NA — NOT AVAILABLE
- 3-1-90 — SAMPLING DATE

SOURCE : MATTESON ENGINEERING SURVEY CONDUCTED 03/03/1994

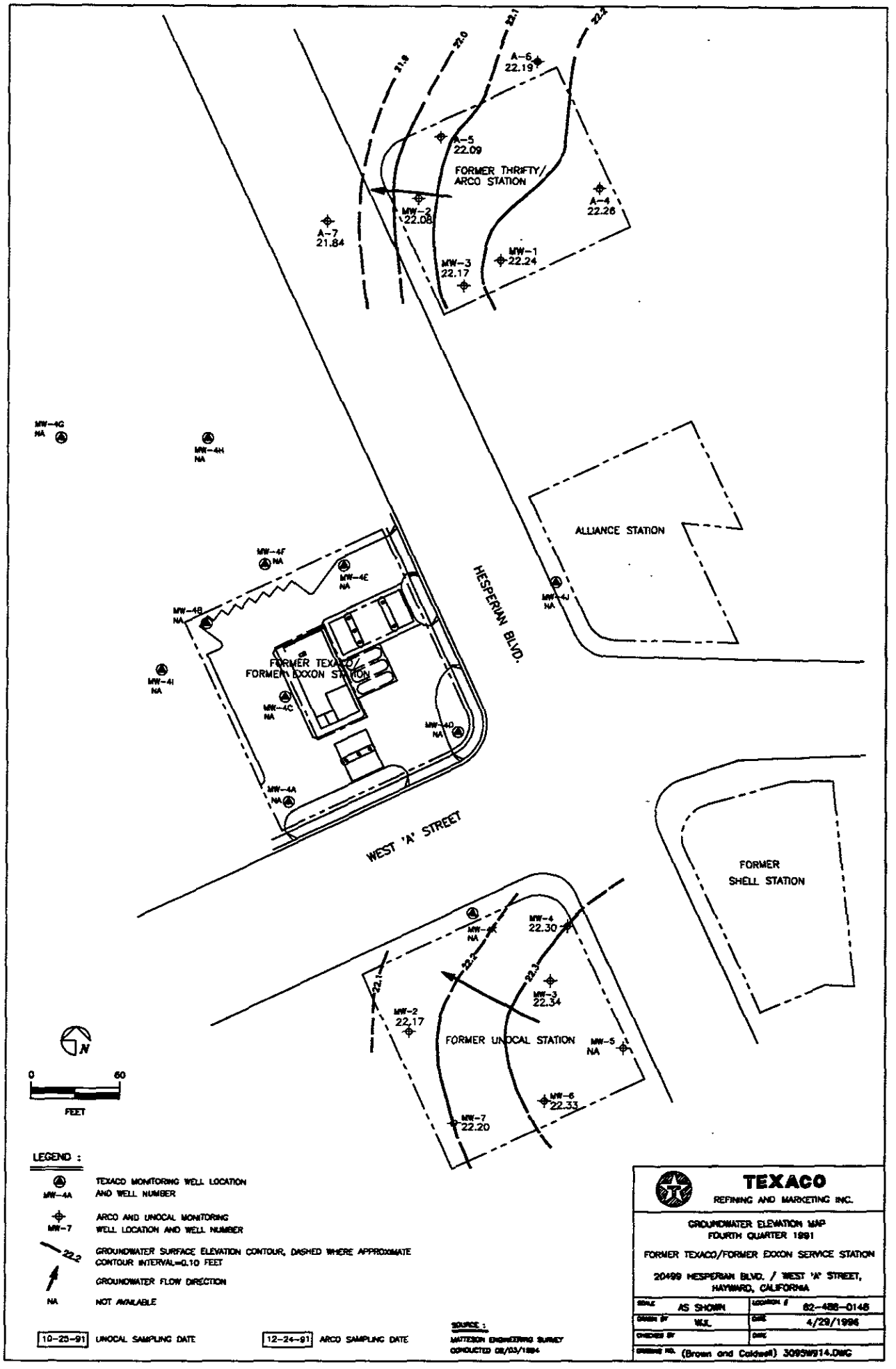
TEXACO
REFINING AND MARKETING INC.

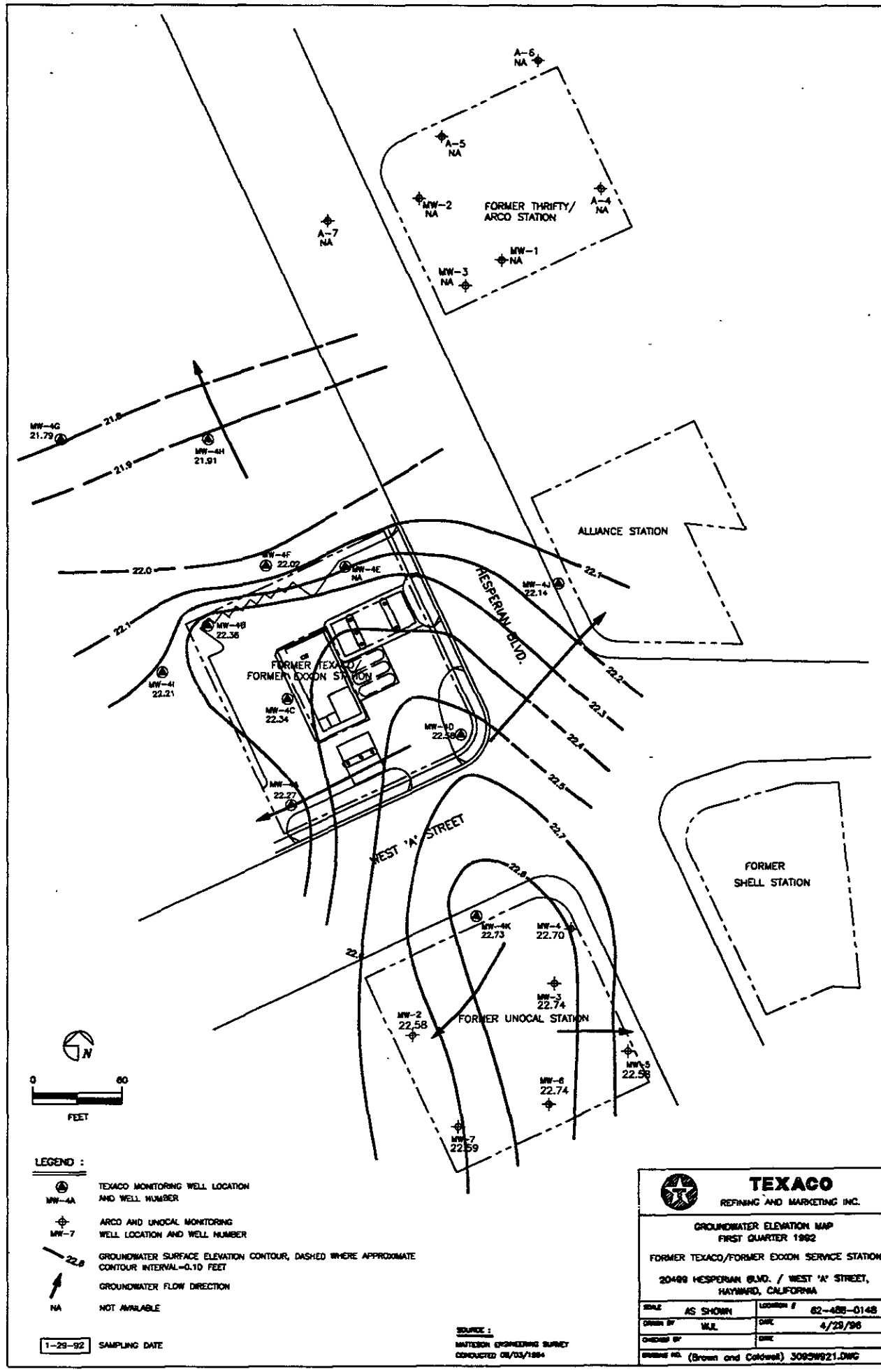
GROUNDWATER ELEVATION MAP
FIRST QUARTER 1990

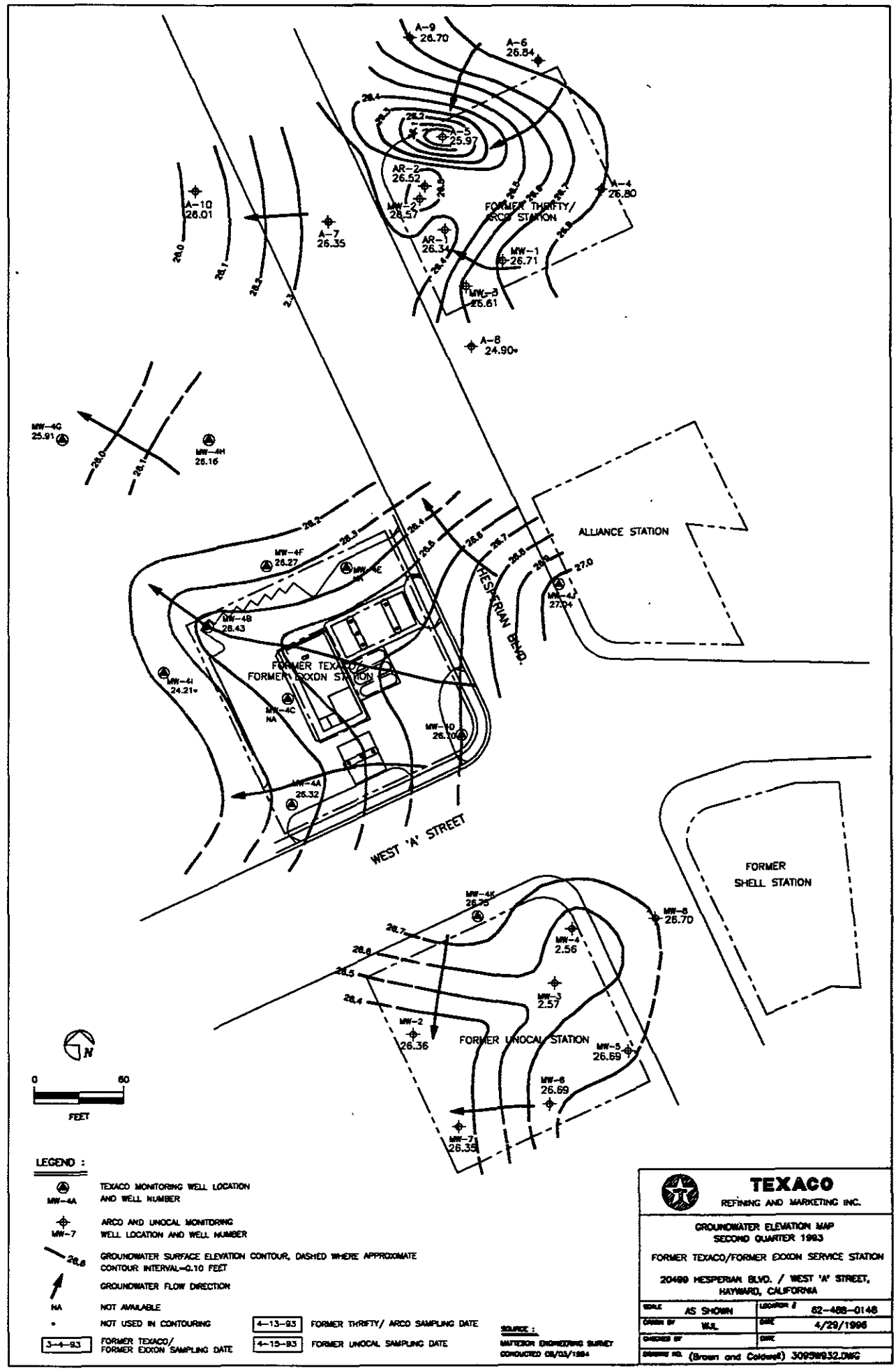
FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	W.L.	DATE	4/25/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095W901.DWG		


A-6
22.19
A-5
22.09
FORMER THRIFTY/
ARCO STATION
A-4
22.26
MW-2
22.08
A-7
21.84
MW-3
22.17
MW-1
22.24
MW-4G
NA
MW-4H
NA
ALLIANCE STATION
MW-4J
NA
MW-4F
NA
MW-4E
NA
MW-4B
NA
HESPERIAN BLVD.
FORMER TEXACO/
FORMER EXXON STATION
MW-4I
NA
MW-4C
NA
MW-4D
NA
MW-4A
NA
WEST 'A' STREET
FORMER
SHELL STATION
MW-4
22.30
MW-3
22.34
MW-2
22.17
FORMER UNOCAL STATION
MW-5
NA
MW-6
22.33
MW-7
22.20
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION AND WELL NUMBER
ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=0.10 FEET
GROUNDWATER FLOW DIRECTION
NOT AVAILABLE
10-25-91 UNOCAL SAMPLING DATE
12-24-91 ARCO SAMPLING DATE
SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994
TEXACO
REFINING AND MARKETING INC.
GROUNDWATER ELEVATION MAP
FOURTH QUARTER 1991
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 62-486-0148
DRAWN BY WJL
DATE 4/29/1996
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 3089W914.DWG


A-6
NA
A-5
NA
MW-2
NA
FORMER THRIFTY/
ARCO STATION
A-4
NA
A-7
NA
MW-1
NA
MW-3
NA
MW-4G
21.79
MW-4H
21.91
21.9
21.9
ALLIANCE STATION
22.0
MW-4F
22.02
MW-4E
NA
22.1
MW-4J
22.14
HESPERIAN BLVD.
MW-4B
22.36
FORMER TEXACO/
FORMER EXXON STATION
MW-4I
22.21
MW-4C
22.34
MW-4D
22.58
MW-4A
22.27
22.2
22.3
22.4
22.5
WEST 'A' STREET
22.7
22.8
FORMER
SHELL STATION
MW-4K
22.73
MW-4
22.70
22.
MW-3
22.74
MW-2
22.58
FORMER UNOCAL STATION
MW-5
22.58
MW-6
22.74
MW-7
22.59
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-4A
ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
MW-7
GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=0.10 FEET
22.8
GROUNDWATER FLOW DIRECTION
NA
NOT AVAILABLE
1-29-92
SAMPLING DATE
SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994
TEXACO
REFINING AND MARKETING INC.
GROUNDWATER ELEVATION MAP
FIRST QUARTER 1992
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 62-486-0148
DRAWN BY WJL
DATE 4/29/96
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 3095W921.DWG



LEGEND :

- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-7 — ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
- 26.8 — GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE; CONTOUR INTERVAL=0.10 FEET
- GROUNDWATER FLOW DIRECTION
- NA — NOT AVAILABLE
- • — NOT USED IN CONTOURING
- 3-4-93 — FORMER TEXACO/ FORMER EXXON SAMPLING DATE
- 4-13-93 — FORMER THRIFTY/ ARCO SAMPLING DATE
- 4-15-93 — FORMER UNOCAL SAMPLING DATE

SOURCE : MATTESON ENGINEERING SURVEY CONDUCTED 08/03/1994

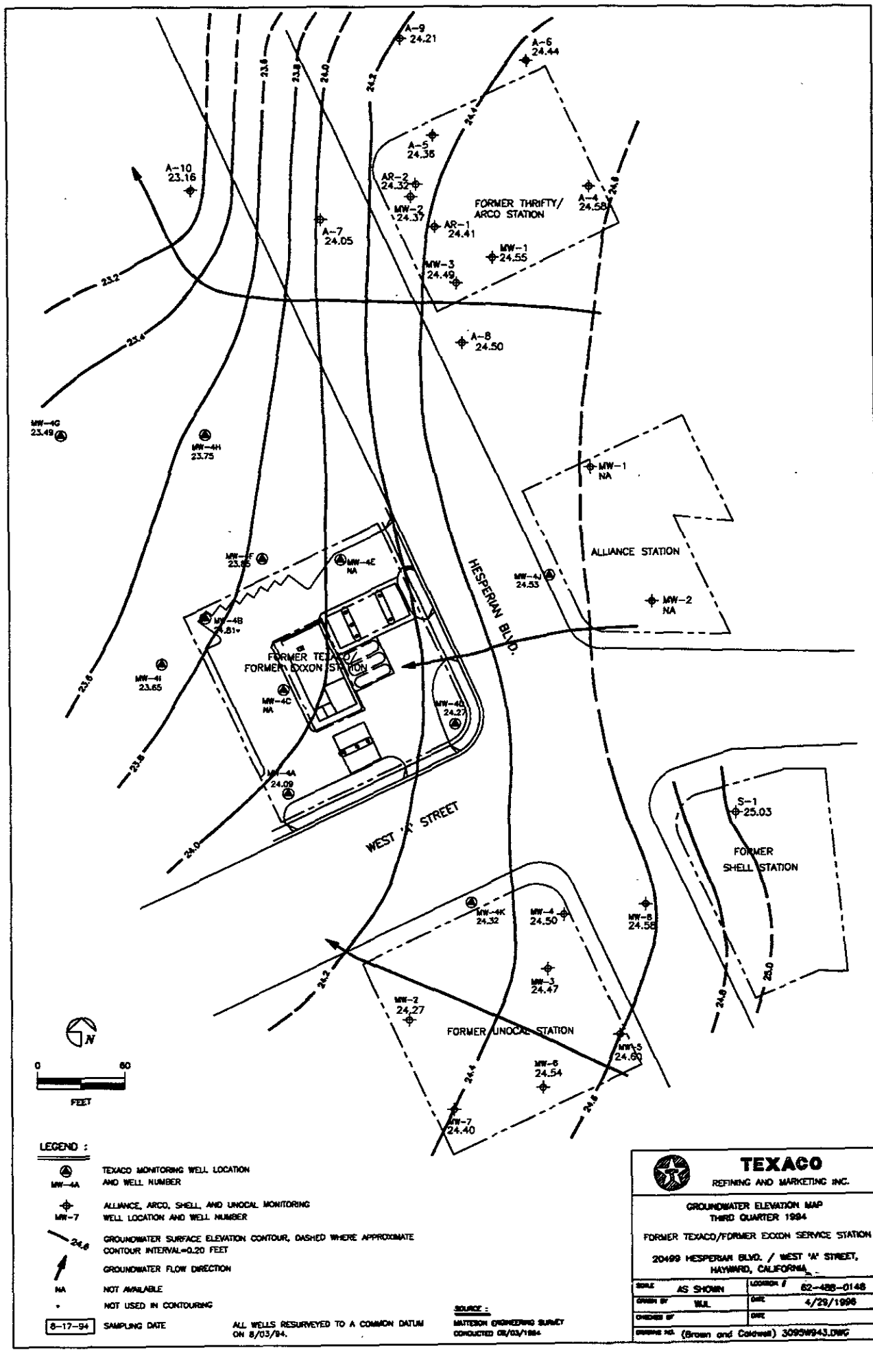
TEXACO
REFINING AND MARKETING INC.

GROUNDWATER ELEVATION MAP
SECOND QUARTER 1993

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095W932.DWG		



LEGEND :

- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-7 — ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
- 24.6 — GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=0.20 FEET
- GROUNDWATER FLOW DIRECTION
- NA — NOT AVAILABLE
- • — NOT USED IN CONTOURING
- 8-17-94 — SAMPLING DATE

ALL WELLS RESURVEYED TO A COMMON DATUM ON 8/03/94.

SOURCE : MATTESON ENGINEERING SURVEY CONDUCTED 08/03/1994

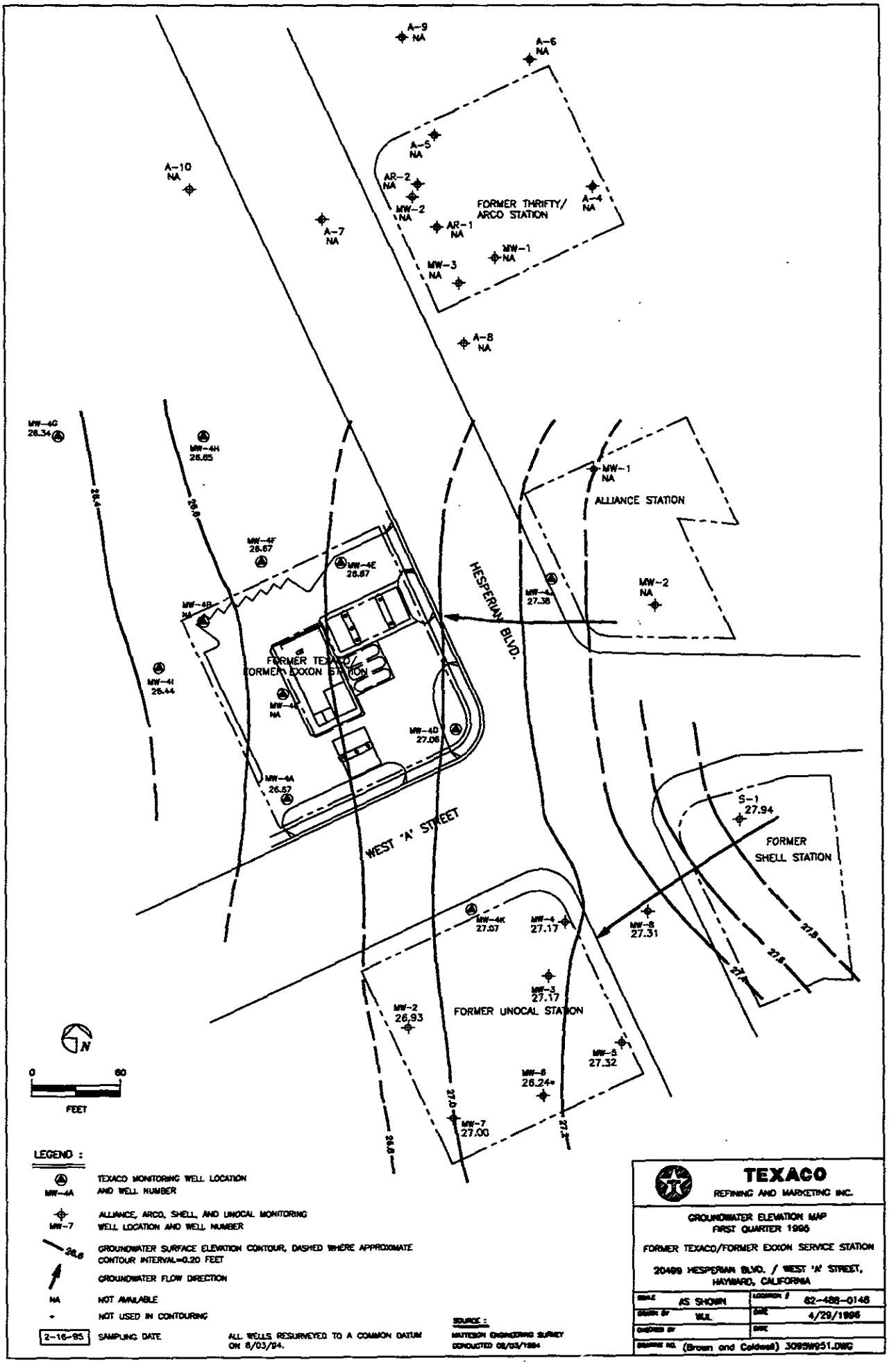
TEXACO
REFINING AND MARKETING INC.

GROUNDWATER ELEVATION MAP
THIRD QUARTER 1994

FORMER TEXACO/FORMER EXXON SERVICE STATION

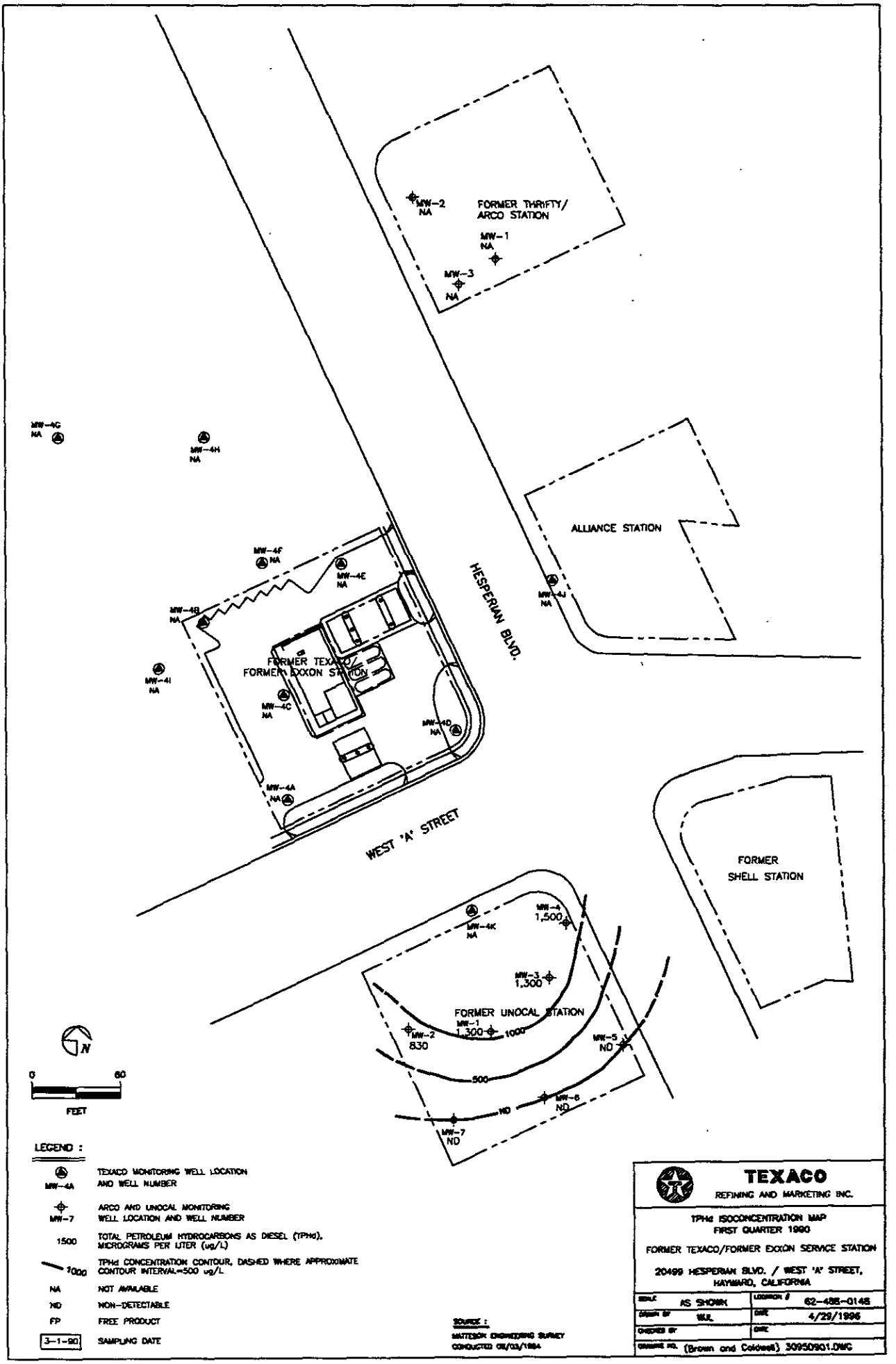
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095W943.DWG		


A-9 NA
A-6 NA
A-5 NA
A-10 NA
AR-2 NA
MW-2 NA
FORMER THRIFTY/ ARCO STATION
A-4 NA
A-7 NA
AR-1 NA
MW-1 NA
MW-3 NA
A-8 NA
MW-4G 26.34
MW-4H 26.65
MW-1 NA
ALLIANCE STATION
MW-4F 26.67
MW-4E 26.67
MW-4J 27.38
MW-2 NA
HESPERIAN BLVD.
MW-4B NA
MW-4I 26.44
FORMER TEXACO/ FORMER EXXON STATION
MW-4C NA
MW-4D 27.06
MW-4A 26.67
WEST 'A' STREET
S-1 27.94
FORMER SHELL STATION
MW-4K 27.07
MW-4 27.17
MW-5 27.31
MW-3 27.17
MW-2 26.93
FORMER UNOCAL STATION
MW-5 27.32
MW-6 26.24
MW-7 27.00
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-4A
ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
MW-7
GROUNDWATER SURFACE ELEVATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=0.20 FEET
GROUNDWATER FLOW DIRECTION
NA NOT AVAILABLE
NOT USED IN CONTOURING
2-16-95 SAMPLING DATE
ALL WELLS RESURVEYED TO A COMMON DATUM ON 8/03/94.
SOURCE :
MATTESON ENGINEERING SURVEY CONDUCTED 08/03/1994
TEXACO
REFINING AND MARKETING INC.
GROUNDWATER ELEVATION MAP
FIRST QUARTER 1995
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 82-488-0148
DRAWN BY W.H.
DATE 4/29/1995
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 3095W831.DWG

ATTACHMENT C

HISTORICAL TOTAL PETROLEUM HYDROCARBONS AS DIESEL FUEL ISOCONCENTRATION MAPS



LEGEND :

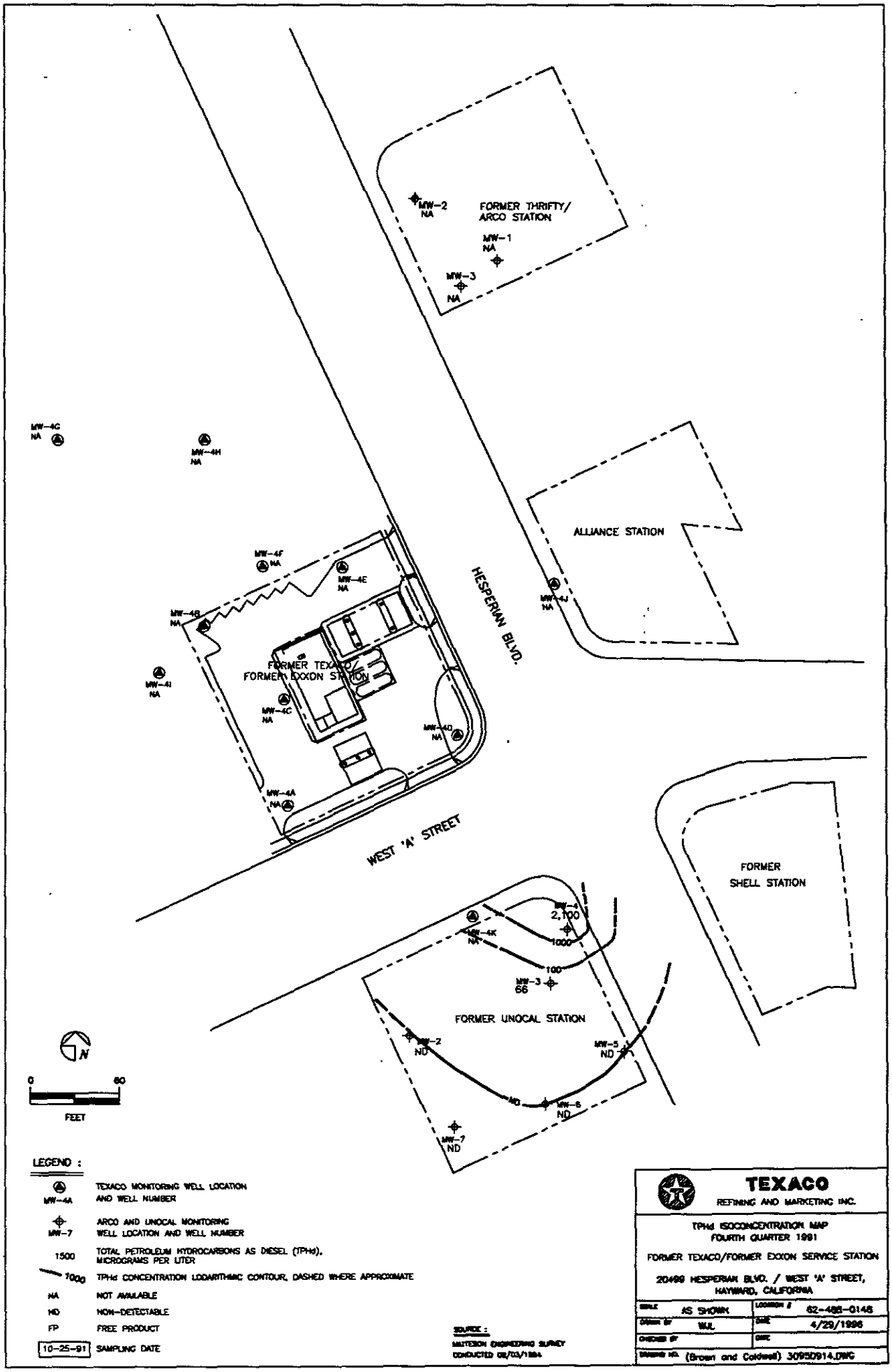
MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHd), MICROGRAMS PER LITER (ug/L)
1000	TPHd CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=500 ug/L
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
3-1-90	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 03/03/1994

TEXACO
REFINING AND MARKETING INC.

TPHd ISOCONCENTRATION MAP
FIRST QUARTER 1990
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950901.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHd), MICROGRAMS PER LITER
100	TPHd CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
10-25-91	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

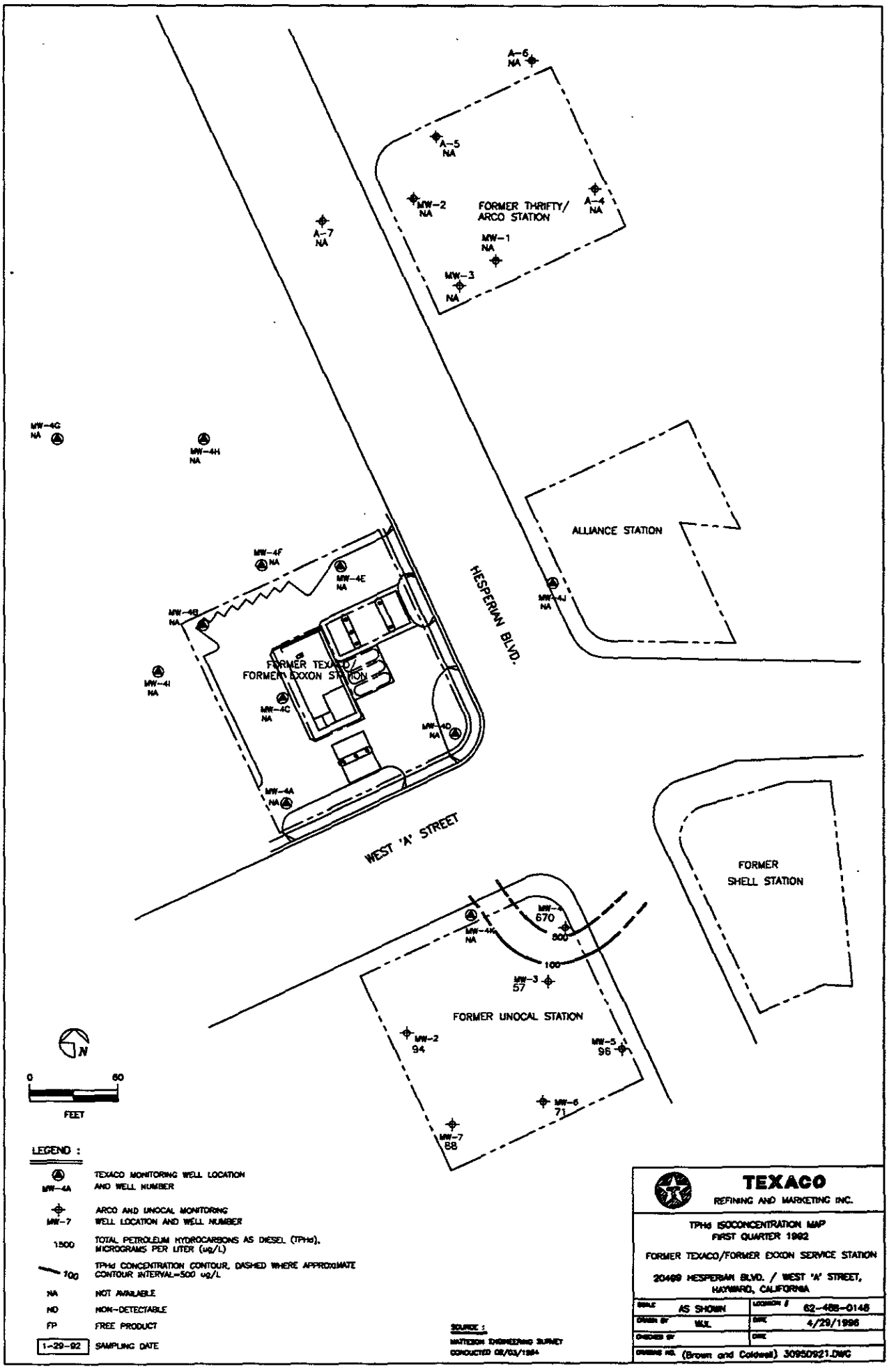
TEXACO
REFINING AND MARKETING INC.

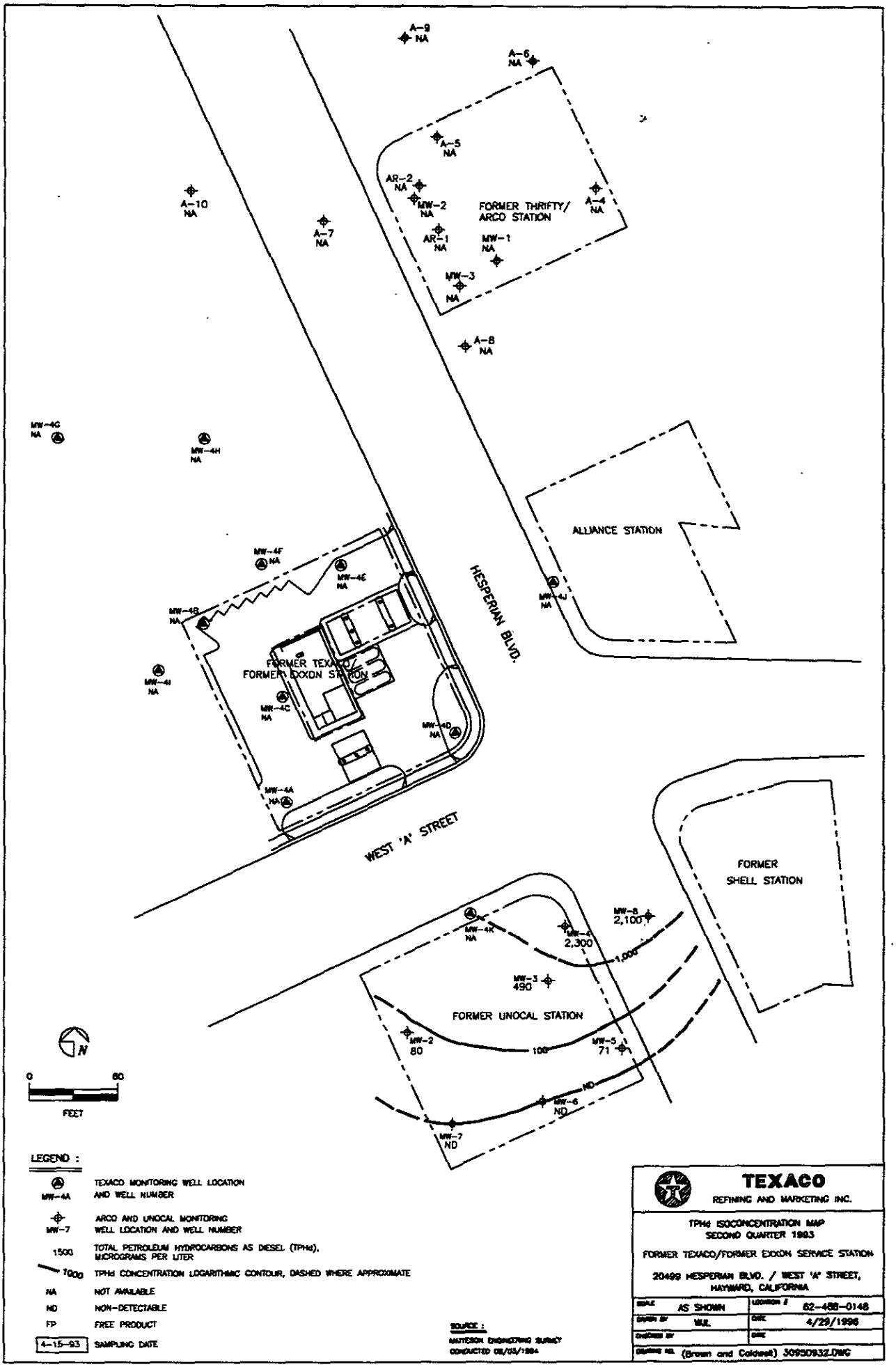
TPHd ISOCONCENTRATION MAP
FOURTH QUARTER 1991

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950914.DWG		


A-6
NA
A-5
NA
MW-2
NA
FORMER THRIFTY/
ARCO STATION
A-4
NA
A-7
NA
MW-1
NA
MW-3
NA
MW-4G
NA
MW-4H
NA
ALLIANCE STATION
MW-4J
NA
HESPERIAN BLVD.
MW-4F
NA
MW-4E
NA
MW-4B
NA
FORMER TEXACO/
FORMER EXXON STATION
MW-4I
NA
MW-4C
NA
MW-4D
NA
MW-4A
NA
WEST 'A' STREET
FORMER
SHELL STATION
MW-4K
NA
MW-1
670
500
100
MW-3
57
FORMER UNOCAL STATION
MW-2
94
MW-5
98
MW-6
71
MW-7
88
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-4A
ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
MW-7
1500
TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHd), MICROGRAMS PER LITER (ug/L)
100
TPHd CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=500 ug/L
NA
NOT AVAILABLE
ND
NON-DETECTABLE
FP
FREE PRODUCT
1-29-92
SAMPLING DATE
SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994
TEXACO
REFINING AND MARKETING INC.
TPHd ISOCONCENTRATION MAP
FIRST QUARTER 1992
FORMER TEXACO/FORMER EXXON SERVICE STATION
20469 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 62-488-0148
DRAWN BY MJL
DATE 4/29/1996
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 30950921.DWG



LEGEND :

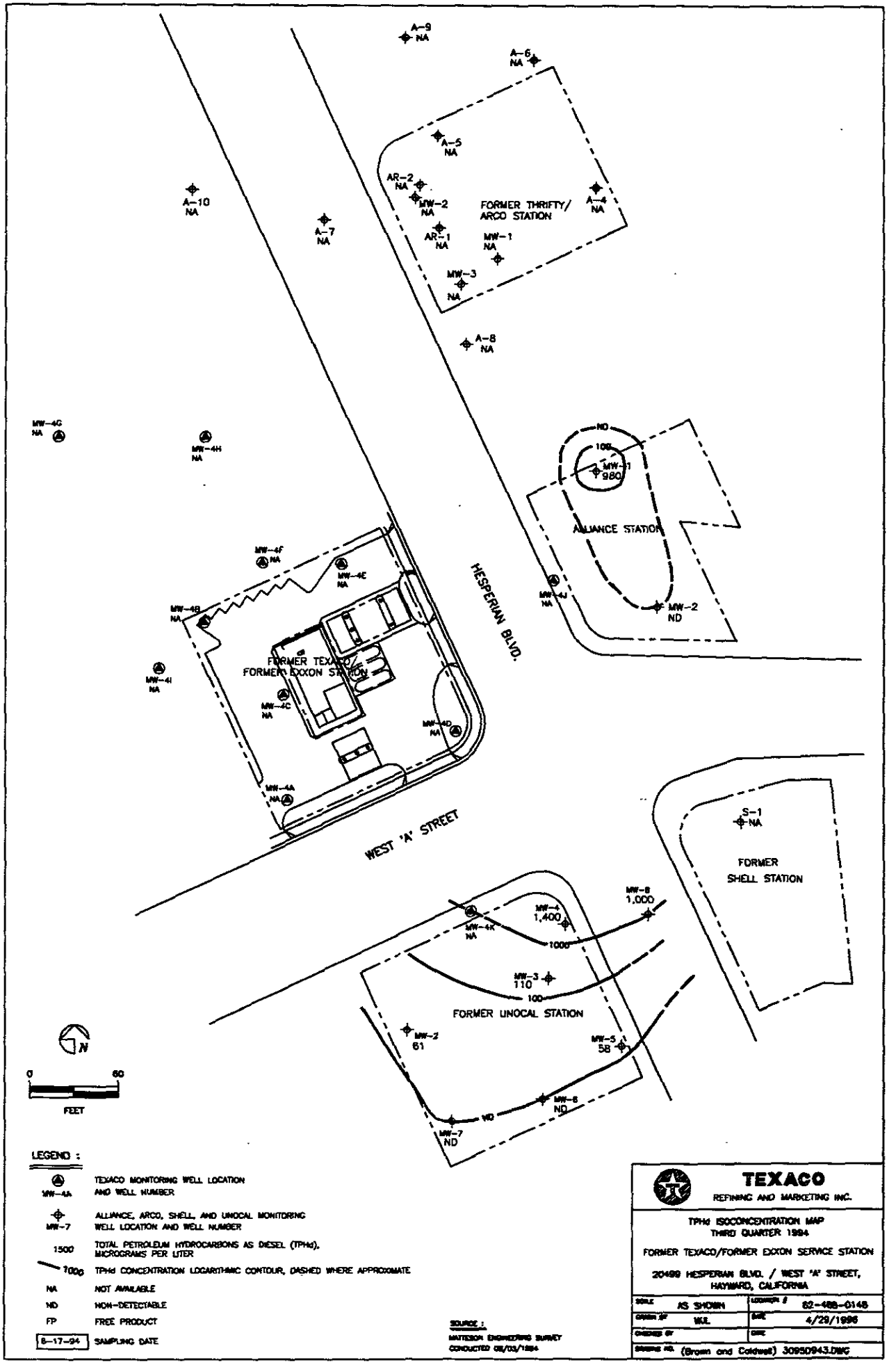
MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHd), MICROGRAMS PER LITER
1000	TPHd CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
4-15-93	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

TEXACO
REFINING AND MARKETING INC.

TPHd ISOCONCENTRATION MAP
SECOND QUARTER 1993
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950932.DWG		



LEGEND :

- MW-4A — TEXACO MONITORING WELL LOCATION AND WELL NUMBER
- MW-7 — ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
- 1500 — TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHd), MICROGRAMS PER LITER
- 1000 — TPHd CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
- NA — NOT AVAILABLE
- ND — NON-DETECTABLE
- FP — FREE PRODUCT
- 8-17-94 — SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

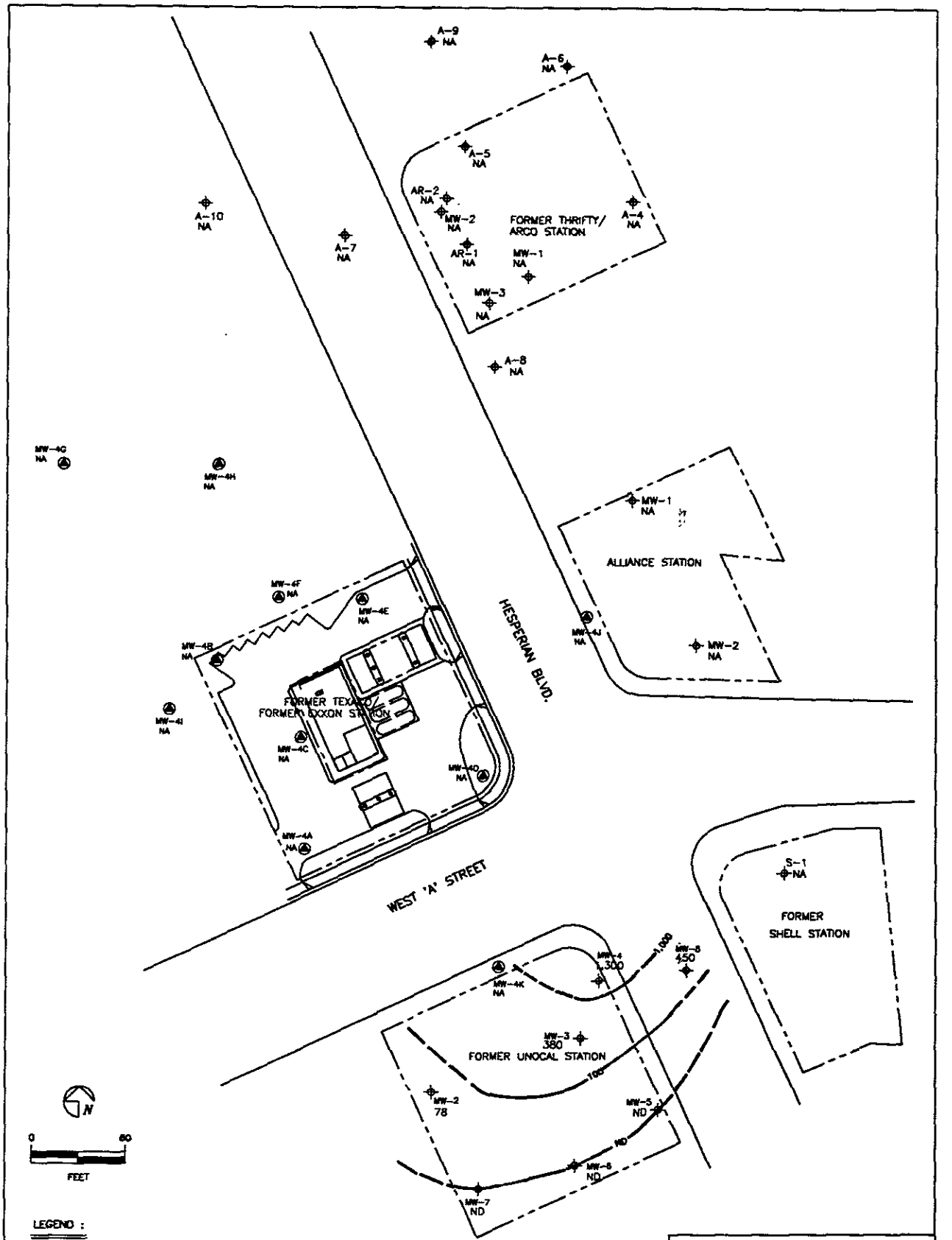
TEXACO
REFINING AND MARKETING INC.

TPHd ISOCONCENTRATION MAP
THIRD QUARTER 1994

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	82-488-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950943.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHd), MICROGRAMS PER LITER
1000	TPHd CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
2-16-95	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

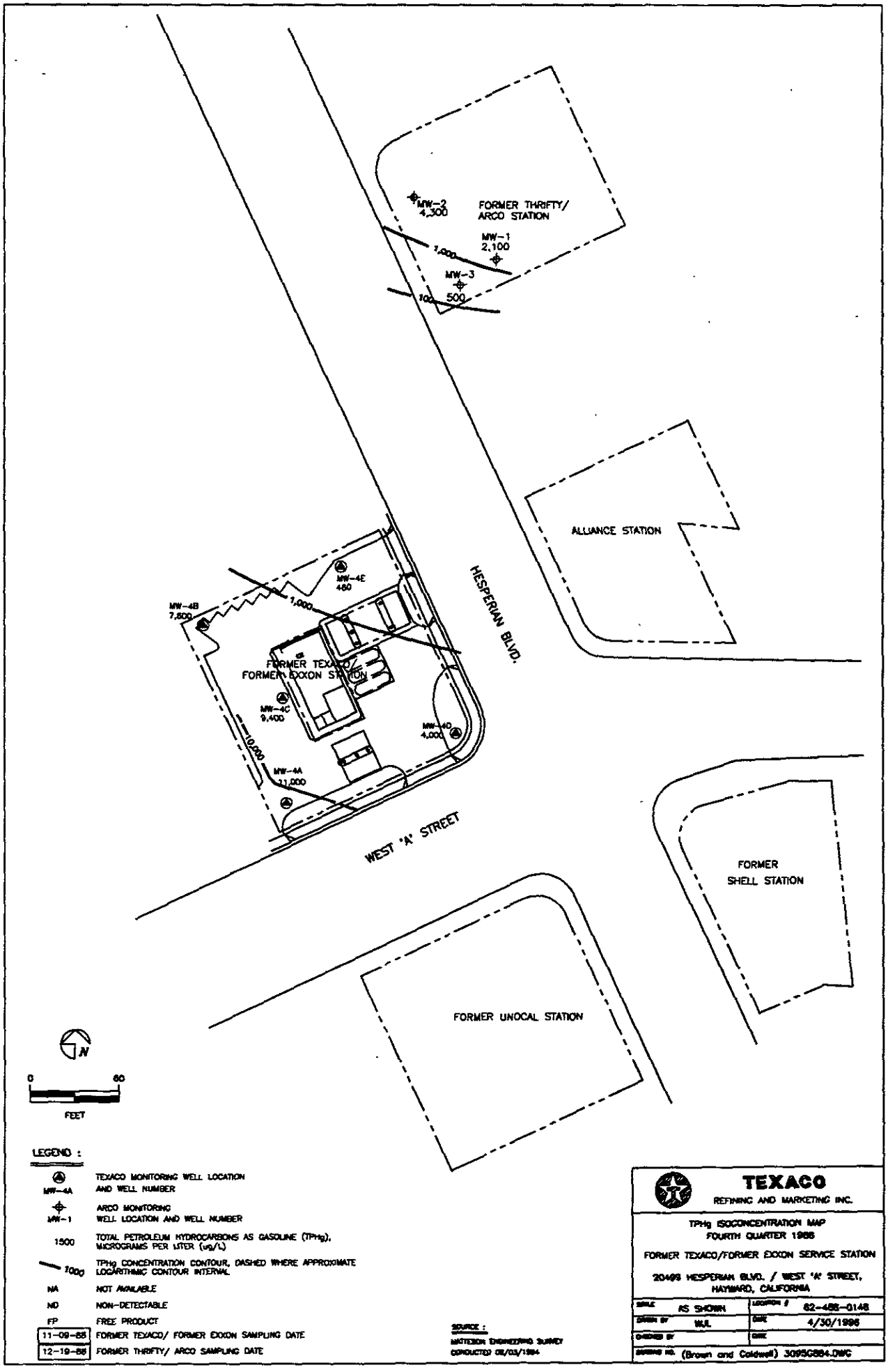
TEXACO
REFINING AND MARKETING INC.

TPHd ISOCONCENTRATION MAP
FIRST QUARTER 1995
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950951.DWG		

ATTACHMENT D

HISTORICAL TOTAL PETROLEUM HYDROCARBONS AS GASOLINE ISOCONCENTRATION MAPS



LEGEND :

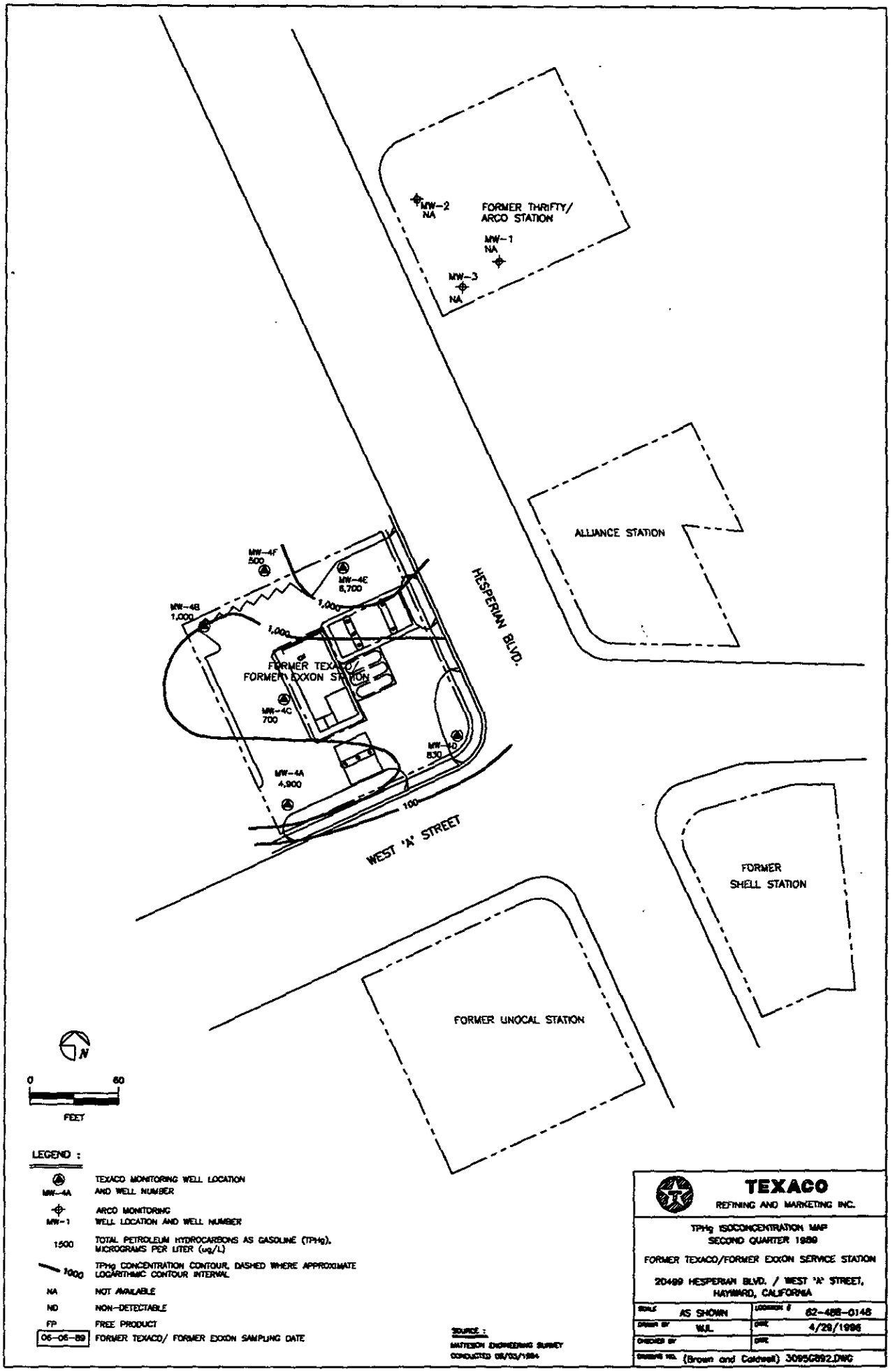
MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-1	ARCO MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), MICROGRAMS PER LITER (ug/L)
1000	TPHg CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE LOGARITHMIC CONTOUR INTERVAL
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
11-09-88	FORMER TEXACO/ FORMER EXXON SAMPLING DATE
12-19-88	FORMER THRIFTY/ ARCO SAMPLING DATE

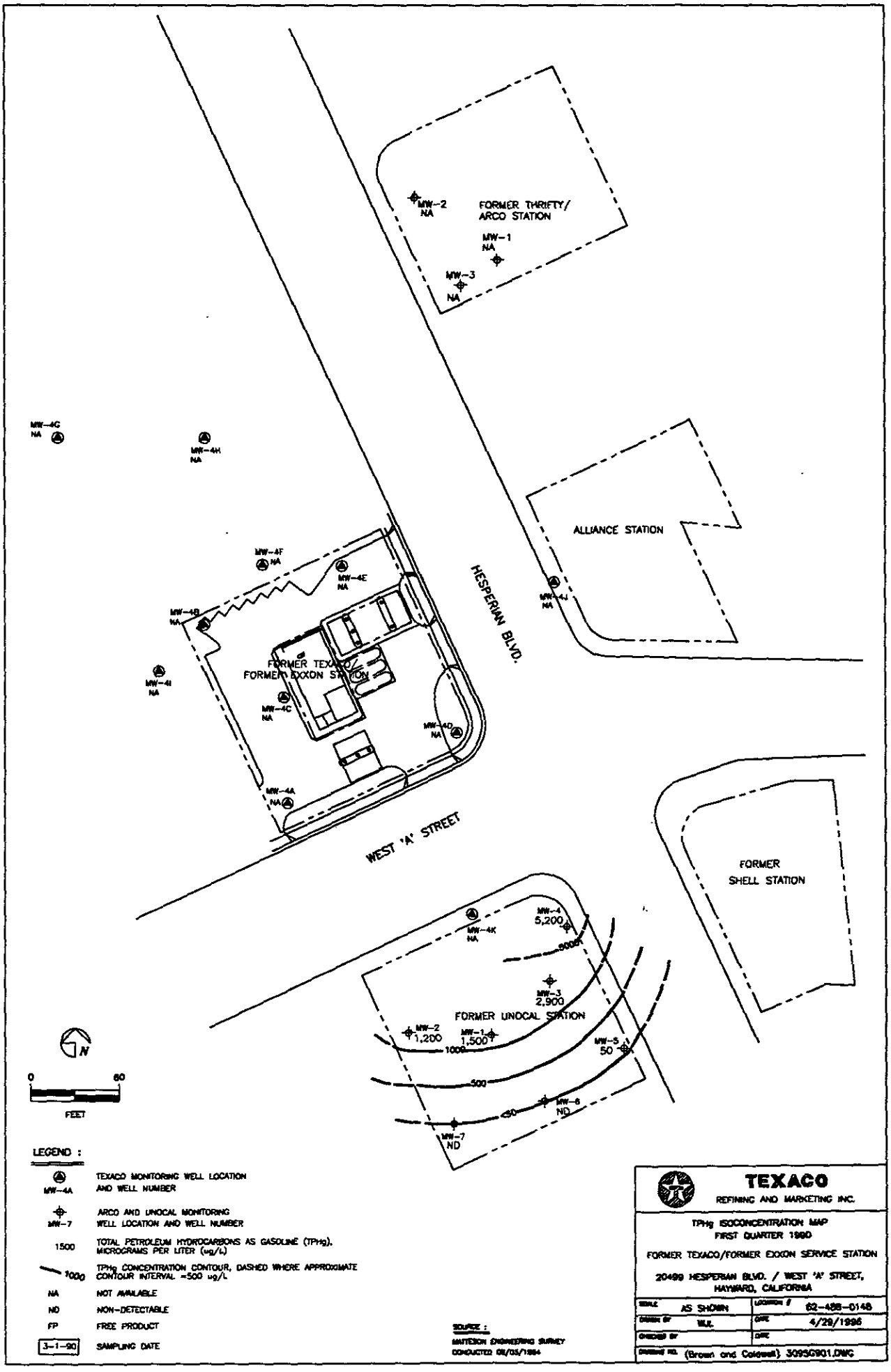
SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

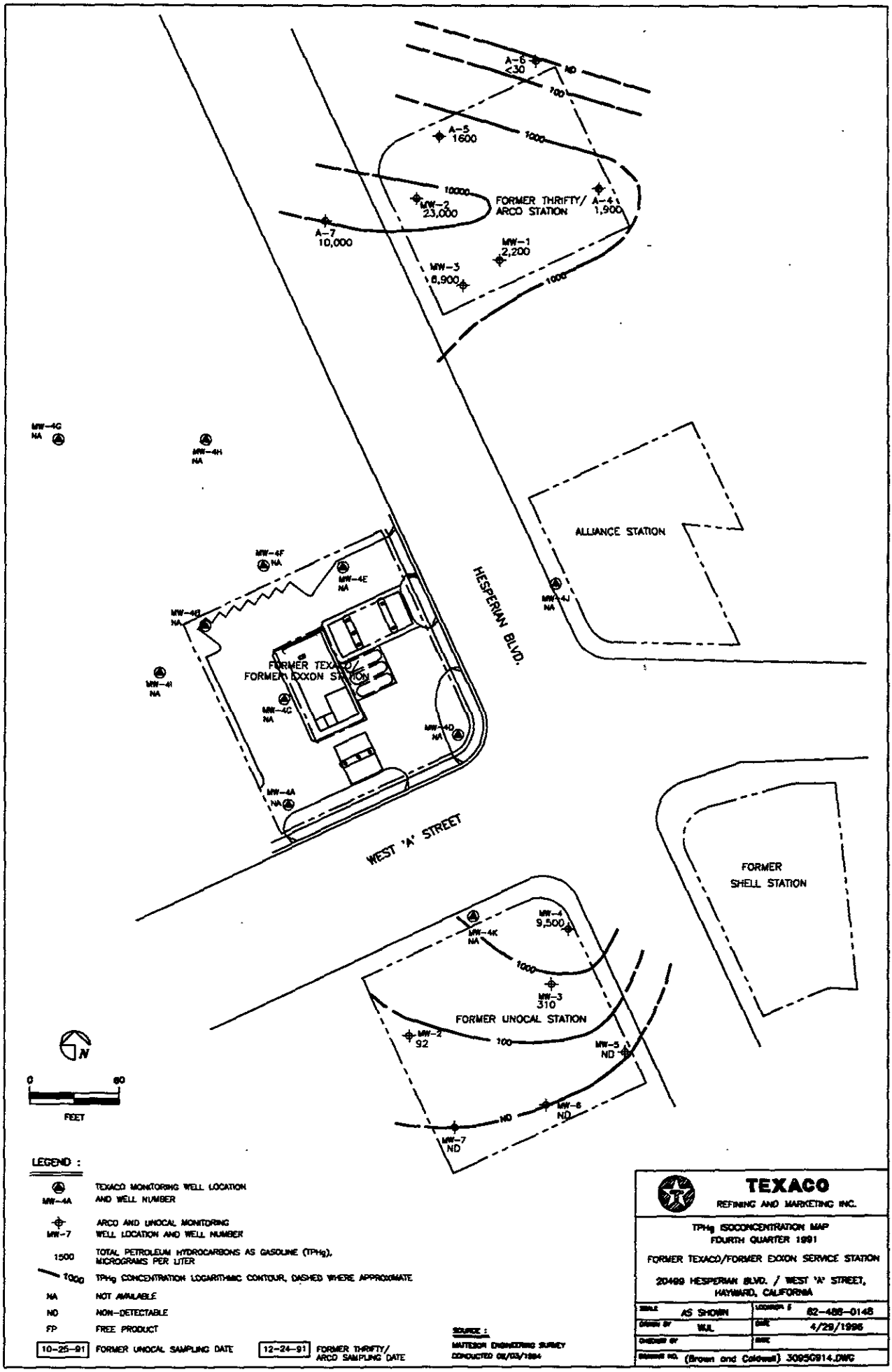
TEXACO
REFINING AND MARKETING INC.

TPHg ISOCONCENTRATION MAP
FOURTH QUARTER 1996
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/30/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095C884.DWG		


MW-2
NA
FORMER THRIFTY/
ARCO STATION
MW-1
NA
MW-3
NA
ALLIANCE STATION
HESPERIAN BLVD.
MW-4F
500
MW-4E
6,700
MW-4B
1,000
1,000
1,000
FORMER TEXACO/
FORMER EXXON STATION
MW-4C
700
MW-4D
830
MW-4A
4,900
100
WEST 'A' STREET
FORMER
SHELL STATION
FORMER UNOCAL STATION
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION
MW-4A
AND WELL NUMBER
ARCO MONITORING
MW-1
WELL LOCATION AND WELL NUMBER
1500
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg),
MICROGRAMS PER LITER (ug/L)
1000
TPHg CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE
LOGARITHMIC CONTOUR INTERVAL
NA
NOT AVAILABLE
ND
NON-DETECTABLE
FP
FREE PRODUCT
06-06-89
FORMER TEXACO/ FORMER EXXON SAMPLING DATE
SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 06/03/1989
TEXACO
REFINING AND MARKETING INC.
TPHg ISOCONCENTRATION MAP
SECOND QUARTER 1989
FORMER TEXACO/FORMER EXXON SERVICE STATION
20489 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 62-488-0146
DRAWN BY W.L.
DATE 4/26/1989
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 3095C892.DWG


MW-2
NA
FORMER THRIFTY/
ARCO STATION
MW-1
NA
MW-3
NA
MW-4G
NA
MW-4H
NA
ALLIANCE STATION
MW-4J
NA
MW-4F
NA
MW-4E
NA
MW-4B
NA
HESPERIAN BLVD.
MW-4I
NA
FORMER TEXACO/
FORMER EXXON STATION
MW-4C
NA
MW-4D
NA
MW-4A
NA
WEST 'A' STREET
FORMER
SHELL STATION
MW-4K
NA
MW-4
5,200
600
MW-3
2,900
FORMER UNOCAL STATION
MW-2
1,200
MW-1
1,500
1000
MW-5
50
500
50
MW-6
ND
MW-7
ND
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION AND WELL NUMBER
ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), MICROGRAMS PER LITER (ug/L)
TPHg CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL =500 ug/L
NA NOT AVAILABLE
ND NON-DETECTABLE
FP FREE PRODUCT
3-1-90 SAMPLING DATE
SOURCE :
MATHESON ENGINEERING SURVEY
CONDUCTED 03/03/1994
TEXACO
REFINING AND MARKETING INC.
TPHg ISOCONCENTRATION MAP
FIRST QUARTER 1990
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 62-488-0148
DRAWN BY WLL
DATE 4/29/1996
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 3093G901.DWG



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPH_g), MICROGRAMS PER LITER
1000	TPH_g CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
10-25-91	FORMER UNOCAL SAMPLING DATE
12-24-91	FORMER THRIFTY/ ARCO SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

TEXACO
REFINING AND MARKETING INC.

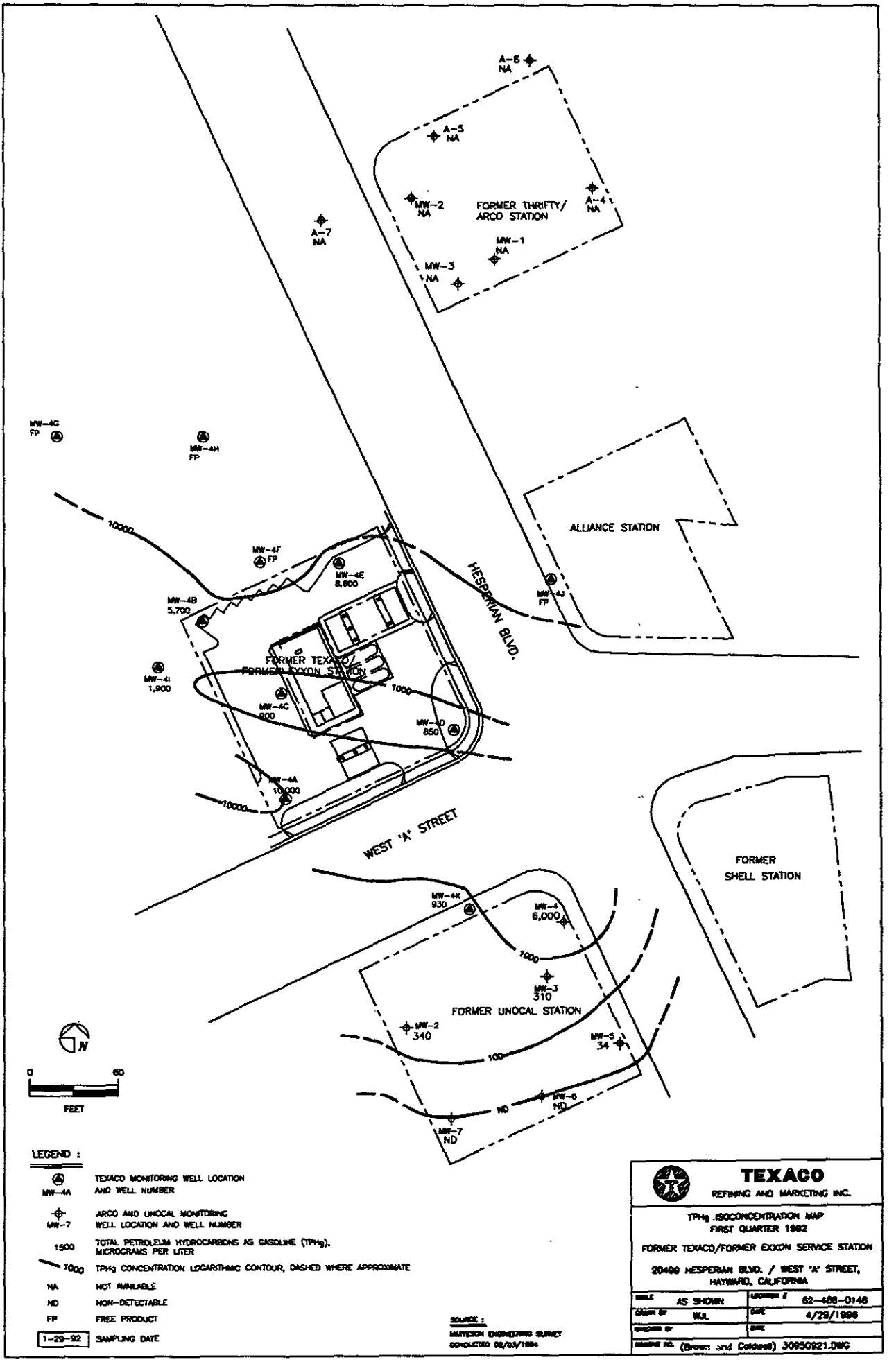
TPHg ISOCONCENTRATION MAP
FOURTH QUARTER 1991

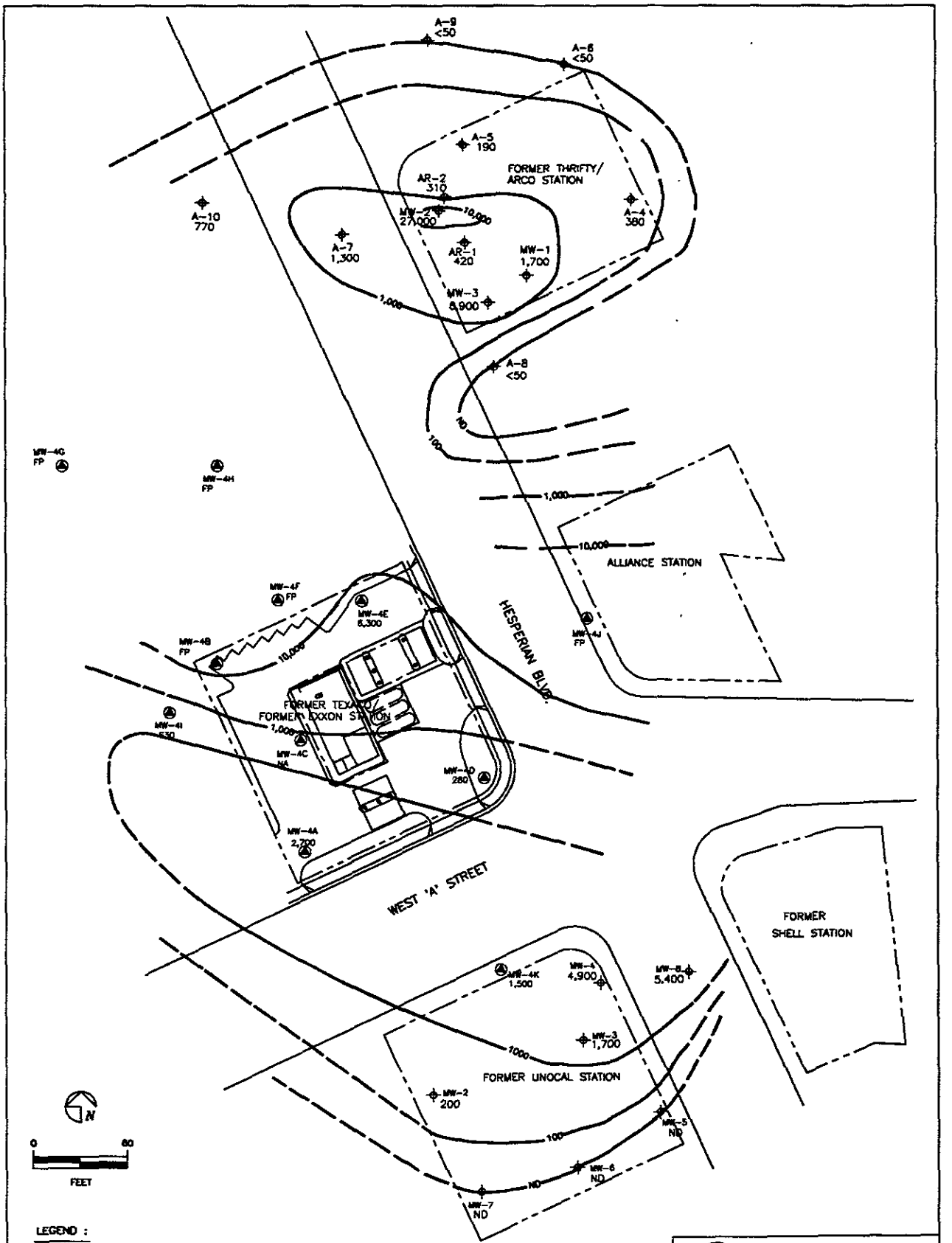
FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DWG	

DRAWING NO. (Brown and Caldwell) 3095G914.DWG


A-6
NA
A-5
NA
MW-2
NA
FORMER THRIFTY/
ARCO STATION
A-4
NA
A-7
NA
MW-1
NA
MW-3
NA
MW-4G
FP
MW-4H
FP
ALLIANCE STATION
10000
MW-4F
FP
MW-4E
8,600
HESPERIAN BLVD.
MW-4J
FP
MW-4B
5,700
FORMER TEXACO/
FORMER EXXON STATION
MW-4I
1,900
1000
MW-4C
800
MW-4D
850
MW-4A
10,000
10000
WEST 'A' STREET
FORMER
SHELL STATION
MW-4K
930
MW-4
6,000
1000
MW-3
310
FORMER UNOCAL STATION
MW-2
340
MW-5
34
100
ND
MW-6
ND
MW-7
ND
N
0
60
FEET
LEGEND :
TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-4A
ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
MW-7
1500
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), MICROGRAMS PER LITER
700
TPHg CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA
NOT AVAILABLE
ND
NON-DETECTABLE
FP
FREE PRODUCT
1-29-92
SAMPLING DATE
SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 02/03/1994
TEXACO
REFINING AND MARKETING INC.
TPHg ISOCONCENTRATION MAP
FIRST QUARTER 1992
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA
SCALE AS SHOWN
LOCATION # 62-488-0148
DRAWN BY MJL
DATE 4/29/1996
CHECKED BY
DATE
DRAWING NO. (Brown and Caldwell) 3095G921.DWG



LEGEND :

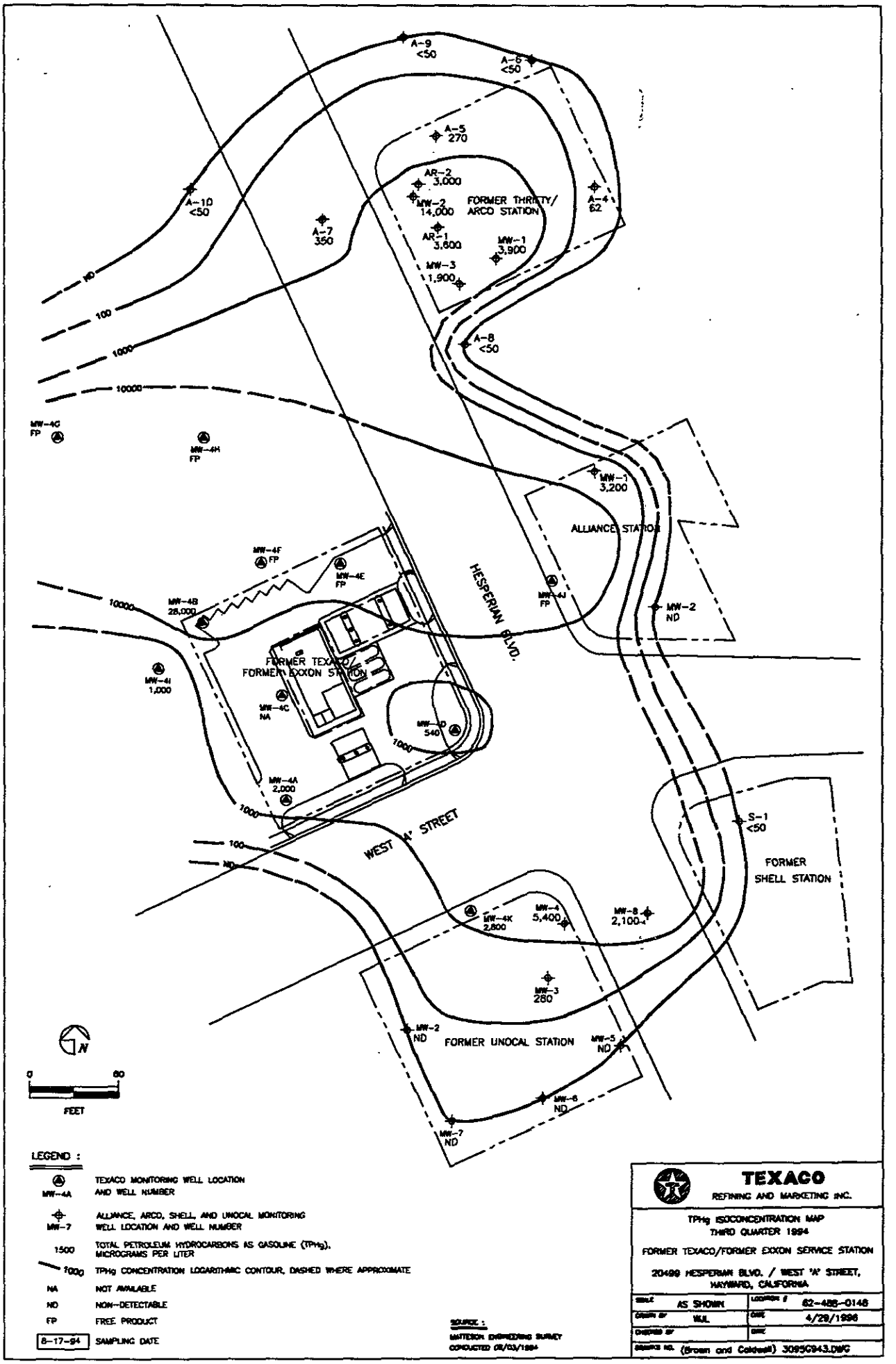
MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPH_g). MICROGRAMS PER LITER
1000	TPH_g CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
3-4-93	FORMER TEXACO/ FORMER EXXON SAMPLING DATE
4-13-93	FORMER THRIFTY/ ARCO SAMPLING DATE
4-15-93	FORMER UNOCAL SAMPLING DATE

SOURCE : MATHESON ENGINEERING SURVEY CONDUCTED 08/03/1994

TEXACO
REFINING AND MARKETING INC.

TPH_g ISOCONCENTRATION MAP
SECOND QUARTER 1993
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET, HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0145
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950932.DWG		



LEGEND :

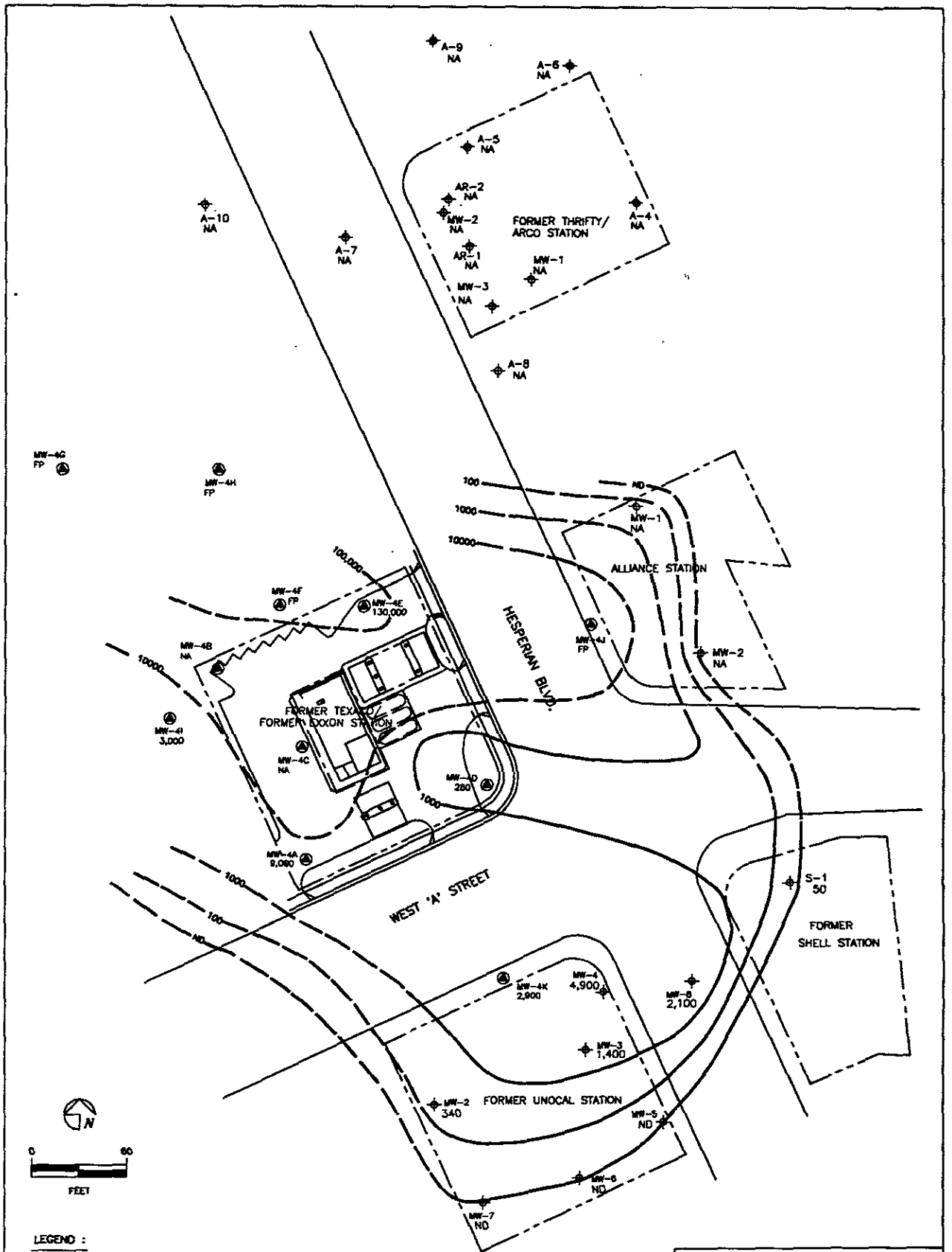
MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPH_g), MICROGRAMS PER LITER
1000	TPH_g CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
8-17-94	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

TEXACO
REFINING AND MARKETING INC.

TPH_g ISOCONCENTRATION MAP
THIRD QUARTER 1994
FORMER TEXACO/FORMER EXXON SERVICE STATION
20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 3095G943.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
1500	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), MICROGRAMS PER LITER
1000	TPHg CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
2-16-95	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

TEXACO
REFINING AND MARKETING INC.

TPHg ISOCONCENTRATION MAP
FIRST QUARTER 1995

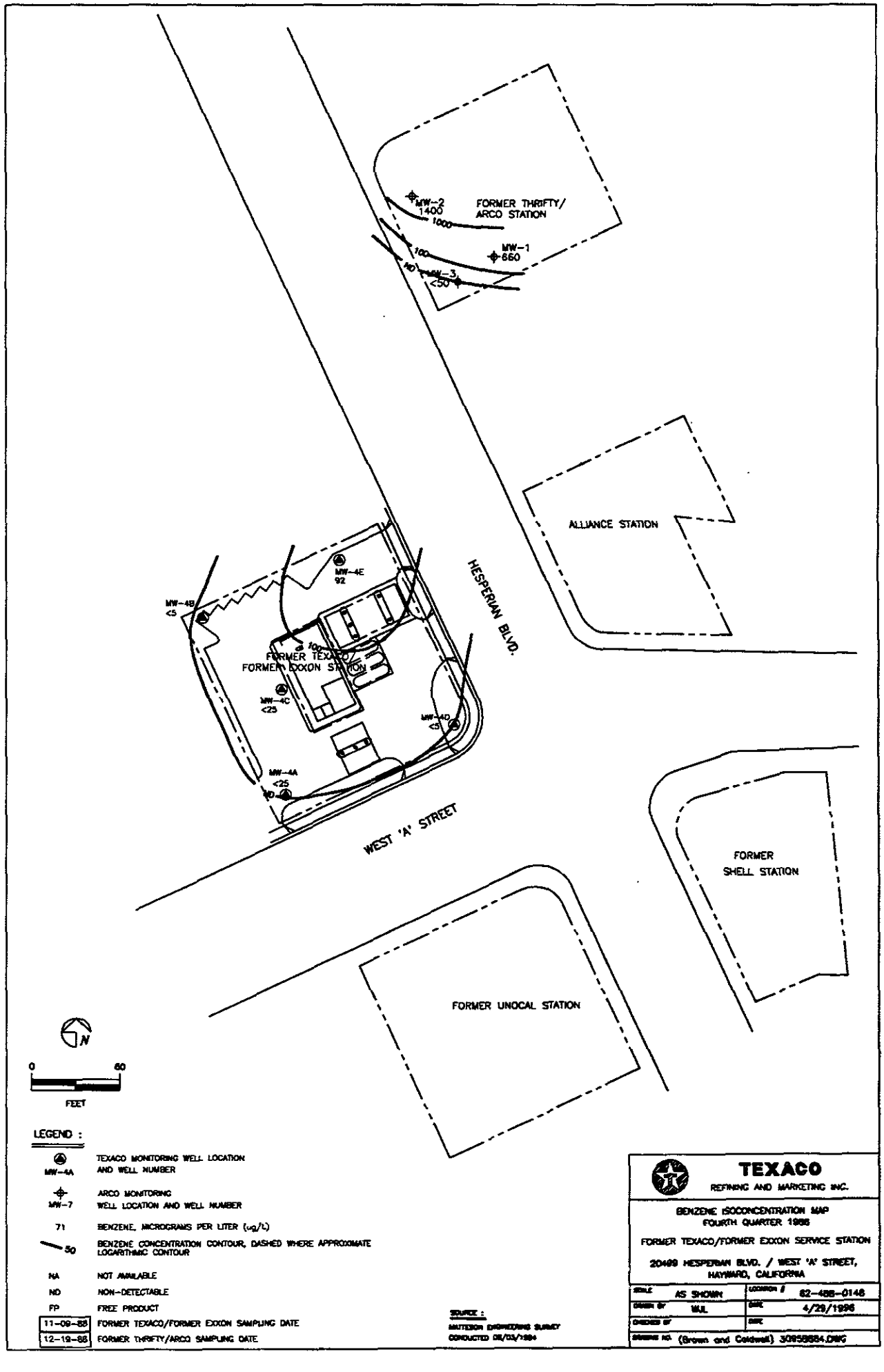
FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	YKJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30950951.DWG		

ATTACHMENT E

HISTORICAL BENZENE ISOCONCENTRATION MAPS



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER (ug/L)
50	BENZENE CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE LOGARITHMIC CONTOUR
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
11-09-88	FORMER TEXACO/FORMER EXXON SAMPLING DATE
12-19-88	FORMER THRIFTY/ARCO SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

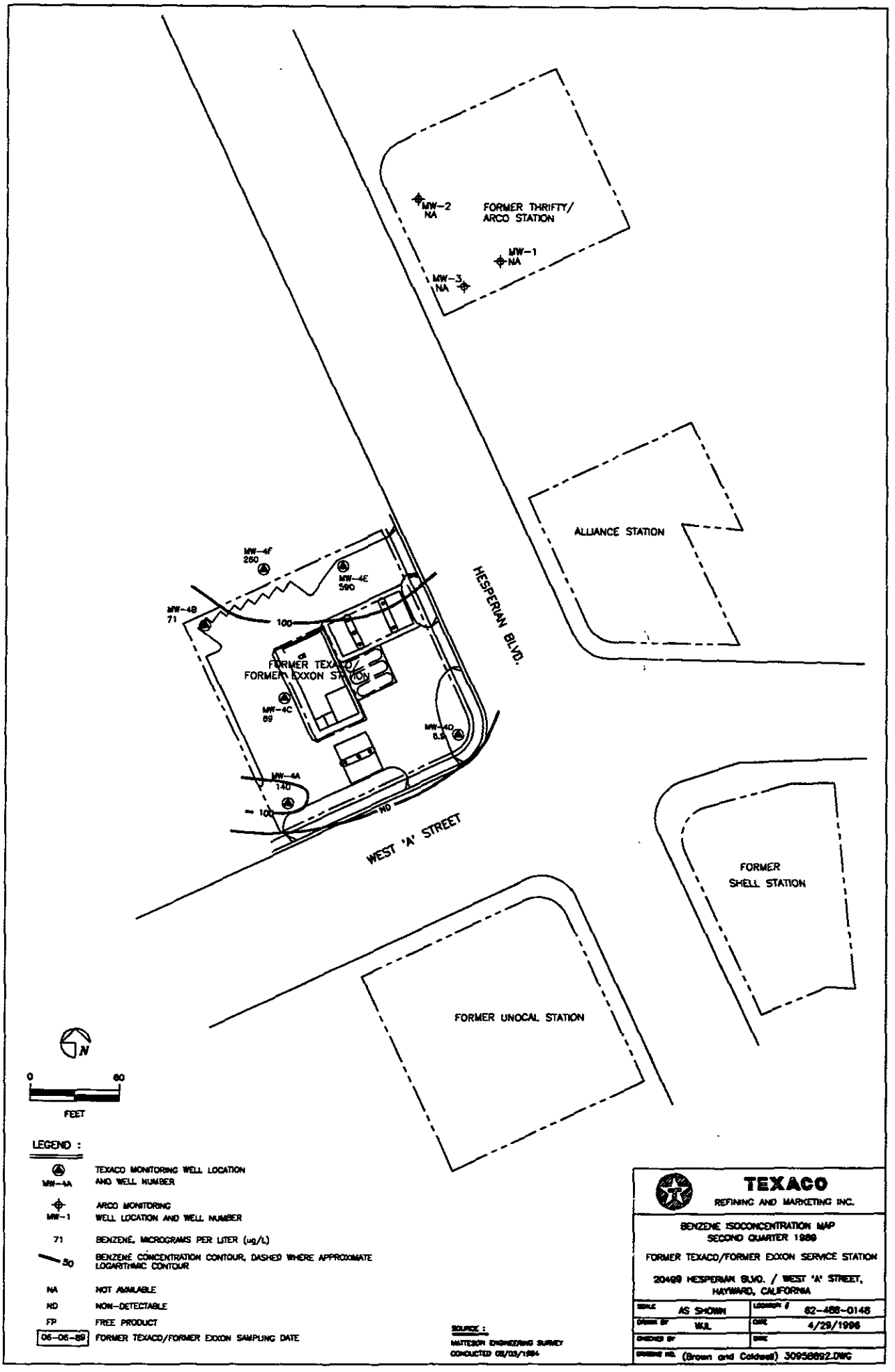
TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
FOURTH QUARTER 1995

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-486-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30959884.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-1	ARCO MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER (ug/L)
50	BENZENE CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE LOGARITHMIC CONTOUR
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
06-06-89	FORMER TEXACO/FORMER EXXON SAMPLING DATE

SOURCE :
METTESOR ENGINEERING SURVEY
CONDUCTED 06/05/1989

TEXACO
REFINING AND MARKETING INC.

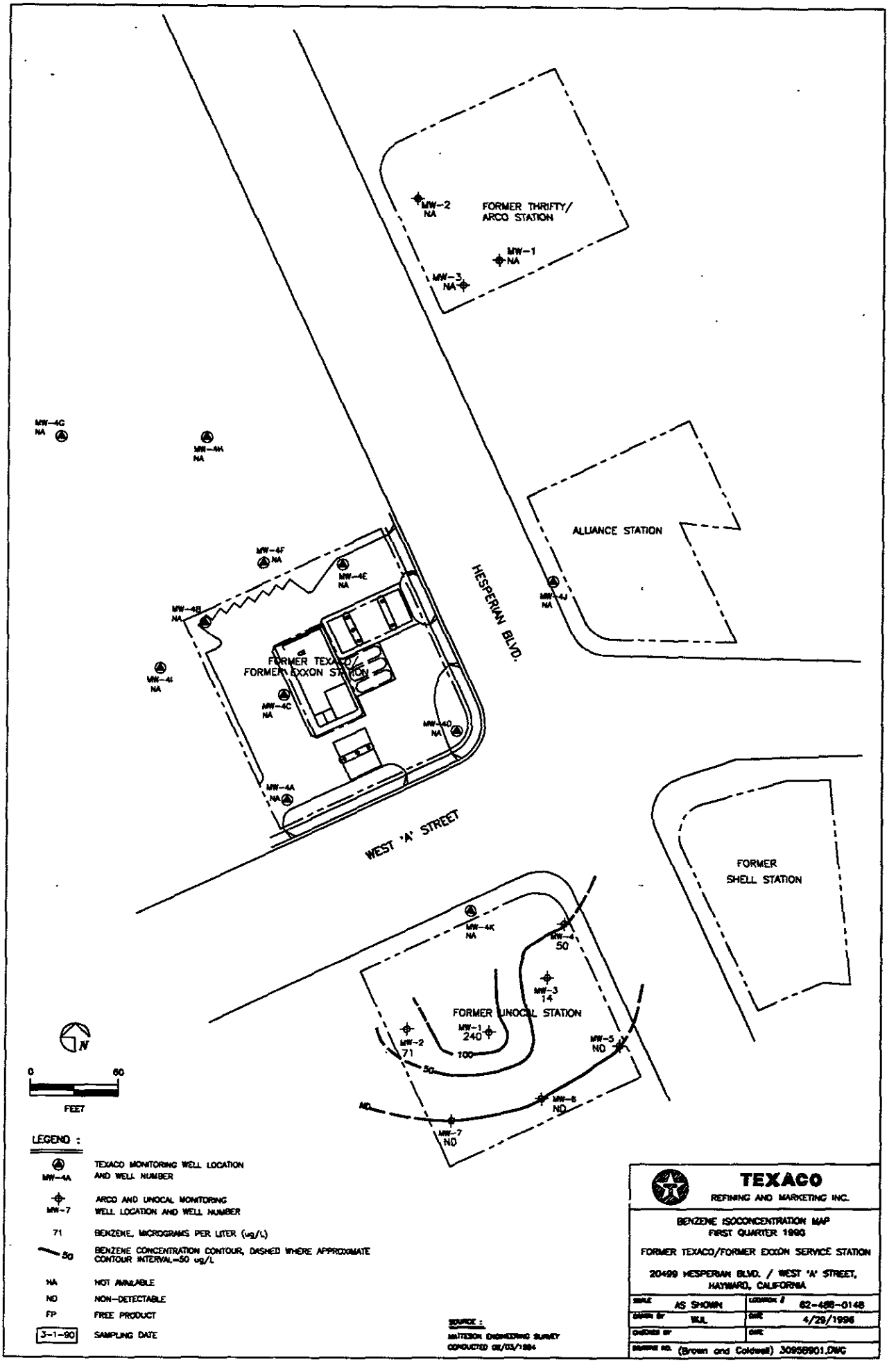
BENZENE ISOCONCENTRATION MAP
SECOND QUARTER 1989

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	W.L.	DATE	4/29/1996
CHECKED BY		DATE	

DRAWING NO. (Brown and Caldwell) 30958692.DWG



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER (ug/L)
50	BENZENE CONCENTRATION CONTOUR, DASHED WHERE APPROXIMATE CONTOUR INTERVAL=50 ug/L
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
3-1-90	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 02/03/1994

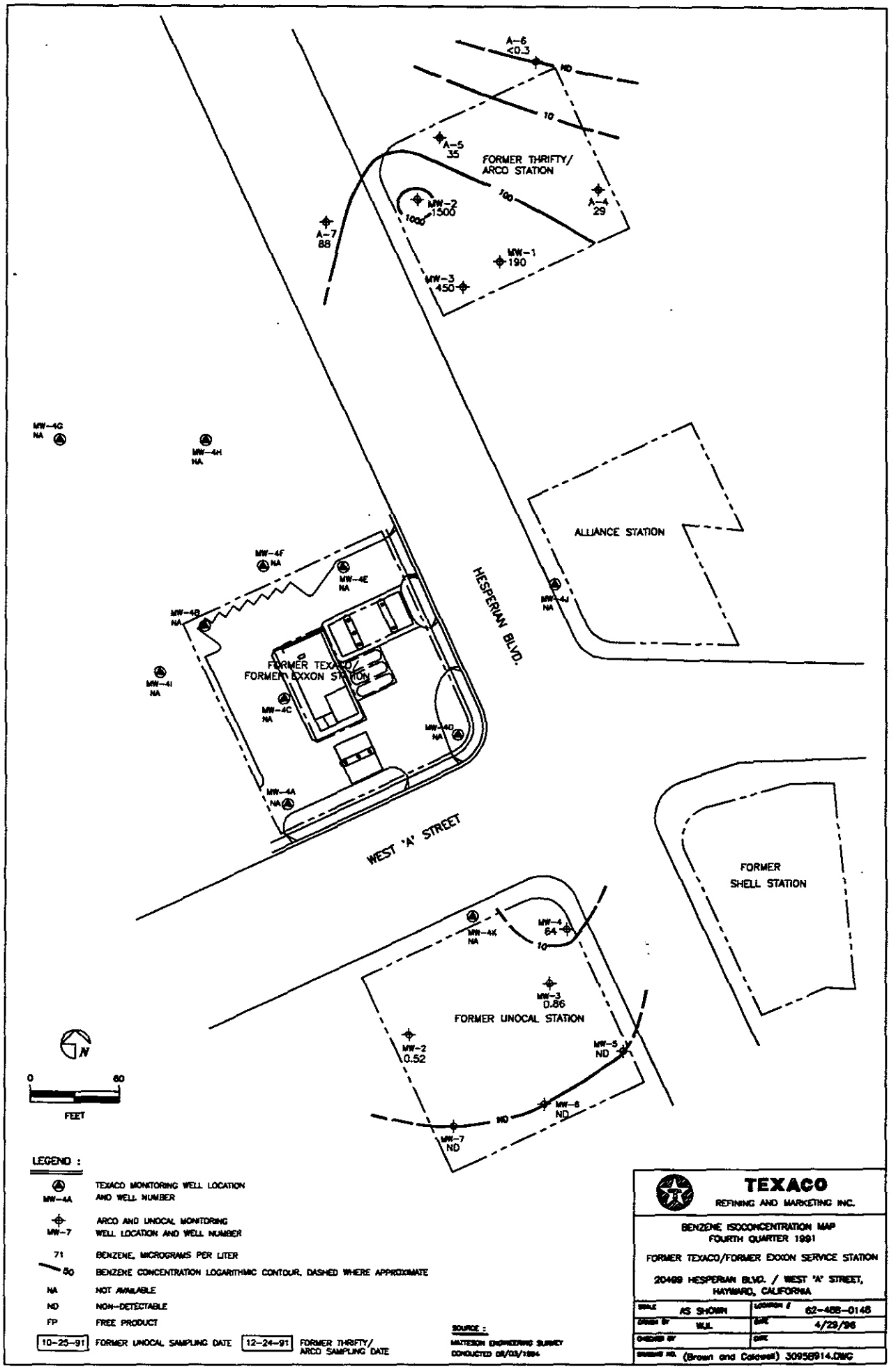
TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
FIRST QUARTER 1996

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30958901.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER
50	BENZENE CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
10-25-91	FORMER UNOCAL SAMPLING DATE
12-24-91	FORMER THRIFTY/ ARCO SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

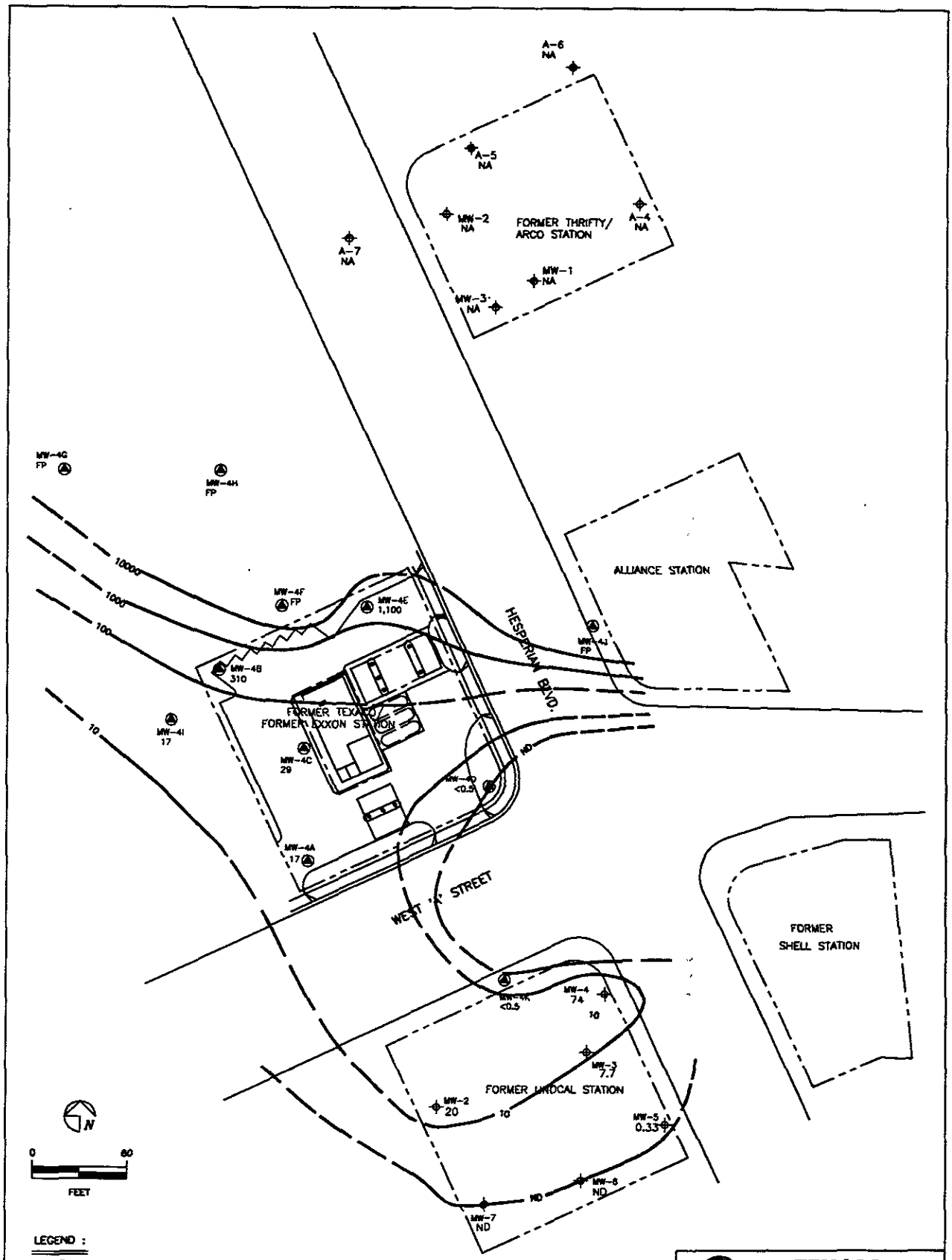
TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
FOURTH QUARTER 1991

FORMER TEXACO/FORMER EXXON SERVICE STATION

20489 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/96
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30958914.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER
60	BENZENE CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
1-29-92	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

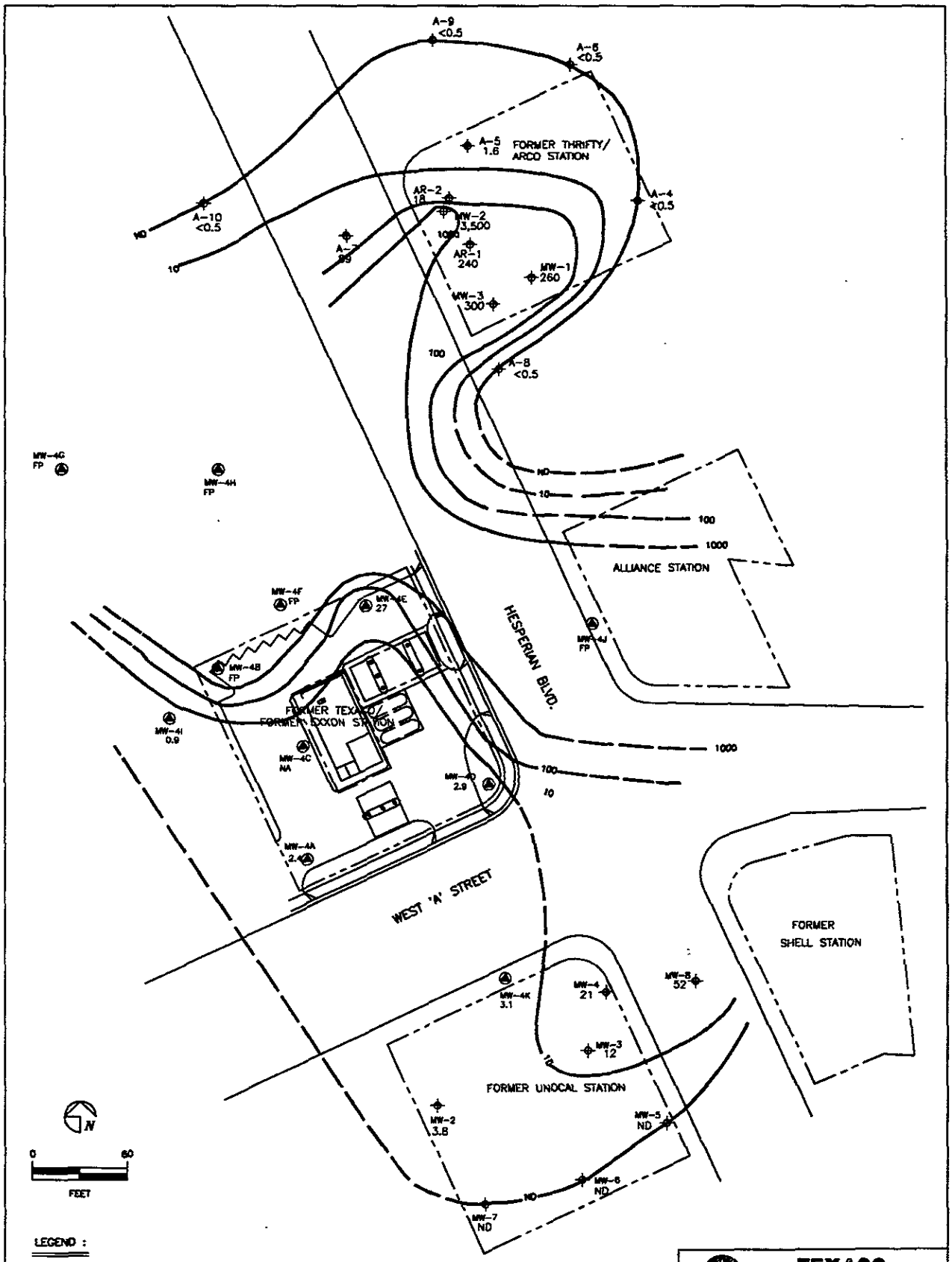
TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
FIRST QUARTER 1992

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30958921.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ARCO AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER
50	BENZENE CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
3-4-93	FORMER TEXACO/ FORMER EXXON SAMPLING DATE
4-13-93	FORMER THRIFTY/ ARCO SAMPLING DATE
4-15-93	FORMER UNOCAL SAMPLING DATE

SOURCE : MATTESON ENGINEERING SURVEY CONDUCTED 05/03/1994

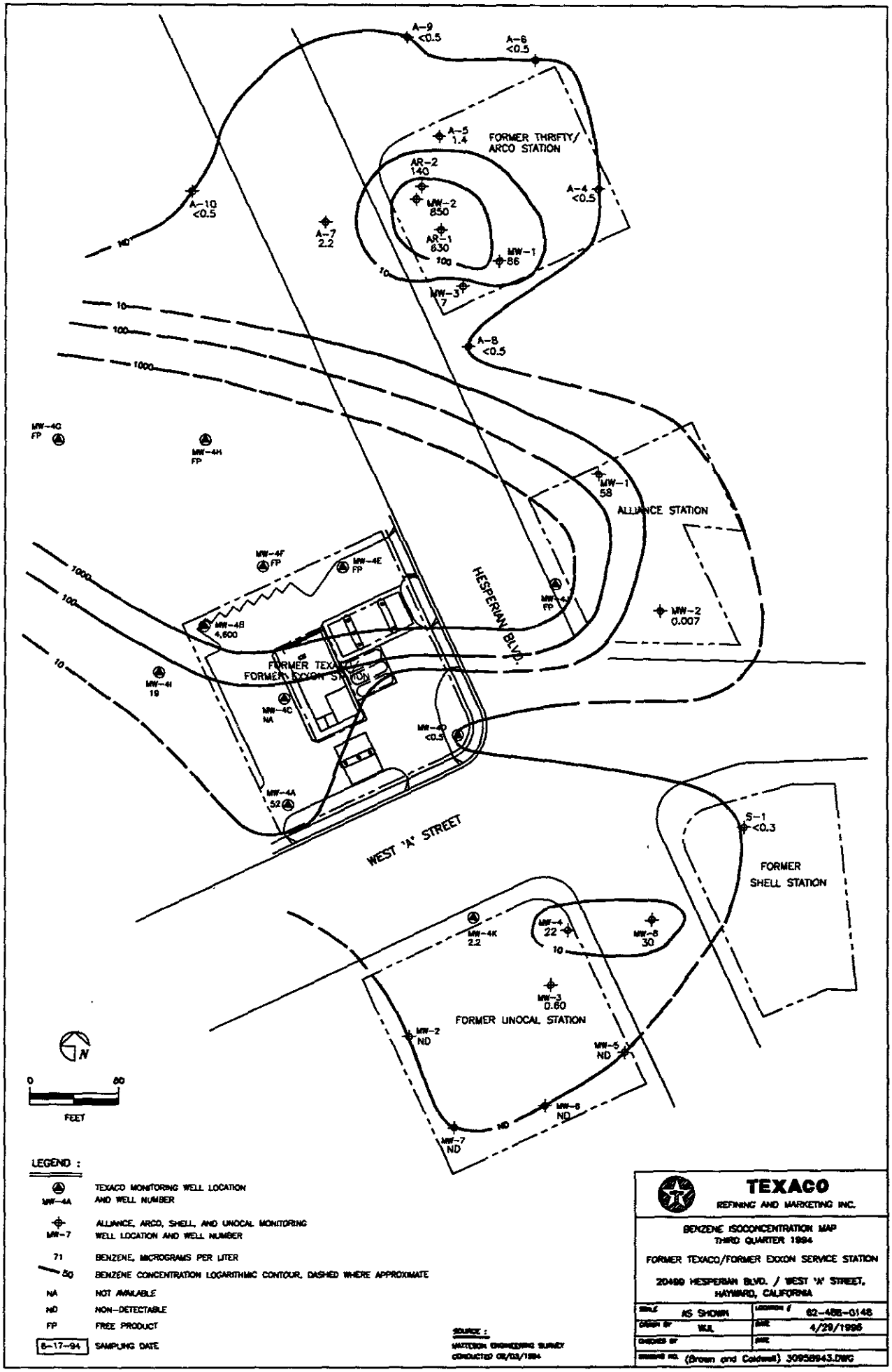
TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
SECOND QUARTER 1993

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET, HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30959932.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER
50	BENZENE CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
8-17-94	SAMPLING DATE

SOURCE :
MATTESON ENGINEERING SURVEY
CONDUCTED 08/03/1994

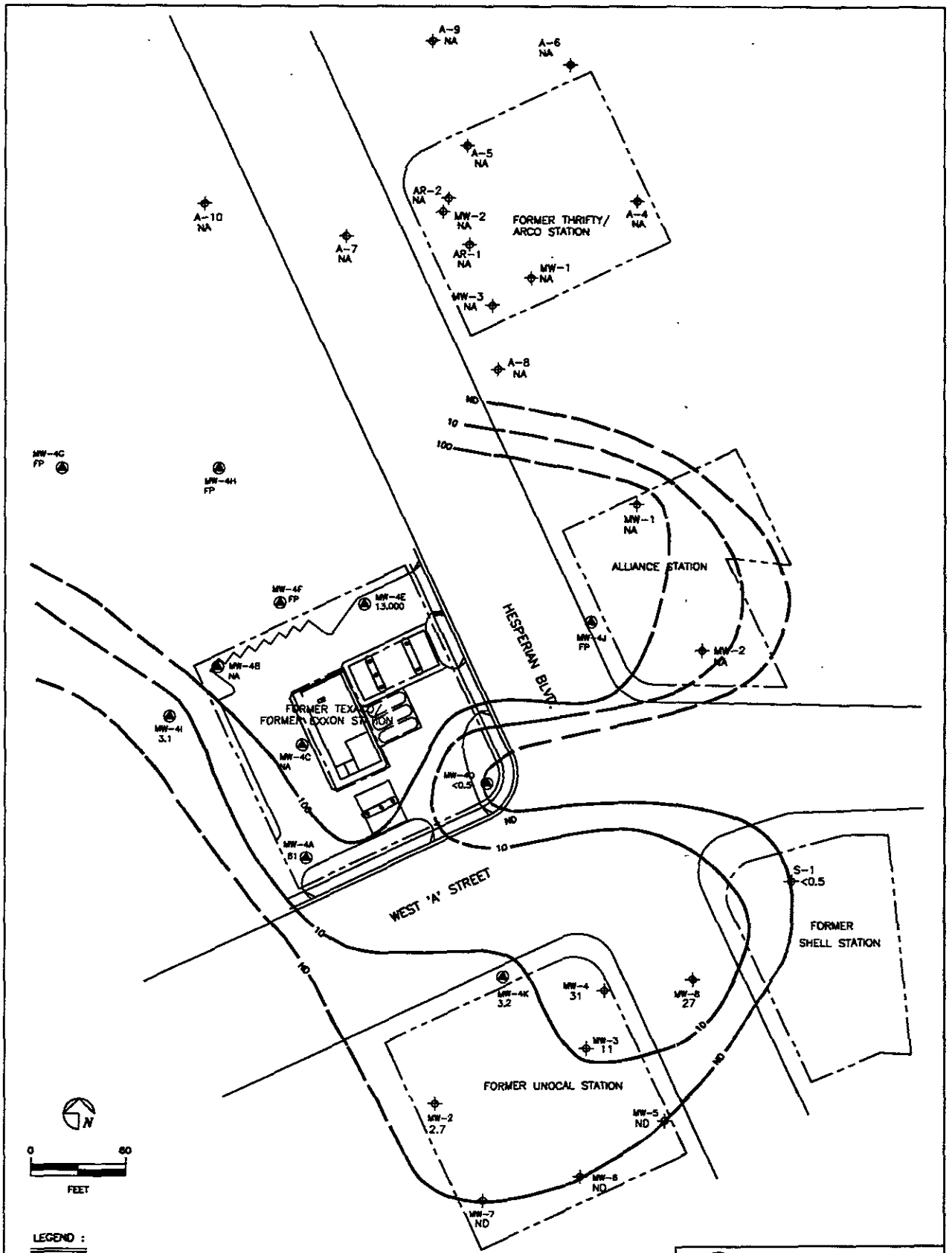
TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
THIRD QUARTER 1994

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	62-488-0148
DRAWN BY	WJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30958943.DWG		



LEGEND :

MW-4A	TEXACO MONITORING WELL LOCATION AND WELL NUMBER
MW-7	ALLIANCE, ARCO, SHELL, AND UNOCAL MONITORING WELL LOCATION AND WELL NUMBER
71	BENZENE, MICROGRAMS PER LITER
70	BENZENE CONCENTRATION LOGARITHMIC CONTOUR, DASHED WHERE APPROXIMATE
NA	NOT AVAILABLE
ND	NON-DETECTABLE
FP	FREE PRODUCT
2-16-95	SAMPLING DATE

SOURCE :
METTESOR ENGINEERING SURVEY
CONDUCTED 02/03/1996

TEXACO
REFINING AND MARKETING INC.

BENZENE ISOCONCENTRATION MAP
FIRST QUARTER 1996

FORMER TEXACO/FORMER EXXON SERVICE STATION

20499 HESPERIAN BLVD. / WEST 'A' STREET,
HAYWARD, CALIFORNIA

SCALE	AS SHOWN	LOCATION #	82-488-0148
DRAWN BY	MJL	DATE	4/29/1996
CHECKED BY		DATE	
DRAWING NO.	(Brown and Caldwell) 30958951.DWG		

ATTACHMENT F

SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS AND ANALYTICAL LABORATORY RESULTS

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1											
MW-1	8/8/86	38.36	11.25		27.11	na[5]	7040	132	8.7	439	230
MW-1	8/11/86		11.22		27.14	na	14300	130	9	439	230
MW-1	8/19/86		11.31		27.05						
MW-1	10/28/86					na	8000	500	700	NA	1000
MW-1	1/21/87					na	3000	800	500	<500	<500
MW-1	4/9/87					na	2300	500	600	NA	200
MW-1	7/15/87					na	700	<50	200	<50	<50
MW-1	1/5/88					na	1800	100	100	<50	<50
MW-1	4/13/88					na	6700	780	160	180	90
MW-1	12/19/88					na	2100	660	120	<50	70
MW-1	12/24/91		16.12		22.24	na	2200	190	8.5	6.9	2.6
MW-1	3/10/92		13.34		25.02	na	2800	270	29	56	39
MW-1	6/9/92		14.12		24.24	na	2900	960	27	99	63
MW-1	9/14/92		15.34		23.02	na	2600	450	<5	45	21
MW-1	11/12/92		15.46		22.90	na	1600	310	7.2	22	8.9
MW-1	2/11/93		11.95		26.41	na	4000	510	47	200	91
MW-1	4/13/93		11.65		26.71	na	1700	260	20	100	70
MW-1	8/12/93		12.93		25.43	na	830	60	3.8	39	3.6
MW-1	10/26/93		14.13		24.23	na	8800	140	<10	41	<10
MW-1	2/16/94	37.26	11.86		25.40	na	1200	130	12	54	58
MW-1	5/3/94		11.58		25.68	na	1100	110	4.5	33	14
MW-1	8/17/94	37.33	12.78		24.55	na	3900	86	5.1	78	9.4
MW-1	11/18/94		12.31		25.02	na	6350	112	8.4	107	35
MW-1	9/26/95		11.26		26.07	na	ND	ND	ND	ND	ND
MW-2											
MW-2	8/8/86	38.58	11.62		26.96	na	1910	20.1	2.8	1.8	ND
MW-2	8/11/86		11.64		26.94	na	2900	200	3	1.8	ND
MW-2	8/19/86		11.69		26.89						
MW-2	10/28/86					na	23000	1800	1400	NA	1600
MW-2	1/21/87					na	61000	500	3000	<500	<500
MW-2	4/9/87					na	14000	800	400	NA	400

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-2	7/15/87					na	16000	3500	3000	<500	300
MW-2	1/5/88					na	24000	2000	2700	2000	1500
MW-2	4/13/88					na	16200	2400	300	1200	600
MW-2	12/19/88					na	4300	1400	130	370	<50
MW-2	12/24/91		16.50		22.08	na	23000	1500	1100	480	1400
MW-2	3/10/92		13.50		25.08	na	210000	44000	3900	1700	5800
MW-2	6/9/92		14.52		24.06	na	33000	2300	370	780	2600
MW-2	9/14/92		15.78		22.80	na	16000	3700	100	470	1000
MW-2	11/12/92		15.98		22.60	na	16000	3800	86	470	910
MW-2	2/11/93		12.27		26.31	na	27000	3500	720	1600	3800
MW-2	4/13/93		12.01		26.57	na	27000	3500	220	2200	5100
MW-2	8/12/93		13.81		24.77	na	16000	1600	27	1300	1200
MW-2	10/26/93		14.53		24.05	na	12000	1200	<25	510	330
MW-2	2/16/94	37.99	12.81		25.18	na	15000	1800	21	850	540
MW-2	5/3/94		12.63		25.36	na	17000	1000	26	990	940
MW-2	8/17/94	38.06	13.69		24.37	na	14000	850	14	640	270
MW-2	11/18/94		13.18		24.88	na	14900	640	3.4	532	156
MW-2	9/26/95		12.23		25.83	na	5100	40	25	2.5	18
MW-3											
MW-3	8/8/86	37.77	10.61		27.16	na	7.45	0.51	0.549	0.409	1.38
MW-3	8/11/86		10.65		27.12						
MW-3	8/19/86		10.72		27.05						
MW-3	10/28/86					na	18000	1200	1500		500
MW-3	1/21/87					na	90000	<500	<500	<500	<500
MW-3	4/14/87					na	4200	<500	<500	<500	<500
MW-3	7/15/87					na	100	<500	<500	<500	<500
MW-3	1/5/88					na	100	<500	<500	<500	<500
MW-3	4/13/88					na	300	<5000	<5000	<5000	<5000
MW-3	12/19/88					na	500	<50	<50		<50
MW-3	12/24/91		15.60		22.17	na	6800	450	10	610	45
MW-3	3/10/92		12.90		24.87	na	11000	2500	75	400	560
MW-3	6/9/92		13.60		24.17	na	16000	2000	69	1300	2600

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-3	9/14/92		14.78		22.99	na	14000	630	<50	1500	2400
MW-3	11/12/92		14.92		22.85	na	7400	400	<50	860	330
MW-3	2/11/93		11.65		26.12	na	8600	580	<50	710	300
MW-3	4/13/93		11.16		26.61	na	6900	300	8.8	580	99
MW-3	8/12/93		12.82		24.95	na	3400	56	<5	190	<5
MW-3	10/26/93		13.60		24.17	na	2900	42	<10	76	<10
MW-3	2/16/94	36.80	11.53		25.27	na	3100	160	<10	36	8.6
MW-3	5/3/94		11.36		25.44	na	2300	44	<25	8	<2.5
MW-3	8/17/94	36.87	12.38		24.49	na	1900	7	<9.5	4.4	<5
MW-3	11/18/94		11.93		24.94	na	909	1.1	<0.5	0.9	4
MW-3	9/26/95		10.96		25.91	na	410	1.3	1.9	2.3	3.3
A-4											
A-4	12/24/91	39.86	17.60		22.26	na	1900	29	1.9	25	29
A-4	3/10/92		14.76		25.10	na	7400	37	<0.6	11	73
A-4	6/9/92		15.63		24.23	na	4500	3.2	1.5	37	16
A-4	9/14/92		16.83		23.03	na	1300	<2.5	2.5	61	6.8
A-4	11/12/92		16.97		22.89	na	610	7.2	0.98	34	0.97
A-4	2/11/93		13.43		26.43	na	740	2.4	<0.5	5	3.5
A-4	4/13/93		13.06		26.80	na	380	<0.5	<0.5	10	1.6
A-4	8/12/93		14.94		24.92	na	1200	0.93	<0.5	0.91	<0.5
A-4	10/26/93		15.52		24.34	na	160	<0.5	<0.5	1	<0.5
A-4	2/16/94	39.46	14.02		25.44	na	320	<0.5	<0.5	28	0.9
A-4	5/3/94		13.85		25.61	na	130	<0.5	<0.5	1.1	<0.5
A-4	8/17/94	39.53	14.95		24.58	na	62	<0.5	<0.5	<0.5	<0.5
A-4	11/18/94		14.46		25.07	na	98	1.3	0.6	<0.5	<0.5
A-4	9/26/95		13.22		26.31	na	ND	ND	ND	ND	ND
A-5											
A-5	12/24/91	38.94	16.85		22.09	na	1600	35	<0.3	32	52
A-5	3/10/92		13.83		25.11	na	1000	21	<1.5	43	100
A-5	6/9/92		14.91		24.03	na	680	1.6	<0.3	14	16
A-5	9/14/92		16.14		22.80	na	770	34	<2.5	51	65
A-5	11/12/92		16.35		22.59	na	520	12	0.96	29	36

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
A-5	2/11/93		13.21		25.73	na	150	3	<0.5	5.1	1.5
A-5	4/13/93		12.97		25.97	na	190	1.6	<0.5	1.5	0.97
A-5	8/12/93		14.12		24.82	na	230	5.4	<0.5	5.3	0.94
A-5	10/26/93		14.72		24.22	na	190	1.7	<0.5	5.5	2
A-5	2/16/94	38.47	13.20		25.27	na	340	2.8	<0.5	13	2.9
A-5	5/3/94		13.08		25.39	na	170	<0.5	<0.5	4	1.9
A-5	8/17/94	38.54	14.18		24.36	na	270	1.4	<0.5	7.3	1.1
A-5	11/18/94		13.73		24.81	na	338	0.6	<0.5	4.6	<0.5
A-5	9/26/95		12.44		26.10	na	ND	0.63	1.1	ND	1.2
A-6											
A-6	12/24/91	39.07	16.88		22.19	na	<30	<0.3	<0.3	<0.3	<0.3
A-6	3/10/92		13.73		25.34	na	<30	<0.3	<0.3	<0.3	<0.3
A-6	6/9/92		14.95		24.12	na	<30	<0.3	<0.3	<0.3	<0.3
A-6	9/14/92		16.20		22.87	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	11/12/92		16.35		22.72	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	2/11/93		13.04		26.03	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	4/13/93		12.23		26.84	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	8/12/93		14.18		24.89	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	10/26/93		14.85		24.22	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	2/16/94		--			Not Monitored					
A-6	5/3/94		13.66		25.41	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	8/17/94	38.78	14.34		24.44	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	11/18/94		13.76		25.02	na	<50	<0.5	<0.5	<0.5	<0.5
A-6	9/26/95		12.56		26.22	na	ND	ND	ND	ND	ND
A-7											
A-7	12/24/91	39.95	18.11		21.84	na	10000	88	16	170	610
A-7	3/10/92		15.30		24.65	na	320	9.3	0.54	8.8	34
A-7	6/9/92		16.12		23.83	na	340	11	1.1	8.9	26
A-7	9/14/92		17.35		22.60	na	510	12	<2	30	51
A-7	11/12/92		17.47		22.48	na	760	17	0.83	50	73
A-7	2/11/93		13.80		26.15	na	260	20	1	11	21
A-7	4/13/93		13.60		26.35	na	1300	89	2.1	48	87

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
A-7	8/12/93		15.54		24.41	na	360	9	<0.5	13	9
A-7	10/26/93		16.28		23.67	na	99	1.7	<0.5	4	3
A-7	2/16/94	39.38	14.44		24.94	na	1300	38	<1	35	25
A-7	5/3/94		14.34		25.04	na	330	8.1	<0.5	7.8	3.7
A-7	8/17/94	39.45	15.40		24.05	na	350	2.2	<0.5	9.6	3.6
A-7	11/18/94		14.95		24.50	na	412	1.3	<0.5	6.2	2
A-7	9/26/95		13.92		25.53	na	ND	ND	ND	ND	ND
A-8											
A-8	9/14/92	37.23	14.19		23.04	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	11/12/92		14.35		22.88	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	2/11/93		11.25		25.98	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	4/13/93		12.33		24.90	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	8/12/93		12.41		24.82	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	10/26/93		13.02		24.21	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	2/16/94	36.76	11.47		25.29	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	5/3/94		11.35		25.41	na	<50	<0.5	<0.5	<0.5	<0.5
A-8	8/17/94	36.84	12.34		24.50	na	<50	<0.5	1.7	<0.5	1.4
A-8	11/18/94		11.90		24.94	na	<50	1	<0.5	<0.5	<0.5
A-8	9/26/95		10.94		25.90	na	ND	ND	ND	ND	ND
A-9											
A-9	9/14/92	38.71	16.12		22.59	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	11/12/92		16.29		22.42	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	2/11/93		12.31		26.40	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	4/13/93		12.01		26.70	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	8/12/93		13.90		24.81	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	10/26/93		14.86		23.85	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	2/16/94	38.19	12.99		25.20	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	5/3/94		--							Not Monitored	
A-9	8/17/94	38.24	14.03		24.21	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	11/18/94		13.44		24.80	na	<50	<0.5	<0.5	<0.5	<0.5
A-9	9/26/95		12.43		25.81	na	<50	<0.5	<0.5	<0.5	<0.5

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
A-10											
A-10	12/7/92	38.94	16.81		22.13	na	660	30	<2.5	<2.5	<2.5
A-10	2/11/93		13.15		25.79	na	210	<0.5	0.97	<0.5	<0.5
A-10	4/13/93		12.93		26.01	na	770	<0.5	3	0.76	1.9
A-10	8/12/93		14.87		24.07	na	390	<0.5	<0.5	<0.5	0.84
A-10	10/26/93		15.65		23.29	na	290	<0.5	<0.5	<0.5	<0.5
A-10	2/16/94	38.66	14.16		24.50	na	52	<0.5	<0.5	<0.5	<0.5
A-10	5/3/94		14.00		24.66	na	<50	<0.5	<0.5	<0.5	<0.5
A-10	8/17/94	38.24	15.08		23.16	na	<50	<0.5	<0.5	<0.5	<0.5
A-10	11/18/94		14.68		23.56	na	<50	<0.5	<0.5	<0.5	<0.5
A-10	9/26/95		13.58		24.66	na	ND	ND	ND	ND	ND
AR-1											
AR-1	9/14/92	38.11	15.21		22.90	na	820	67	<1	8.8	6.7
AR-1	11/12/92		15.36		22.75	na	140	66	<0.5	4.3	3.7
AR-1	2/11/93		12.81		25.30	na	360	190	<2.5	8.6	<2.5
AR-1	4/13/93		11.77		26.34	na	420	240	5.2	30	8.7
AR-1	8/12/93		13.55		24.56	na	370	150	<2	11	<2
AR-1	10/26/93		13.98		24.13	na	240	98	<2	11	<2
AR-1	2/16/94	37.46	12.15		25.31	na	4700	1100	<10	140	26
AR-1	5/3/94		12.03		25.43	na	620	130	1.3	48	4.3
AR-1	8/17/94	37.33	12.92		24.41	na	3600	630	<5	200	12
AR-1	11/18/94		12.41		24.92	na	12100	720	6.1	337	15
AR-1	9/26/95		11.34		25.99	na	ND	8.3	ND	ND	ND
AR-2											
AR-2	3/30/93	38.39	11.53		26.86	na	390	4.1	1.6	<0.5	47
AR-2	4/13/93		11.87		26.52	na	310	18	<0.5	0.67	36
AR-2	8/12/93		13.59		24.80	na	130	16	<0.5	1.7	0.57
AR-2	10/26/93		14.25		24.14	na	110	15	<0.5	1.8	<0.5
AR-2	2/16/94	37.98	12.76		25.22	na	130	2.9	<0.5	15	0.8
AR-2	5/3/94		12.60		25.38	na	<50	<0.5	<0.5	<0.5	<0.5
AR-2	8/17/94	38.18	13.86		24.32	na	3000	140	<5	220	91
AR-2	11/18/94		13.33		24.85	na	623	10.5	<0.5	27.9	8

Table 2. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at ARCO/Former Thrifty Station No. 052 20200 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
AR-2	9/26/95		11.67		26.51	na	ND	ND	ND	ND	ND

[1]Relative to lower mean sea level.
[2]Below ground surface.
[3]Total petroleum hydrocarbons as diesel fuel
[4]Total petroleum hydrocarbons as gasoline
[5]constituent not analyzed for

Table 3. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Alliance Service Station 20450 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1											
MW-1 (B-6	7/5/94	37.13	11.85		25.28	3000	11000	140	560	350	1800
MW-1	8/17/94			20		980	3200	58	49	4.9	290
MW-1	11/16/94		13.30		23.83	270	1100	270	43	14	36
MW-2											
MW-2 (B-9	7/5/94	37.88	12.45		25.43	ND	ND	1.1	1.6	ND	2.2
MW-2	8/17/94					ND	ND	0.007	ND	ND	0.006
MW-2	11/16/94		12.80		25.08	ND	130	11	1.3	0.91	ND
WS-1*	1/24/94		17.36			2700	31000	8200	1200	1200	2100
WS-2*	1/24/94		14.7			ND	ND	70	ND	ND	ND
WS-3*	1/24/94		14.54			ND	400	91	1.8	4.0	2.2
WS-4*	1/24/94		12.3			150	990	210	17	50	14

[1]Relative to lower mean sea level.
[2]Below ground surface.
[3]Total petroleum hydrocarbons as diesel fuel
[4]Total petroleum hydrocarbons as gasoline
*Grab sample collected during well construction

Table 4. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Texaco/Former Exxon Service Station 20499 Hesperian Boulevard, Hayward, CA

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentation, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4A											
MW-4A	10/12/88	35.72	12.49		23.23	na[5]	na	<13	<25	420	71
MW-4A	11/09/88		12.59		23.13	na	11,000	<25	<100	280	61
MW-4A	06/06/89		12.64		23.08	na	4,900	140	<20	270	49
MW-4A	05/15/90		12.39		23.33	na	2,800	<10	<2.5	280	33
MW-4A	02/21/91		13.31		22.41	na	6,400	9.9	<0.25	350	29
MW-4A	07/22/91		12.71		23.01	na	8,600	43	<5	280	78
MW-4A	01/29/92		13.34		22.38	na	10,000	17	22	200	43
MW-4A	09/24/92		13.05		22.67	na	4,800	99	20	310	22
MW-4A	03/04/93		9.35		26.37	na	2,700	2.4	<0.5	92	6.4
MW-4A	09/14/93		11.74		23.98	na	6,800	55	<0.5	140	41
MW-4A	03/29/94		10.57		25.15	na	5,600	41	<0.5	49	15
MW-4A	08/17/94	35.73	11.64		24.09	na	2,000	52	6.4	120	12
MW-4A	11/16/94		11.51		24.22	na	9,400	<5	36	75	91
MW-4A	02/16/95		9.06		26.67	na	9,000	61	16	65	18
MW-4A	05/16/95		8.64		27.09	na	9,800	51	9.5	53	10
MW-4A	08/10/95		9.80		25.93	na	7,200	<3	<3	40	11
MW-4A	11/15/95		10.98		24.75	na	9,200	73	20	40	42
MW-4B											
MW-4B	10/12/88	35.82	12.72		23.10	na	na	<13	<25	<50	<25
MW-4B	11/09/88		12.81		23.01	na	7,600	<5	<10	20	<10
MW-4B	06/06/89		12.95		22.87	na	1,000	71	<10	<20	<10
MW-4B	05/15/90		12.62		23.20	na	220	87	<2.5	21	3
MW-4B	02/19/91		13.51		22.31	na	4,500	630	8.1	16	5.6
MW-4B	07/22/91		12.92		22.90	na	8,900	1,400	14	210	990
MW-4B	01/29/92		13.55		22.27	na	8,600	1,110	<5	170	60
MW-4B	09/24/92		13.37		22.45	na	7,900	1,800	1.1	970	420
MW-4B	03/04/93		9.50		26.32	na	6,300	27	1.1	85	240
MW-4B	09/14/93								Not Accessible		
MW-4B	03/29/94		11.34		24.48				Not Sampled		
MW-4B	08/17/94	37.39	12.58		24.81	na	28,000	4,600	2,300	850	4,000
MW-4B	11/16/94								Not Accessible		
MW-4B	02/16/95								Not Accessible		

Table 4. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Texaco/Former Exxon Service Station 20499 Hesperian Boulevard, Hayward, CA

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentation, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4B	05/16/95		9.44		27.95	na	130,000	13000	16,000	4,000	20,000
MW-4B	08/10/95								Not Accessible		
MW-4B	11/15/95								Not Accessible		
MW-4C											
MW-4C	10/12/88	36.88	13.69		23.19	na	na	<2.5	<5	33	20
MW-4C	11/09/88		13.79		23.09	na	9,400	<25	<50	<100	<50
MW-4C	06/06/89		13.94		22.94	na	700	69	<5	15	16
MW-4C	05/15/90		13.59		23.29	na	250	10	<5	15	<5
MW-4C	02/21/91		14.50		22.38	na	1,500	9.3	<5	<5	<5
MW-4C	07/22/91		13.91		22.97	na	2,000	26	4.5	6.5	<2.5
MW-4C	01/29/92		14.53		22.35	na	900	29	5	4.2	12
MW-4C	09/24/92		14.38		22.50	na	620	7.7	8	6.7	4.1
MW-4C	03/04/93								Not Accessible		
MW-4C	09/14/93		12.95		23.93	na	12,000	20	220	72	51
MW-4C	03/29/94				36.88	na	130,000	280	48	940	1,300
MW-4C	08/17/94	36.88							Not Accessible		
MW-4C	11/16/94								Not Accessible		
MW-4C	02/16/95								Not Accessible		
MW-4C	05/16/95								Not Accessible		
MW-4C	08/10/95								Not Accessible		
MW-4C	11/15/95		12.15		24.73	na	3,200	38	28	120	300
MW-4D											
MW-4D	10/13/88	37.50	14.00		23.50	na	na	10	<1	5.8	5.8
MW-4D	11/09/88		14.10		23.40	na	4,000	<5	<10	12	3.9
MW-4D	06/06/89		14.26		23.24	na	830	6.9	<100	4.1	7.1
MW-4D	05/15/90		13.93		23.57	na	<50	<0.5	<5	5.6	2.0
MW-4D	02/20/91		14.88		22.62	na	710	4.2	<0.5	0.6	<0.5
MW-4D	07/22/91		14.23		23.27	na	850	4.6	<2.5	<2.5	<2.5
MW-4D	01/29/92		14.92		22.58	na	850	<0.5	17	14	34
MW-4D	09/24/92		14.70		22.80	na	290	3.9	<0.5	4.9	5.1
MW-4D	03/04/93		10.80		26.70	na	280	2.9	<0.5	<0.5	4.4
MW-4D	09/14/93		13.15		24.35	na	380	0.71	8.6	46	4.2
MW-4D	03/29/94		12.00		25.50	na	200	0.9	<0.5	<0.5	<0.5

Table 4. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Texaco/Former Exxon Service Station 20499 Hesperian Boulevard, Hayward, CA

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentation, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4D	08/17/94	37.50	13.23		24.27	na	540	<0.5	<0.5	2	5.3
MW-4D	11/16/94		12.98		24.52	na	500	<0.5	<0.5	1.3	1.9
MW-4D	02/16/95		10.44		27.06	na	280	<0.5	<0.5	<0.5	<0.5
MW-4D	05/16/95		11.08		26.42	na	360	5.0	7.1	4.7	8.1
MW-4D	08/10/95		11.25		26.25	na	390	<0.5	<0.5	<0.5	2.3
MW-4D	11/15/95		12.43		25.07	na	200	<0.5	<0.5	1.7	2.3
MW-4E											
MW-4E	10/13/88	36.60	13.48		23.12	na	na	550	91	<2	88
MW-4E	11/09/88		13.49		23.11	na	460	92	20	2.3	27
MW-4E	06/06/89		13.94		22.66	na	6,700	590	340	<200	610
MW-4E	05/15/90		13.28		23.32	na	1,800	210	190	31	140
MW-4E	02/19/91		14.62		21.98	na	92,000	5,700	18,000	3,500	17,000
MW-4E	07/22/91		12.85		23.75	na	86,000	4,500	8,800	1,900	11,000
MW-4E	01/29/92		14.24		22.36	na	5,700	310	820	130	730
MW-4E	09/24/92		14.10		22.50	na	37,000	2,100	5,800	1,700	5,100
MW-4E	03/04/93		10.17		26.43	Not Sampled					
MW-4E	09/14/93		12.43		24.17	Not Sampled					
MW-4E	03/29/94					na	71,000	3,600	10,000	1,800	9,200
MW-4E	08/17/94	36.62				Not Accessible					
MW-4E	11/16/94		12.35		24.27	na	40,000	3,300	5,100	1,200	6,300
MW-4E	02/16/95		9.75		26.87	na	130,000	13,000	14,000	2,500	12,000
MW-4E	05/16/95					Not Accessible					
MW-4E	08/10/95		10.45		26.17	na	90,000	7,200	8,600	3,200	3,400
MW-4E	11/15/95		11.77		24.85	na	74,000	7,000	7,600	3,500	17,000
MW-4F											
MW-4F	06/06/89	35.47	12.60		22.87	na	500	260	<50	<100	<50
MW-4F	05/16/90		12.26		23.21	na	22,000	1,200	1,300	390	690
MW-4F	02/21/91		13.65	0.60	22.30	na	4,500	630	8.1	16	5.6
MW-4F	09/24/92					Not Accessible					
MW-4F	03/04/93		9.19	0.02	26.30	Not Sampled					
MW-4F	09/14/93		11.57	0.09	23.97	Not Sampled					
MW-4F	03/29/94		10.40		25.07	Not Sampled					
MW-4F	08/17/94	35.48	11.65	0.02	23.85	Not Sampled					

Table 4. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Texaco/Former Exxon Service Station 20499 Hesperian Boulevard, Hayward, CA

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentation, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4F	11/16/94		11.41	0.03	24.09	Not Sampled					
MW-4F	02/16/95		8.83	0.03	26.67	Not Sampled					
MW-4F	05/16/95		8.50		26.98	na	320,000	17,000	12,000	46,000	26,000
MW-4F	08/10/95		9.82	0.10	25.74	Not Sampled					
MW-4F	11/15/95		10.92	0.04	24.59	Not Sampled					
MW-4G											
MW-4G	07/06/89	35.18	12.57		22.61	na	64,000	21,000	3,000	2,000	12,000
MW-4G	05/18/90		12.19	0.17	23.12	na	72,000	10,000	2,400	2,200	7,600
MW-4G	09/24/92					Not Accessible					
MW-4G	03/04/93		9.27		25.91	Not Sampled					
MW-4G	09/14/93		11.72	0.07	23.52	Not Sampled					
MW-4G	03/29/94		10.60	0.06	24.63	Not Sampled					
MW-4G	08/17/94	35.19	11.90	0.25	23.49	Not Sampled					
MW-4G	11/16/94		11.50	0.09	23.76	Not Sampled					
MW-4G	02/16/95		8.95	0.12	26.34	Not Sampled					
MW-4G	05/16/95		8.68		26.51	na	260,000	45,000	22,000	4,900	24,000
MW-4G	08/10/95		9.80	0.20	25.55	Not Sampled					
MW-4G	11/15/95		10.94	0.07	24.31	Not Sampled					
MW-4H											
MW-4H	07/06/89	36.01	13.10		22.91	na	60,000	3,000	4,300	1,100	8,100
MW-4H	05/18/90		12.83	0.23	23.37	na	280,000	11,000	20,000	4,900	25,000
MW-4H	09/24/92					Not Accessible					
MW-4H	03/04/93		9.85		26.16	Not Sampled					
MW-4H	09/14/93		12.36	0.14	23.76	Not Sampled					
MW-4H	03/29/94		11.03	0.30	25.22	Not Sampled					
MW-4H	08/17/94	36.04	12.35	0.08	23.75	Not Sampled					
MW-4H	11/16/94		12.28	0.03	23.78	Not Sampled					
MW-4H	02/16/95		9.73	0.43	26.65	Not Sampled					
MW-4H	05/16/95		9.37	0.23	26.85	Not Sampled					
MW-4H	08/10/95		10.20	0.50	26.24	Not Sampled					
MW-4H	11/15/95		11.67	0.31	24.62	Not Sampled					

Table 4. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Texaco/Former Exxon Service Station 20499 Hesperian Boulevard, Hayward, CA

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentation, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4I											
MW-4I	12/06/89	34.28	11.46		22.82	na	810	<2.5	<2.5	6.6	11
MW-4I	05/15/90		11.12		23.16	na	1100	<0.5	<0.5	4.6	8
MW-4I	02/21/91		12.02		22.26	na	3000	24	120	36	70
MW-4I	07/22/91		11.44		22.84	na	2100	21	17	15	27
MW-4I	01/29/92		12.07		22.21	na	1,900	17	8.9	14	32
MW-4I	09/24/92								Not Accessible		
MW-4I	03/04/93		10.07		24.21	na	630	0.9	<0.5	4.1	4.3
MW-4I	09/14/93		10.05		24.23	na	720	4.5	7.3	4.6	3.9
MW-4I	03/29/94		9.33		24.95	na	1,500	16	<0.5	4.5	<0.5
MW-4I	08/17/94	34.27	10.62		23.65	na	1,000	19	19	4.7	13
MW-4I	11/16/94		10.31		23.96	na	1,900	5.7	7.4	5.7	7.1
MW-4I	02/16/95		7.83		26.44	na	3,000	3.1	5.0	7.8	6.5
MW-4I	05/16/95		7.52		26.75	na	3,700	19	<2.5	7.2	8.8
MW-4I	08/10/95		8.50		25.77	na	<3000	<30	<30	<30	<30
MW-4I	11/15/95		9.49		24.78	na	780	<5	<5	<5	<5
MW-4J											
MW-4J	03/23/90	36.74	12.44		24.30	na	100,000	4,100	6,700	3,200	13,000
MW-4J	05/18/90		12.96	0.37	24.07	na	230,000	8,600	19,000	4,100	21,000
MW-4J	09/24/92								Not Accessible		
MW-4J	03/04/93		9.70	Sheen	27.04				Not Sampled		
MW-4J	09/14/93		12.20	0.02	24.56				Not Sampled		
MW-4J	03/29/94		10.94	0.02	25.82				Not Sampled		
MW-4J	08/17/94	36.74	12.23	0.03	24.53				Not Sampled		
MW-4J	11/16/94		12.04	0.13	24.80				Not Sampled		
MW-4J	02/16/95		9.43	0.09	27.38				Not Sampled		
MW-4J	05/16/95		8.95	0.02	27.81				Not Sampled		
MW-4J	08/10/95		10.12	0.16	26.75				Not Sampled		
MW-4J	11/15/95		11.38	0.22	25.54				Not Sampled		
MW-4K											
MW-4K	03/23/90	36.37	12.22		24.15	na	540	<5	<5	52	<5
MW-4K	05/15/90		12.74		23.63	na	450	<5	<5	15	5.2
MW-4K	02/20/91		13.64		22.73	na	910	<0.5	19	14	43

Table 4. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Texaco/Former Exxon Service Station 20499 Hesperian Boulevard, Hayward, CA

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentation, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4K	07/22/91		13.03		23.34	na	1,700	<2.5	<2.5	<2.5	<2.5
MW-4K	01/29/92		13.65		22.72	na	930	<0.5	1.7	1.8	6.3
MW-4K	09/24/92		13.50		22.87	Not Sampled					
MW-4K	03/04/93		9.62		26.75	na	1,500	3.1	<0.5	8.3	16
MW-4K	09/14/93		11.82		24.55	na	270	0.89	<0.5	1.5	3.2
MW-4K	03/29/94		9.33		27.04	na	14,000	30	11	140	250
MW-4K	08/17/94	36.34	12.02		24.32	na	2,800	2.2	<0.5	2.8	7.6
MW-4K	11/16/94		11.73		24.61	na	1,500	1.3	0.6	1.5	4.7
MW-4K	02/16/95		9.27		27.07	na	2,900	3.2	23	8.5	9.6
MW-4K	05/16/95		8.84		27.50	na	5,100	1.8	6.1	5.3	17
MW-4K	08/10/95		9.80		26.54	na	840	3.2	<1	3.3	6.4
MW-4K	11/15/95		11.30		25.04	na	460	0.86	<0.5	1.6	3.2

[1]Relative to lower mean sea level.
[2]Below ground surface.
[3]Total petroleum hydrocarbons as diesel fuel
[4]Total petroleum hydrocarbons as gasoline
[5]constituent not analyzed for
Wells were resurveyed on August 3, 1994

Table 5. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Shell Service Station 20500 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPH-D[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
S-1											
S-1	8/13/93	36.56	11.02		25.54	na[5]	130	<0.5	<0.5	<0.5	<0.5
S-1	11/17/93		11.85		24.71	na	<50	<0.5	<0.5	<0.5	<0.5
S-1	2/21/94		10.07		26.49	na	<50	<0.5	<0.5	<0.5	1.3
S-1	5/20/94		10.29		26.27	na	150	8.3	12	4.5	24
S-1	8/17/94		11.53		25.03	na	<50	<0.3	<0.3	<0.3	<0.6
S-1	11/16/94		11.35		25.21	na	<50	<0.3	0.3	<0.3	<0.6
S-1	2/16/95		8.62		27.94	na	50	<0.5	0.5	<0.5	1.4
S-1	5/16/95		8.06		28.50	na	<50	<0.5	<0.5	<0.5	<0.5
S-1	8/10/95		9.25		27.31	na	<50	<0.5	<0.5	<0.5	<0.5

[1]Relative to lower mean sea level.
[2]Below ground surface.
[3]Total petroleum hydrocarbons as diesel fuel
[4]Total petroleum hydrocarbons as gasoline
[5]constituent not analyzed for

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1											
MW-1	2/21/90		13.94								
MW-1	3/1/90		13.97			1300	1500	240	31	53	300
MW-1	5/4/90		14.08								
MW-1	6/4/90		14.45								
MW-1	7/23/90		15.00			330	200	16	0.63	6.0	23
MW-1	8/24/90		15.27								
MW-1	9/21/90		15.50								
MW-1	10/19/90		15.63			ND	78	11	ND	3.2	6.3
MW-1	11/19/90		15.71								
MW-1	12/13/90		15.53								
MW-1	1/11/91		15.51			64	150	18	1.1	14	6
MW-1	4/18/91		*			Well was destroyed					
MW-2											
MW-2	2/21/90	37.20	13.68		23.52						
MW-2	3/1/90	37.20	13.73		23.47	830	1200	71	16	93	20
MW-2	5/4/90	37.20	13.88		23.32						
MW-2	6/4/90	37.20	13.85		23.35						
MW-2	7/23/90	37.20	14.74		22.46	ND	ND	ND	2.0	ND	ND
MW-2	8/24/90	37.20	15.00		22.20						
MW-2	9/21/90	37.20	15.20		22.00						
MW-2	10/19/90	37.20	15.32	20.00	21.88	60	420	2.7	ND	ND	ND
MW-2	11/19/90	37.20	15.41		21.79						
MW-2	12/13/90	37.20	15.23		21.97						
MW-2	1/11/91	37.20	15.21		21.99	53	54	0.48	ND	ND	ND
MW-2	4/18/91	37.20	*		24.62	ND	ND	ND	ND	ND	ND
MW-2	7/18/91	37.20				ND	ND	0.41	ND	ND	ND
MW-2	10/25/91	37.20	*		22.17	ND	92	0.52	ND	ND	ND
MW-2	1/29/92	37.20	*		22.58	94	340	20	0.83	1.6	3.5
MW-2	4/10/92	37.20	*		24.95	140	570	ND	ND	0.67	0.99
MW-2	5/14/92	37.20	13.22		23.98						
MW-2	6/18/92	37.20	13.81		23.39						

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-2	7/15/92	37.20	13.98		23.22	97	330	ND	0.74	0.59	0.55
MW-2	8/14/92	37.20	*		23.33						
MW-2	9/15/92	37.20	*		23.04						
MW-2	10/14/92	37.20	*		22.82	63	580	0.62	1.5	0.76	2.7
MW-2	11/6/92	37.20	*		22.96						
MW-2	1/11/93	37.20	*		24.96	ND	ND	ND	ND	ND	ND
MW-2	4/15/93	37.20	*		26.36	80	200	3.8	ND	1.1	1.6
MW-2	7/15/93	37.20	12.44		24.76	57	200	ND	0.88	ND	ND
MW-2	10/15/93	37.20	13.14		24.06	ND	120	ND	ND	ND	ND
MW-2	1/11/94	37.20	12.94		24.26	53	70	ND	ND	ND	ND
MW-2	4/5/94	37.20	11.87		25.33	68	200	ND	0.74	ND	ND
MW-2	8/17/94	37.20	12.93		24.27	61	ND	ND	ND	ND	ND
MW-2	11/16/94	37.20	12.68		24.52	ND	76	ND	ND	ND	ND
MW-2	2/16/95	37.20	10.27		26.93	78	340	2.7	ND	ND	2.1
MW-2	5/16/95	37.20	9.80		27.40	78	370	1.9	0.82	0.59	0.89
MW-2	8/10/95	37.20	11.00		26.20	ND	320	2.7	ND	ND	1.8
MW-3											
MW-3	2/21/90	37.57	14.03		23.54						
MW-3	3/1/90	37.57	13.82		23.75	1300	2900	14	ND	11	33
MW-3	5/4/90	37.57	13.94		23.63						
MW-3	6/4/90	37.57	13.97		23.60						
MW-3	7/23/90	37.57	14.23		23.34	1500	1600	23	10	23	21
MW-3	8/24/90	37.57	15.10		22.47						
MW-3	9/21/90	37.57	15.34		22.23						
MW-3	10/19/90	37.57	15.44		22.13	780	3200	33	ND	330	21
MW-3	11/19/90	37.57	14.64		22.93						
MW-3	12/13/90	37.57	15.38		22.19						
MW-3	1/11/91	37.57	15.34		22.23	130	720	2.3	2.4	5.2	5.5
MW-3	4/18/91	37.57	*		24.83	100	260	1.5	ND	14	3.8
MW-3	7/18/91	37.57			37.57	350	970	25	8.0	1.0	5.1
MW-3	10/25/91	37.57	*		22.34	66	310	0.86	1.8	0.75	0.72
MW-3	1/29/92	37.57	*		22.74	57	310	7.7	0.71	1.6	3.3

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-3	4/10/92	37.57	*		25.17	150	590	8.9	0.81	5.7	1.8
MW-3	5/14/92	37.57	13.25		24.32						
MW-3	6/18/92	37.57	13.88		23.69						
MW-3	7/15/92	37.57	14.08		23.49	190	760	2.2	ND	2.2	1.5
MW-3	8/14/92	37.57	*		23.49						
MW-3	9/15/92	37.57	*		23.18						
MW-3	10/14/92	37.57	*		22.96	89	260	1.4	ND	0.66	0.56
MW-3	11/6/92	37.57	*		23.11						
MW-3	1/11/93	37.57	*		25.10	53	130	ND	ND	ND	ND
MW-3	4/15/93	37.57	*		26.57	490	1700	12	ND	16	16
MW-3	7/15/93	37.57	12.50		25.07	150	170	0.80	ND	0.81	0.50
MW-3	10/15/93	37.57	13.28		24.29	210	380	1.1	0.60	6.4	1.3
MW-3	1/11/94	37.57	13.11		24.46	130	220	ND	0.71	0.57	ND
MW-3	4/5/94	37.57	12.03		25.54	180	480	3.1	1.2	3.7	0.62
MW-3	8/17/94	37.57	13.10		24.47	110	280	0.60	7.0	ND	1.0
MW-3	11/16/94	37.57	12.87		24.70	73	91	1.1	0.58	ND	ND
MW-3	2/16/95	37.57	10.40		27.17	380	1400	11	ND	25	3.5
MW-3	5/16/95	37.57	9.89		27.68	370	850	4.5	0.80	19	2.0
MW-3	8/10/95	37.57	11.15		26.42	120	380	2.0	0.59	9.5	1.5
MW-4											
MW-4	2/21/90	36.82	12.82		24.00						
MW-4	3/1/90	36.82	13.24		23.58	1500	5200	50	11	84	11
MW-4	5/4/90	36.82	13.38		23.44						
MW-4	6/4/90	36.82	13.36		23.46						
MW-4	7/23/90	36.82	14.84		21.98	2100	1100	12	24	31	ND
MW-4	8/24/90	36.82	14.52		22.30						
MW-4	9/21/90	36.82	14.73		22.09						
MW-4	10/19/90	36.82	14.85		21.97	1500	8200	48	10	130	4.8
MW-4	11/19/90	36.82	15.56		21.26						
MW-4	12/13/90	36.82	14.78		22.04						
MW-4	1/11/91	36.82	14.76		22.06	350	2300	16	8.6	27	4.8
MW-4	4/18/91	36.82	*		24.86	1500	3500	31	4.3	29	2.6

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4	7/18/91	36.82			36.82	1300	2300	43	19	49	3.2
MW-4	10/25/91	36.82	*		22.30	2100	9500	64	2.7	91	9.8
MW-4	1/29/92	36.82	*		22.70	670	6000	74	7.2	68	10
MW-4	4/10/92	36.82	*		25.10	1200	4500	43	30	58	24
MW-4	5/14/92	36.82	12.82		24.00						
MW-4	6/18/92	36.82	13.35		23.47						
MW-4	7/15/92	36.82	13.55		23.27	1600	7200	21	11	61	5.4
MW-4	8/14/92	36.82	*		23.50						
MW-4	9/15/92	36.82	*		23.19						
MW-4	10/14/92	36.82	*		22.94	3700	9100	140	13	70	16
MW-4	11/6/92	36.82	*		23.10						
MW-4	1/11/93	36.82	*		25.12	510	1400	8.0	7.4	2.0	3.3
MW-4	4/15/93	36.82	*		26.56	2300	4900	21	ND	29	6.6
MW-4	7/15/93	36.82	11.96		24.86	1000	3500	33	6.4	14	7.2
MW-4	10/15/93	36.82	12.52		24.30	1500	5800	43	3.2	16	8.5
MW-4	1/11/94	36.82	12.35		24.47	1200	4100	19	ND	7.9	6.4
MW-4	4/5/94	36.82	11.28		25.54	1700	5600	52	13	7.7	5.1
MW-4	8/17/94	36.82	12.32		24.50	1400	5400	22	22	7.3	9.8
MW-4	11/16/94	36.82	12.14		24.68	1400	3300	28	ND	ND	9.5
MW-4	2/16/95	36.82	9.65		27.17	1300	4900	31	16	ND	ND
MW-4	5/16/95	36.82	9.14		27.68	1400	3100	17	5.3	5.1	6.7
MW-4	8/10/95	36.82	10.38		26.44	1100	3300	36	9.3	11	12
MW-5											
MW-5	2/21/90	37.30	13.67		23.63						
MW-5	3/1/90	37.30	13.40		23.90	ND	50	ND	ND	ND	ND
MW-5	5/4/90	37.30	13.51		23.79						
MW-5	7/23/90	37.30	14.42		22.88	ND	ND	0.60	2.6	ND	ND
MW-5	8/24/90	37.30	14.68		22.62						
MW-5	9/21/90	37.30	14.90		22.40						
MW-5	10/19/90	37.30	15.04		22.26	ND	ND	ND	ND	ND	ND
MW-5	11/19/90	37.30	15.16		22.14						
MW-5	12/13/90	37.30	14.97		22.33						

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-5	1/11/91	37.30	14.92		22.38	ND	ND	ND	ND	ND	ND
MW-5	4/18/91	37.30	*		24.72	ND	73	0.33	ND	ND	0.45
MW-5	7/18/91	37.30			37.30	ND	ND	ND	ND	ND	ND
MW-5	10/25/91	37.30	*			ND	ND	ND	ND	ND	ND
MW-5	1/29/92	37.30	*		22.58	96	34	0.33	0.68	ND	2.0
MW-5	4/10/92	37.30	*		24.83	84	68	ND	ND	ND	ND
MW-5	5/14/92	37.30	13.24		24.06						
MW-5	6/18/92	37.30	13.44		23.86						
MW-5	7/15/92	37.30	13.65		23.65	68	68	ND	ND	ND	ND
MW-5	8/14/92	37.30	*		23.59						
MW-5	9/15/92	37.30	*		23.30						
MW-5	10/14/92	37.30	*		23.07	ND	ND	ND	ND	ND	ND
MW-5	11/6/92	37.30	*		23.23						
MW-5	1/11/93	37.30	*		25.40	ND	ND	ND	ND	ND	ND
MW-5	4/15/93	37.30	*		26.69	71	ND	ND	ND	ND	ND
MW-5	7/15/93	37.30	12.01		25.29	ND	ND	ND	ND	ND	ND
MW-5	10/15/93	37.30	13.52		23.78	ND	ND	ND	ND	ND	ND
MW-5	1/11/94	37.30	12.70		24.60	Sampled Semi-Annually					
MW-5	4/5/94	37.30	11.62		25.68	ND	ND	ND	ND	ND	ND
MW-5	8/17/94	37.30	12.70		24.60	58	ND	ND	ND	ND	ND
MW-5	11/16/94	37.30	12.48		24.82	Sampled Semi-Annually					
MW-5	2/16/95	37.30	9.98		27.32	ND	ND	ND	ND	ND	ND
MW-5	5/16/95	37.30	9.45		27.85	Sampled Semi-Annually					
MW-5	8/10/95	37.30	10.69		26.61	ND	ND	ND	ND	ND	ND
MW-6											
MW-6	2/21/90	38.12	14.51		23.61						
MW-6	3/1/90	38.12	14.20		23.92	ND	ND	ND	ND	ND	ND
MW-6	5/4/90	38.12	14.31		23.81						
MW-6	7/23/90	38.12	15.21		22.91	ND	ND	ND	2.4	ND	ND
MW-6	8/24/90	38.12	15.47		22.65						
MW-6	9/21/90	38.12	15.69		22.43						
MW-6	10/19/90	38.12	15.80		22.32	ND	ND	ND	ND	ND	ND

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-6	11/19/90	38.12	15.89		22.23						
MW-6	12/13/90	38.12	15.72		22.40						
MW-6	1/11/91	38.12	15.70		22.42	ND	ND	ND	ND	ND	ND
MW-6	4/18/91	38.12	*		24.82	ND	ND	ND	0.30	ND	0.72
MW-6	7/18/91	38.12			38.12	ND	ND	ND	ND	ND	ND
MW-6	10/25/91	38.12	*		22.33	ND	ND	ND	ND	ND	ND
MW-6	1/29/92	38.12	*		22.74	71	ND	ND	ND	ND	ND
MW-6	4/10/92	38.12	*		25.13	ND	ND	ND	ND	ND	ND
MW-6	5/14/92	38.12	13.75		24.37						
MW-6	6/18/92	38.12	14.32		23.80						
MW-6	7/15/92	38.12	14.50		23.62	ND	ND	ND	ND	ND	ND
MW-6	8/14/92	38.12	*		23.56						
MW-6	9/15/92	38.12	*		23.27						
MW-6	10/14/92	38.12	*		23.06	ND	ND	ND	ND	ND	ND
MW-6	11/6/92	38.12	*		23.20						
MW-6	1/11/93	38.12	*		25.18	ND	ND	ND	ND	ND	ND
MW-6	4/15/93	38.12	*		26.69	ND	ND	ND	ND	ND	ND
MW-6	7/15/93	38.12	12.85		25.27	ND	ND	ND	ND	ND	ND
MW-6	10/15/93	38.12	13.74		24.38	ND	ND	ND	ND	ND	ND
MW-6	1/11/94	38.12	13.57		24.55	Sampled Semi-Annually					
MW-6	4/5/94	38.12	12.51		25.61	ND	ND	ND	ND	ND	ND
MW-6	8/17/94	38.12	13.58		24.54	ND	ND	ND	ND	ND	ND
MW-6	11/16/94	38.12	13.36		24.76	Sampled Semi-Annually					
MW-6	2/16/95	38.12	11.88		26.24	ND	ND	ND	ND	ND	ND
MW-6	5/16/95	38.12	10.39		27.73	Sampled Semi-Annually					
MW-6	8/10/95	38.12	11.63		26.49	ND	ND	ND	ND	ND	ND
MW-7											
MW-7	2/21/90	36.70	12.85		23.85						
MW-7	3/1/90	36.70	12.90		23.80	ND	ND	ND	ND	ND	ND
MW-7	5/4/90	36.70	13.01		23.69						
MW-7	7/23/90	36.70	13.82		22.88	ND	ND	ND	0.40	ND	ND
MW-7	8/24/90	36.70	14.09		22.61						

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-7	9/21/90	36.70	14.30		22.40						
MW-7	10/19/90	36.70	14.40		22.30	ND	ND	ND	ND	ND	ND
MW-7	11/19/90	36.70	14.52		22.18						
MW-7	12/13/90	36.70	14.37		22.33						
MW-7	1/11/91	36.70	14.35		22.35	ND	ND	ND	1.2	0.4	2.2
MW-7	4/18/91	36.70	*		24.55	61	ND	ND	ND	ND	ND
MW-7	7/18/91	36.70			36.70	ND	ND	ND	ND	ND	ND
MW-7	10/25/91	36.70	*		22.20	ND	ND	ND	ND	ND	ND
MW-7	1/29/92	36.70	*		22.59	88	ND	ND	ND	ND	ND
MW-7	4/10/92	36.70	*		24.95	78	ND	ND	ND	ND	ND
MW-7	5/14/92	36.70	12.52		24.18						
MW-7	6/18/92	36.70	13.04		23.66						
MW-7	7/15/92	36.70	13.22		23.48	ND	ND	ND	ND	ND	ND
MW-7	8/14/92	36.70	*		23.40						
MW-7	9/15/92	36.70	*		23.10						
MW-7	10/14/92	36.70	*		22.90	ND	ND	ND	ND	ND	ND
MW-7	11/6/92	36.70	*		23.05						
MW-7	1/11/93	36.70	*		25.00	ND	ND	ND	ND	ND	ND
MW-7	4/15/93	36.70	*		26.35	ND	ND	ND	ND	ND	ND
MW-7	7/15/93	36.70	11.70		25.00	ND	ND	ND	ND	ND	ND
MW-7	10/15/93	36.70	12.53		24.17	ND	ND	ND	ND	ND	ND
MW-7	1/11/94	36.70	12.37		24.33	Sampled Semi-Annually					
MW-7	4/5/94	36.70	11.25		25.45	ND	ND	ND	ND	ND	ND
MW-7	8/17/94	36.70	12.30		24.40	ND	ND	ND	ND	ND	ND
MW-7	11/16/94	36.70	12.06		24.64	Sampled Semi-Annually					
MW-7	2/16/95	36.70	9.70		27.00	ND	ND	ND	ND	ND	ND
MW-7	5/16/95	36.70	9.21		27.49	Sampled Semi-Annually					
MW-7	8/10/95	36.70	10.41		26.29	ND	ND	ND	ND	ND	ND
MW-8											
MW-8	4/10/92	38.47	*		25.17	3100	8500	17	12	8.1	7.2
MW-8	5/14/92	38.47	13.99		24.48						
MW-8	6/18/92	38.47	14.57		23.90						

Table 6. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former Unocal Service Station No. 5590 20501 Hesperian Boulevard, Hayward, California

Well ID	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	Concentration, µg/L					
						TPHd[3]	TPH-G[4]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-8	7/15/92	38.47	14.73		23.74	1500	6800	27	ND	21	ND
MW-8	8/14/92	38.47	*		23.57						
MW-8	9/15/92	38.47	*		23.25						
MW-8	10/14/92	38.47	*		23.05	1700	5800	32	5.1	23	8.0
MW-8	11/6/92	38.47	*		23.14						
MW-8	1/11/93	38.47	*		25.24	510	1600	9.4	11	2.4	4.2
MW-8	4/15/93	38.47	*		26.70	2100	5400	52	ND	9.2	13
MW-8	7/15/93	38.47	13.15		25.32	1500	3800	ND	15	6.0	12
MW-8	10/15/93	38.47	14.08		24.39	1400	3100	30	ND	6.0	7.5
MW-8	1/11/94	38.47	13.90		24.57	1300	3900	34	ND	14	18
MW-8	4/5/94	38.47	12.81		25.66	980	3100	ND	9.8	ND	9.8
MW-8	8/17/94	38.47	13.89		24.58	1000	2100	30	15	ND	17
MW-8	11/16/94	38.47	13.68		24.79	930	ND	ND	ND	ND	ND
MW-8	2/16/95	38.47	11.16		27.31	450	2100	27	17	1.9	6.4
MW-8	5/16/95	38.47	10.64		27.83	480	1400	16	5.5	5.0	8.1
MW-8	8/10/95	38.47	11.90		26.57	460	1400	17	13	11	17

[1]Relative to lower mean sea level.
[2]Below ground surface.
[3]Total petroleum hydrocarbons as diesel fuel
[4]Total petroleum hydrocarbons as gasoline
Data compiled from RWQCB files.
*No depth to water measurement available. Groundwater elevation pulled from figure.

ATTACHMENT G

FIRST QUARTER 1996 ANALYTICAL RESULTS FOR ARCO/FORMER THRIFTY STATION NO. 052 20200 HESPERIAN BOULEVARD

THRIFTY OIL CO.

10000 LAKEWOOD BOULEVARD
DOWNEY, CA 90240
(310) 923-9876

TO: Todd Miller

FROM: Raymond Friedrichsen

DATE: 3/25/96

SUBJ: Sampling Data for Thrifty/AKCO

COMMENTS: As per your Request

___ NUMBER OF PAGES INCLUDING THIS PAGE

AMERICAN ANALYTICS

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.: A135052-3
Date Received: 02/16/96
Date Reported: 02/27/96
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
43251	A-4	02/14/96	02/20/96	<50	50
43252	A-5	02/14/96	02/20/96	<50	50
43253	A-6	02/14/96	02/20/96	<50	50
43254	A-7	02/14/96	02/20/96	<50	50
43255	A-8	02/14/96	02/20/96	<50	50
43256	A-9	02/14/96	02/20/96	<50	50
43257	A-10	02/14/96	02/20/96	<50	50
43258	AR-1	02/14/96	02/20/96	<50	50
43259	AR-2	02/14/96	02/20/96	<50	50
43260	MW-1	02/15/96	02/20/96	<50	50
43261	MW-2	02/15/96	02/20/96	420	50
43262	MW-3	02/15/96	02/20/96	99	50
43263	Trip Blank	02/15/96	02/20/96	<50	50

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

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135052-3
Date Received: 02/16/96
Date Reported: 03/22/96
Units: mg/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Extracted	Date Analyzed	Results	MRL
43251	A-4	02/14/96	02/20/96	02/20/96	<1	1
43252	A-5	02/14/96	02/20/96	02/20/96	<1	1
43253	A-6	02/14/96	02/20/96	02/20/96	<1	1
43254	A-7	02/14/96	02/20/96	02/20/96	<1	1
43255	A-8	02/14/96	02/20/96	02/20/96	<1	1
43256	A-9	02/14/96	02/20/96	02/20/96	<1	1
43257	A-10	02/14/96	02/20/96	02/20/96	<1	1
43258	AR-1	02/14/96	02/20/96	02/20/96	<1	1
43259	AR-2	02/14/96	02/20/96	02/20/96	<1	1
43260	MW-1	02/15/96	02/20/96	02/20/96	<1	1
43261	MW-2	02/15/96	02/20/96	02/20/96	5.5	1
43262	MW-3	02/15/96	02/20/96	02/20/96	1.5	1
43263	Trip Blank	02/15/96	02/20/96	02/20/96	<1	1

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

NOTES:
The above samples were analyzed by EPA 5030 (purge and trap)/GC-FID. The results were obtained by quantitation against a diesel standard that was analyzed using the same procedure.

George Havalias
Laboratory Director

ANALYTICS

LABORATORY ANALYSIS RESULTS

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

AA Project No.: A135052-3
Date Received: 02/16/96
Date Reported: 03/22/96
Units: ug/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
43251	A-4	02/14/96	02/20/96	<5	5
43252	A-5	02/14/96	02/20/96	<5	5
43253	A-6	02/14/96	02/20/96	<5	5
43254	A-7	02/14/96	02/20/96	<5	5
43255	A-8	02/14/96	02/20/96	<5	5
43256	A-9	02/14/96	02/20/96	<5	5
43257	A-10	02/14/96	02/20/96	<5	5
43258	AR-1	02/14/96	02/20/96	<5	5
43259	AR-2	02/14/96	02/20/96	<5	5
43260	MW-1	02/15/96	02/20/96	<5	5
43261	MW-2	02/15/96	02/20/96	18	5
43262	MW-3	02/15/96	02/20/96	<5	5
43263	Trip Blank	02/15/96	02/20/96	<5	5

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

George Havalias
Laboratory Director

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AMERICAN ANALYTICS

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.: 43174
Project No.: N/A
AA Project No.: A135052-3
Date Analyzed: 02/20/96
Date Reported: 02/27/96

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Gasoline Range Organics	470	94	460	92	2	59 - 149

George Havalias
Laboratory Director

AMERICAN ANALYTICS

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.: A135052-3
Date Received: 02/16/96
Date Reported: 02/27/96
Units: ug/L

Date Sampled:	02/14/96	02/14/96	02/14/96	02/14/96	
Date Analyzed:	02/20/96	02/20/96	02/20/96	02/20/96	
AA ID No.:	43251	43252	43253	43254	
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	2.3	2.0	2.0	1.1	0.3
Xylenes	0.71	1.1	<0.5	0.59	0.5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

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.: A135052-3
Date Received: 02/16/96
Date Reported: 02/27/96
Units: ug/L

Date Sampled:	02/14/96	02/14/96	02/14/96	02/14/96	
Date Analyzed:	02/20/96	02/20/96	02/20/96	02/20/96	
AA ID No.:	43255	43256	43257	43258	
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	0.49	<0.3	<0.3	0.3
Toluene	0.48	1.8	<0.3	0.99	0.3
Xylenes	<0.5	0.82	<0.5	0.52	0.5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

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.: A135052-3
Date Received: 02/16/96
Date Reported: 02/27/96
Units: ug/L

Date Sampled:	02/14/96	02/15/96	02/15/96	02/15/96	
Date Analyzed:	02/20/96	02/20/96	02/20/96	02/20/96	
AA ID No.:	43259	43260	43261	43262	
Client ID No.:	AR-2	MW-1	MW-2	MW-3	MRL
Compounds:					
Benzene	<0.3	<0.3	0.75	<0.3	0.3
Ethylbenzene	<0.3	<0.3	0.64	0.46	0.3
Toluene	0.53	0.56	0.54	0.49	0.3
Xylenes	0.76	0.82	0.53	<0.5	0.5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

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.: A135052-3
Date Received: 02/16/96
Date Reported: 02/27/96
Units: ug/L

Date Sampled:	**02/15/96**	
Date Analyzed:	**02/20/96**	
AA ID No.:	**43263**	
Client ID No.:	**Trip Blank**	**MRL**
Compounds:		
Benzene	<0.3	0.3
Ethylbenzene	0.34	0.3
Toluene	<0.3	0.3
Xylenes	1.1	0.5

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

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

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

AA ID No.: 43174
Project No.: N/A
AA Project No.: A135052-3
Date Analyzed: 02/20/96
Date Reported: 02/27/96

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Benzene	17.432	87	18.034	90	3	65 - 135
Ethylbenzene	19.977	100	30.779	154	43	77 - 123
Toluene	20.646	103	21.472	107	4	66 - 134
Xylenes	20.604	103	21.516	108	5	73 - 127

George Havalias
Laboratory Director

EARTH MANAGEMENT CO.
Environmental Remediation

PROJECT STATUS REPORT
THRIFTY OIL CO. S.S. #052
20200 HESPERIAN BLVD.
HAYWARD, CALIF. 94541
DATE: 02.14.1996

OBSERVATION WELLS

NO.	DTW	DTP	PT	DTB	DIA.	ODORS			F/P		
						YES	NO	S	YES	NO	
A-4	11.24			34.40	3"		X			X	
A-5	10.76			29.20	3"		X			X	
A-6	12.46			34.25	3"		X			X	
A-7	12.38			34.85	3"		X			X	
A-8	8.80			33.60	2"		X			X	
A-9	9.05			33.50	2"		X			X	
A-10	6.70			34.15	2"		X			X	
AR-1	10.48			34.00	6"		X			X	
AR-2	10.74			34.60	6"		X			X	
MW-1	8.53			28.00	2"		X			X	
MW-2	10.87			26.40	2"		X			X	
MW-3	7.47			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. 492 GALLONS

DATA RECORDED BY: Leslie Rodriguez INPUT BY:

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

AMERICAN ANALYTICS

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: 02.15.1996
PAGE 1 OF 4

AA Client: THRIFTY OIL COMPANY	Phone: (310) 923-9876 / 310	Sampler's Name: SERBAN P.	
Project Manager: CHRIS PANAITESCU	P.O. No.	Sampler's Signature: [signature]	
Project Name: Quarterly water sampling	Project No.	Project Manager's Signature	
Job Name and Address: SS #052, 20200 HESPERIAN Blvd. HAYWARD, 95541.	Detection Limits	Test Requirements	

ANALYSIS REQUIRED

AA I.D.#	Client's I.D.	Date	Time	Sample Type	Number of Containers	TPH	BTEX	MTBE	Diesel
43251	A-4	02.14.96	8:20	WATER	2	X	X	X	X
43252	A-5	02.14.96	8:26	WATER	2	X	X	X	X
43253	A-6	02.14.96	8:30	WATER	2	X	X	X	X
43254	A-7	02.14.96	8:40	WATER	2	X	X	X	X
43255	A-8	02.14.96	8:47	WATER	2	X	X	X	X
43256	A-9	02.14.96	8:54	WATER	2	X	X	X	X
43257	A-10	02.14.96	9:00	WATER	2	X	X	X	X
43258	AR-1	02.14.96	9:10	WATER	2	X	X	X	X
43259	AR-2	02.14.96	9:15	WATER	2	X	X	X	X
43260	MW-1	02.15.96	9:23	WATER	2	X	X	X	X
43261	MW-2	02.15.96	9:28	WATER	2	X	X	X	X
43262	MW-3	02.15.96	9:35	WATER	2	X	X	X	X
43263	TRIP BLANK	02.15.96	6:30	WATER	2	X	X	X	X
					26				

SAMPLE INTEGRITY TO BE FILLED IN BY RECEIVING LAB

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

AA Project No. AB5052-3

Relinquished by:	Date	Time	Received by:
[signature]	02.15.	17:00	CALIFORNIA OVERNIGHT
	2/16	12:00	[signature]

[redacted]STR[redacted]ON: [redacted] - [redacted]rato[redacted]an[redacted] Lab[redacted]ry, [redacted]- A[redacted]t E[redacted]ve[redacted] - [redacted]

ATTACHMENT H

FIRST QUARTER 1996 FIELD DATA SHEETS AND ANALYTICAL RESULTS FOR ALLIANCE SERVICE STATION 20450 HESPERIAN BOULEVARD

Well Gauging Data

Project Name: Hesperian Blvd
Project Number: 960214-K3

Date: 2/14/96
Recorded By: KCB

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW4A		1945	2		826		
MW4B		1956	2		855		
MW4D		1961	4		953		
MW4E		1940	4		887		
MW4G		—	4	943	947	0.04	
MW4H		—	4	841	863	0.22	
MW4I		1850	4		688 W		
MW4J		—	2	814	836	0.22	
MW4K		1962	2		825		
MW1		3333	4		1125		
MW2		2697	2		999		

TOC = Top of casing
DTB = Depth to bottom in feet below TOC
DTP = Depth to product in feet below TOC
DTW = Depth to water in feet below TOC
PT = Product thickness in feet

WELL MONITORING DATA SHEET

Project #: 960214-1438	Client: Tex - 624880148
Sampler: KCB	Start Date: 2/14
Well I.D.: MW1	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 33.33 After	Depth to Water: Before 7.22 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

1 Case Volume	x	Specified Volumes	=	gallons
14.4	x	3	=	432

Purging: Bailer / Disposable Bailer / Middleburg / Electric Submersible ✓ / Extraction Pump / Other ___

Sampling: Bailer ✓ / Disposable Bailer / Extraction Port / Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1215	70.4	6.6	1200	127.8	15.0	fuel / gas
1217	70.8	6.6	1400	>200	30.0	odor
1219	69.8	6.7	1400	>200	45.0	silty

Did Well Dewater? ✓ If yes, gals. ___ Gallons Actually Evacuated: 45.0

Sampling Time: 1225	Sampling Date: 2/14
Sample I.D.: MW1	Laboratory: BCA
Analyzed for: (TPH-G) ~~BTEX~~ TPH-D OTHER: (Circle)	
Duplicate I.D.:	Cleaning Blank I.D.:
Analyzed for: TPH-G BTEX TPH-D OTHER: (Circle)	

WELL MONITORING DATA SHEET

Project #:	960214-KCB	Client:	Tex - 624880148
Sampler:	KCB	Start Date:	2/14
Well I.D.:	MW2	Well Diameter: (circle one)	(2) 3 4 6 ___
Total Well Depth: Before	26.97 After	Depth to Water: Before	9.99 After
Depth to Free Product:	___	Thickness of Free Product (feet):	
Measurements referenced to:	(PVC) Grade	Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

1 Case Volume	x	Specified Volumes	=	gallons
2.7	x	3	=	8.1

Purging: (Bailer) Disposable Bailer, Middleburg, Electric Submersible, Extraction Pump, Other ___

Sampling: (Bailer) Disposable Bailer, Extraction Port, Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1159	69.8	6.8	1200	>200	3.0	
1202	69.4	6.6	1200	>200	6.0	
1205	69.2	6.8	1200	>200	8.0	

Did Well Dewater? N If yes, gals. ___ Gallons Actually Evacuated: 8.5

Sampling Time: 1210 Sampling Date: 2/14

Sample I.D.: MW2 Laboratory: BCA

Analyzed for: (TPH-G) ~~BTEX~~ TPH-D OTHER:

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:

SOURCE RECORD

BILL OF LADING

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT TEXACO FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE-WATER WHICH HAS BEEN RECOVERED FROM GROUND-WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED TO THE DESTINATION DESIGNATED BY TEXACO ENVIRONMENTAL SERVICES (TES).

Contractor: Blaine Tech Services, Inc.
Address: 985 Timothy Drive
City, State, ZIP: San Jose, CA 95133
Phone: (408) 995-5535

is authorized by Texaco Environmental Services to recover, collect, apportion into loads, and haul the NON-HAZARDOUS WELL PURGEWATER that is drawn from wells at the Texaco facility listed below and to deliver that purgewater to an appropriate destination designated by TEXACO ENVIRONMENTAL SERVICES in either Redwood City, California or in Richmond, California. Transport routing of the Non-Hazardous Well Purgewater may be directed from one Texaco facility to the designated desitnation point; from one Texaco facility to the designated destination point via another Texaco facility; from a Texaco facility via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Texaco Environmental Services (TES).

This SOURCE RECORD BILL OF LADING was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Texaco facility described below:

TEXACO #: 624880148
Address: 20499 Hesperian Blvd
City, State, ZIP: Hayward

Well I.D.	Gals.	Well I.D.	Gals.
MW1	1		1
	1		1
	1		1
	1		1
MW4/11	1		1
	1/42		1
	1		1
	1		1
	1		1
	1		1
Total gals.	157	added rinse water	15

Total Gals. Recovered 157

Job #: 960214-JC
Date 2/14/96
Time 1445
Signature:

REC'D AT: BTS
Date: 2/14/96
Time: 1600
Signature:

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G96-02-390
Received: 16 FEB 96
Mailed: FEB 27 1996

Ms. Caron French
Blaine Tech Services
985 Timothy Drive
San Jose, California 95133

Purchase Order: 94-1446346+4370
Requisition: 624880148
Project: FKEP1011L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)							
		Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl- Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
1*MW 1	02/14/96	02/22/96	1	1600	350	220	22	76	C6-C12
2*MW 2	02/14/96	02/22/96	1	<50	0.80	0.61	<0.5	<0.5	C6-C12

Karen Petryna
20499 Hesperian Blvd., Hayward
Alameda County

Dick Swenson, Laboratory Director

ORDER PLACED FOR CLIENT: Blaine Tech Services 9602390 :
BC ANALYTICAL : GLEN LAB : 10:10:21 27 FEB 1996 - P. 1 :

MPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9602390*1	MW 1	GAS.BTX.TESNC	02.22.96	8015M.TX	536-23	96527	8501
02390*2	MW 2	GAS.BTX.TESNC	02.22.96	8015M.TX	536-23	96527	8501

*

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

ORDER QC REPORT FOR G9602390

DATE REPORTED : 02/27/96

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
GRO C6022314*1						
Date Analyzed	02.21.96	96527	02/21/96	02/21/96	Date	N/A
Benzene	02.21.96	96527	15.8	15.2	ug/L	104
Toluene	02.21.96	96527	95.1	97.4	ug/L	98
Ethylbenzene	02.21.96	96527	18.7	20.4	ug/L	92
Total Xylene Isomers	02.21.96	96527	111	119	ug/L	93
TPH (Gasoline Range)	02.21.96	96527	976	1100	ug/L	89
a,a,a-Trifluorotoluene Rep.	02.21.96	96527	63.0	50.0	ug/L	126
a,a,a-Trifluorotoluene Th.	02.21.96	96527	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9602390

DATE REPORTED : 02/27/96

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
GRO	9602323*9						
Date Analyzed		02.21.96	96527	02/21/96	02/21/96	Date	N/A
Benzene		02.21.96	96527	14.6	14.0	ug/L	4
Toluene		02.21.96	96527	86.4	85.0	ug/L	2
Ethylbenzene		02.21.96	96527	17.7	17.3	ug/L	2
Total Xylene Isomers		02.21.96	96527	107	104	ug/L	3
TPH (Gasoline Range)		02.21.96	96527	1140	1150	ug/L	1
a,a,a-Trifluorotoluene Rep.		02.21.96	96527	57.7	57.2	ug/L	1
a,a,a-Trifluorotoluene Th.		02.21.96	96527	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9602390

DATE REPORTED : 02/27/96

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
GRO	9602323*9						
Benzene		02.21.96	96527	96	92	15.2	ug/L
Toluene		02.21.96	96527	89	87	97.4	ug/L
Ethylbenzene		02.21.96	96527	87	85	20.4	ug/L
Total Xylene Isomers		02.21.96	96527	90	87	119	ug/L
TPH (Gasoline Range)		02.21.96	96527	104	105	1100	ug/L
a,a,a-Trifluorotoluene Rep.		02.21.96	96527	115	114	50.0	ug/L
a,a,a-Trifluorotoluene Th.		02.21.96	96527	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9602390

DATE REPORTED : 02/27/96

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
GRO B6021257*1						
Date Analyzed	02.21.96	96527	02/21/96	NA	Date	8015M.TX
Benzene	02.21.96	96527	0	0.5	ug/L	8015M.TX
Toluene	02.21.96	96527	0	0.5	ug/L	8015M.TX
Ethylbenzene	02.21.96	96527	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	02.21.96	96527	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	02.21.96	96527	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Rep.	02.21.96	96527	53.3	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Th.	02.21.96	96527	50.0	NA	ug/L	8015M.TX

SURROGATE RECOVERIES :
BC ANALYTICAL : GLEN LAB : 10:10:58 27 FEB 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
602390*1							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/22/96	53.1	50.0	106	
602390*2							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/22/96	51.9	50.0	104	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 10:10:58 27 FEB 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9002323*9*R1							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	51.5	50.0	103	
9002323*9*S1							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	57.7	50.0	115	
9002323*9*S2							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	57.2	50.0	114	
9002323*9*T							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	50.0	50.0	100	
B6021257*1*MB							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	53.3	50.0	107	
6022314*1*LC							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	63.0	50.0	126	
6022314*1*LT							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	50.0	50.0	100	

G9602390

Chain of Custody

Page 1 of 1

Texaco Environmental Services
100 Cutting Boulevard
Richmond, California 94804
Phone: (510) 230-3541
FAX: (510) 237-7821

Forward Results to BLAINE TECH, ATTN. Caron French
Texaco Project Coordinator: Karen Petryna

Site Name: Texaco Loc# 624880148
Site Address: 20499 Hesperian Blvd, Hayward, CA
Contractor Project Number: 960214-K313
Contractor Name: Blaine Tech Services, Inc.
Address: 985 Timothy Drive San Jose, CA 95133
Project Contact: Jim Keller
Phone/FAX: /

Laboratory: B C Analytical
Turn Around Time: As Contracted
Samplers (PRINT NAME): Keith Brown
Sampler Signature:
Date Samples Collected: 2/14/96

Cooler Temp: 5°
Sample Condition: good

Sample Number	Lab Sample Number	Date/Time Collected	No. of Containers	Type of Containers	Sample Matrix	Preservative	TPH gas/BTEX	TPH Diesel	O&G/TRPH (418.1)	TPH Ex. (C8-C36+)	VOCs 8240/824	P. Halocarbons 8010/60	P. Aromatics 8020/602	Organic Lead	Comments
MW1		2/14 1225	3	VOA	W	Hcl	X								-1
MW2		2/14 1210	3	VOA	W	Hcl	X								-2
															624880148 Alameda EKER1011C EFP

Relinquished by: (Signature)		Date: 2/14/96	Time: 1525
Relinquished by: (Signature)		Date: 2-16-96	Time: 500
Relinquished by: (Signature)		Date: 2/16/96	Time: 5:30
Method of Shipment:			

Received by: (Signature)		Date: 2-16-96	Time: 1525
Received by: (Signature)		Date: 2/16/96	Time: 500
Received by: (Signature)		Date:	Time:
Lab Comments:			

P:\GWMP\FORMS\TEX-COC.XLS

ATTACHMENT I

FIRST QUARTER 1996 FIELD DATA SHEETS AND ANALYTICAL RESULTS FOR FORMER TEXACO/FORMER EXXON SERVICE STATION 20499 HESPERIAN BOULEVARD

Well Gauging Data

Project Name: Hesperian Blvd
Project Number: 960214-K3

Date: 2/14/96
Recorded By: KCB

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW4A		1945	2		826		
MW4B		1956	2		855		
MW4D		1961	4		953		
MW4E		1940	4		887		
MW4G		—	4	943	947	0.04	
MW4H		—	4	841	863	0.22	
MW4I		1850	4		688 W		
MW4J		—	2	814	836	0.22	
MW4K		1962	2		825		
MW1		3333	4		1125		
MW2		2697	2		999		

TOC = Top of casing
DTB = Depth to bottom in feet below TOC
DTP = Depth to product in feet below TOC
DTW = Depth to water in feet below TOC
PT = Product thickness in feet

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-KS	Texaco ID#: 624880148
Sampler: KCB	Date: 2/14
Well I.D.: MW4A	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 1945	Depth to Water: 826
Depth to Free Product: Ø	Thickness of Free Product: Ø

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer ✓ / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: S.S. Bailer / Teflon Bailer ✓ / Extraction Port / Other: ___

1.8 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 5.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1335	69.8	6.6	1200	1884	2.0	Fuel odor
1338	68.8	6.7	1200	200	4.0	
1340	68.4	6.8	1200	>200	5.5	

Did well dewater? Yes (No)	Gallons actually evacuated: 5.5
Sampling Time: 1345	Sampling Date: 2/14
Sample I.D.: MW4A	Laboratory: BC Analytical
Analyzed for: Tph-G (BTEX) Tph-D	Other:
Equipment Blank I.D.:	Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-K3	Texaco ID#: 624880148
Sampler: KCB	Date: 2/14
Well I.D.: MW4B	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 1956	Depth to Water: 855
Depth to Free Product: Ø	Thickness of Free Product: Ø

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius^2 * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer ✓
- Middleburg
- Electric Submersible
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer
- Teflon Bailer ✓
- Extraction Port
- Other: _____

1.7 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 5.1 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1414	67.6	7.2	1500	83.3	2.0	slight odor
1416	68.2	7.2	1400	48.7	4.0	
1418	68.6	7.3	1500	81.2	5.5	

Did well dewater? Yes (No) Gallons actually evacuated: 5.5

Sampling Time: 1425 Sampling Date: 2/14

Sample I.D.: MW4B Laboratory: BC Analytical

Analyzed for: (Tph-G) (BTEX) Tph-D Other:

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 980214-K3	Texaco ID#: 624880448
Sampler: ICB	Date: 2/14
Well I.D.: MW4D	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 1961	Depth to Water: 953
Depth to Free Product: Ø	Thickness of Free Product: Ø

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer
- Middleburg
- Electric Submersible ✓
- Extraction Pump
- Other: ___

Sampling Method:
- S.S. Bailer ✓
- Teflon Bailer
- Extraction Port
- Other: ___

1 Case Volume (Gals.)		Specified Volumes		Calculated Volume
6.6	x	3	=	19.8 Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1246	70.6	7.1	1100	69.8	7.0	
1247	69.0	6.8	1200	28.4	14.0	
1248	68.8	6.8	1200	166.9	21.0	

Did well dewater? Yes (No) Gallons actually evacuated: 21.0

Sampling Time: 1255 Sampling Date: 2/14

Sample I.D.: MW4D Laboratory: BC Analytical

Analyzed for: Tph-G BTEX Tph-D Other:

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 96014-63	Texaco ID#: 6248801 48
Sampler: KCB	Date: 2/14
Well I.D.: MW4E	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 1940	Depth to Water: 887
Depth to Free Product: ø	Thickness of Free Product: ø

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer / Middleburg / Electric Submersible ✓ / Extraction Pump / Other: ___

Sampling Method: S.S. Bailer ✓ / Teflon Bailer / Extraction Port / Other: ___

6.8 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 20.4 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1429	71.8	7.2	1400	37.5	7.0	Slight gas odor
1430	69.8	6.8	1400	88.7	14.0	
1431	68.2	6.7	1200	111.2	21.0	stronger odor

Did well dewater? Yes (No) Gallons actually evacuated: 210

Sampling Time: 1435 Sampling Date: 2/14

Sample I.D.: MW 4E Laboratory: BC Analytical

Analyzed for: (Tph-G) (BTEX) Tph-D Other:

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-1C3	Texaco ID#: 6248801.48
Sampler: KCB	Date: 2/14
Well I.D.: MW-16	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water: 9.47
Depth to Free Product: 9.43	Thickness of Free Product: 0.04

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: S.S. Bailer / Teflon Bailer / Extraction Port / Other: _____

___ (1 Case Volume (Gals.)) X ___ (Specified Volumes) = ___ (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
		FP in Well				
		Not Sampled				

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: Sampling Date:

Sample I.D.: Laboratory: BC Analytical

Analyzed for: Tph-G BTEX Tph-D Other:

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-1C3	Texaco ID#: 624880148
Sampler: KCB	Date: 2/14
Well I.D.: MW4/H	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water: 8.63
Depth to Free Product: 8.41	Thickness of Free Product: 0.22

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius^2 * 0.164

Purge Method: S.S. Bailer / Teflon Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: S.S. Bailer / Teflon Bailer / Extraction Port / Other: _____

_____	X	_____	= _____ Gals.
1 Case Volume (Gals.)		Specified Volumes	Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
		FP in Well				
		Not Sampled				

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date:

Sample I.D.: — Laboratory: BC Analytical

Analyzed for: Tph-G BTEX Tph-D Other:

Equipment Blank I.D.: — Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-1C3	Texaco ID#: 6248801148
Sampler: KCB	Date: 2/14
Well I.D.: MW4I	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 1850	Depth to Water: 688
Depth to Free Product: ϕ	Thickness of Free Product: ϕ

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: S.S. Bailer / Teflon Bailer / Extraction Port / Other: ___

7.6 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 22.8 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1355	70.2	7.4	1300	139.2	8.0	gas odor
1356	69.2	7.2	1300	63.4	16.0	
1357	69.2	7.3	1300	27.0	24.0	

Did well dewater? Yes (No) Gallons actually evacuated: 24.0

Sampling Time: 1405 Sampling Date: 2/14

Sample I.D.: MW4I Laboratory: BC Analytical

Analyzed for: Tph-G BTEX Tph-D Other:

Equipment Blank I.D.: EB-(1350) Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-1C3	Texaco ID#: 624880148
Sampler: KCB	Date: 2/14
Well I.D.: MW4/5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: —	Depth to Water: 8.36
Depth to Free Product: 8.14	Thickness of Free Product: 0.22

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: S.S. Bailer / Teflon Bailer / Extraction Port / Other: _____

1 Case Volume (Gals.)	X	Specified Volumes	=	Calculated Volume Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
		FP in Well				
		Not Sampled				

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: Sampling Date:

Sample I.D.: Laboratory: BC Analytical

Analyzed for: Tph-G BTEX Tph-D Other:

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 960214-163	Texaco ID#: 6248048
Sampler: KCB	Date: 2/14
Well I.D.: MW 41C	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 1962	Depth to Water: 825
Depth to Free Product: ϕ	Thickness of Free Product: ϕ

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer ✓ Teflon Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: S.S. Bailer ✓ Teflon Bailer / Extraction Port / Other: ___

1.8 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 5.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1314	68.2	6.6	1500	128.2	2.0	(sheen?)
1317	68.4	6.6	1600	91.5	4.0	
1320	68.6	6.6	1600	88.7	5.5	

Did well dewater? Yes (No)	Gallons actually evacuated: 5.5
Sampling Time: 1325	Sampling Date: 2/14
Sample I.D.: MW-41C	Laboratory: BC Analytical
Analyzed for: Tph-G BTEX Tph-D	Other:
Equipment Blank I.D.:	Analyzed for same as primary sample

SOURCE RECORD

BILL OF LADING

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT TEXACO FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE-WATER WHICH HAS BEEN RECOVERED FROM GROUND-WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED TO THE DESTINATION DESIGNATED BY TEXACO ENVIRONMENTAL SERVICES (TES).

Contractor: Blaine Tech Services, Inc.
Address: 985 Timothy Drive
City, State, ZIP: San Jose, CA 95133
Phone: (408) 995-5535

is authorized by Texaco Environmental Services to recover, collect, apportion into loads, and haul the NON-HAZARDOUS WELL PURGEWATER that is drawn from wells at the Texaco facility listed below and to deliver that purgewater to an appropriate destination designated by TEXACO ENVIRONMENTAL SERVICES in either Redwood City, California or in Richmond, California. Transport routing of the Non-Hazardous Well Purgewater may be directed from one Texaco facility to the designated desitnation point; from one Texaco facility to the designated destination point via another Texaco facility; from a Texaco facility via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Texaco Environmental Services (TES).

This SOURCE RECORD BILL OF LADING was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Texaco facility described below:

TEXACO #: 624880148
Address: 20499 Hesperian Blvd
City, State, ZIP: Hayward

Well I.D.	Gals.	Well I.D.	Gals.
MW1	1		1
	1		1
	1		1
	1		1
MW4/11	1		1
	1/42		1
	1		1
	1		1
	1		1
	1		1

Total gals. 157

added rinse water 15

Total Gals. Recovered 157

Job #: 980214-1C1
Date 2/14/96
Time 1405
Signature:

REC'D AT: BTS
Date: 2/14/96
Time: 1600
Signature:

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G96-02-389

Received: 16 FEB 96

Mailed: FEB 28 1996

Ms. Caron French
Blaine Tech Services
985 Timothy Drive
San Jose, California 95133

Purchase Order: 94-1446346+4370

Requisition: 624880148
Project: FKEP1011L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
1*MW 4A	02/14/96	02/26/96	1	5900	<0.5	<0.5	25	9.0	C6-C12
2*MW 4B	02/14/96	02/26/96	5	7300	190	<3	550	25	C6-C12
3*MW 4D	02/14/96	02/23/96	1	200	<0.5	<0.5	1.2	2.1	C6-C12
4*MW 4E	02/14/96	02/23/96	50	64000	2500	2900	2900	12000	C6-C12
5*MW 4I	02/14/96	02/23/96	1	1800	<0.5	<0.5	2.8	5.4	C6-C12
6*MW 4K	02/14/96	02/23/96	1	920	0.96	<0.5	0.59	1.3	C6-C12

Karen Petryna
20499 Hesperian Blvd., Hayward
Alameda County

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G96-02-389

Received: 16 FEB 96

Ms. Caron French
Blaine Tech Services
985 Timothy Drive
San Jose, California 95133

Purchase Order: 94-1446346+4370

Requisition: 624880148
Project: FKEP1011L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)								
		Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl- Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
7*EB	02/14/96	02/21/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
8*TB	02/14/96	02/21/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12

Dick Swenson, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

: ORDER PLACED FOR CLIENT: Blaine Tech Services 9602389 :
BC ANALYTICAL : GLEN LAB : 10:16:02 28 FEB 1996 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9602389*1	MW 4A	GAS.BTX.TESNC	02.26.96	8015M.TX	536-23	96530	8501
9602389*2	MW 4B	GAS.BTX.TESNC	02.26.96	8015M.TX	536-23	96530	8501
9602389*3	MW 4D	GAS.BTX.TESNC	02.23.96	8015M.TX	536-23	96529	8501
9602389*4	MW 4E	GAS.BTX.TESNC	02.23.96	8015M.TX	536-23	96529	8501
9602389*5	MW 4I	GAS.BTX.TESNC	02.23.96	8015M.TX	536-23	96529	8501
9602389*6	MW 4K	GAS.BTX.TESNC	02.23.96	8015M.TX	536-23	96529	8501
9602389*7	EB	GAS.BTX.TESNC	02.21.96	8015M.TX	536-23	96527	8501
9602389*8	TB	GAS.BTX.TESNC	02.21.96	8015M.TX	536-23	96527	8501

*

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

ORDER QC REPORT FOR G9602389

DATE REPORTED : 02/28/96

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
BTEX/GRO C6022631*1						
Date Analyzed	02.26.96	96530	02/26/96	02/26/96	Date	N/A
Benzene	02.26.96	96530	12.3	15.2	ug/L	81
Toluene	02.26.96	96530	78.6	97.4	ug/L	81
Ethylbenzene	02.26.96	96530	16.5	20.4	ug/L	81
Total Xylene Isomers	02.26.96	96530	98.4	119	ug/L	83
TPH (Gasoline Range)	02.26.96	96530	987	1100	ug/L	90
a,a,a-Trifluorotoluene Rep.	02.26.96	96530	57.5	50.0	ug/L	115
a,a,a-Trifluorotoluene Th.	02.26.96	96530	50.0	50.0	ug/L	100
2. GRO C6022616*1						
Date Analyzed	02.23.96	96529	02/23/96	02/23/96	Date	N/A
Benzene	02.23.96	96529	13.4	15.2	ug/L	88
Toluene	02.23.96	96529	85.5	97.4	ug/L	88
Ethylbenzene	02.23.96	96529	17.3	20.4	ug/L	85
Total Xylene Isomers	02.23.96	96529	104	119	ug/L	87
TPH (Gasoline Range)	02.23.96	96529	965	1100	ug/L	88
a,a,a-Trifluorotoluene Rep.	02.23.96	96529	59.2	50.0	ug/L	118
a,a,a-Trifluorotoluene Th.	02.23.96	96529	50.0	50.0	ug/L	100
GRO C6022314*1						
Date Analyzed	02.21.96	96527	02/21/96	02/21/96	Date	N/A
Benzene	02.21.96	96527	15.8	15.2	ug/L	104
Toluene	02.21.96	96527	95.1	97.4	ug/L	98
Ethylbenzene	02.21.96	96527	18.7	20.4	ug/L	92
Total Xylene Isomers	02.21.96	96527	111	119	ug/L	93
TPH (Gasoline Range)	02.21.96	96527	976	1100	ug/L	89
a,a,a-Trifluorotoluene Rep.	02.21.96	96527	63.0	50.0	ug/L	126
a,a,a-Trifluorotoluene Th.	02.21.96	96527	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9602389

DATE REPORTED : 02/28/96

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. BTEX/GRO	9602518*2						
Date Analyzed		02.26.96	96530	02/26/96	02/26/96	Date	N/A
Benzene		02.26.96	96530	12.2	12.0	ug/L	2
Toluene		02.26.96	96530	78.3	77.4	ug/L	1
Ethylbenzene		02.26.96	96530	16.2	15.9	ug/L	2
Total Xylene Isomers		02.26.96	96530	97.1	96.1	ug/L	1
TPH (Gasoline Range)		02.26.96	96530	1050	1040	ug/L	1
a,a,a-Trifluorotoluene	Rep.	02.26.96	96530	53.8	51.4	ug/L	5
a,a,a-Trifluorotoluene	Th.	02.26.96	96530	50.0	50.0	ug/L	0
2. GRO	9602392*1						
Date Analyzed		02.23.96	96529	02/23/96	02/23/96	Date	N/A
Benzene		02.23.96	96529	13.1	14.7	ug/L	12
Toluene		02.23.96	96529	81.7	88.5	ug/L	8
Ethylbenzene		02.23.96	96529	16.8	18.5	ug/L	10
Total Xylene Isomers		02.23.96	96529	101	111	ug/L	9
TPH (Gasoline Range)		02.23.96	96529	1050	1070	ug/L	2
a,a,a-Trifluorotoluene	Rep.	02.23.96	96529	51.4	56.5	ug/L	9
a,a,a-Trifluorotoluene	Th.	02.23.96	96529	50.0	50.0	ug/L	0
3. GRO	9602323*9						
Date Analyzed		02.21.96	96527	02/21/96	02/21/96	Date	N/A
Benzene		02.21.96	96527	14.6	14.0	ug/L	4
Toluene		02.21.96	96527	86.4	85.0	ug/L	2
Ethylbenzene		02.21.96	96527	17.7	17.3	ug/L	2
Total Xylene Isomers		02.21.96	96527	107	104	ug/L	3
TPH (Gasoline Range)		02.21.96	96527	1140	1150	ug/L	1
a,a,a-Trifluorotoluene	Rep.	02.21.96	96527	57.7	57.2	ug/L	1
a,a,a-Trifluorotoluene	Th.	02.21.96	96527	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9602389

DATE REPORTED : 02/28/96

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
GRO	9602518*2						
Benzene		02.26.96	96530	80	79	15.2	ug/L
Toluene		02.26.96	96530	80	79	97.4	ug/L
Ethylbenzene		02.26.96	96530	79	78	20.4	ug/L
Total Xylene Isomers		02.26.96	96530	82	81	119	ug/L
TPH (Gasoline Range)		02.26.96	96530	95	95	1100	ug/L
a,a,a-Trifluorotoluene Rep.		02.26.96	96530	108	103	50.0	ug/L
a,a,a-Trifluorotoluene Th.		02.26.96	96530	100	100	50.0	ug/L
GRO	9602392*1						
Benzene		02.23.96	96529	86	97	15.2	ug/L
Toluene		02.23.96	96529	84	91	97.4	ug/L
Ethylbenzene		02.23.96	96529	82	91	20.4	ug/L
Total Xylene Isomers		02.23.96	96529	84	92	120	ug/L
TPH (Gasoline Range)		02.23.96	96529	95	97	1100	ug/L
a,a,a-Trifluorotoluene Rep.		02.23.96	96529	103	113	50.0	ug/L
a,a,a-Trifluorotoluene Th.		02.23.96	96529	100	100	50.0	ug/L
3. GRO	9602323*9						
Benzene		02.21.96	96527	96	92	15.2	ug/L
Toluene		02.21.96	96527	89	87	97.4	ug/L
Ethylbenzene		02.21.96	96527	87	85	20.4	ug/L
Total Xylene Isomers		02.21.96	96527	90	87	119	ug/L
TPH (Gasoline Range)		02.21.96	96527	104	105	1100	ug/L
a,a,a-Trifluorotoluene Rep.		02.21.96	96527	115	114	50.0	ug/L
a,a,a-Trifluorotoluene Th.		02.21.96	96527	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9602389

DATE REPORTED : 02/28/96

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNITS	METHOD
1. BTEX/GRO	B6021372*1					
Date Analyzed	02.26.96	96530	02/26/96	NA	Date	8015M
Benzene	02.26.96	96530	0	0.3	ug/L	8015M
Toluene	02.26.96	96530	0	0.3	ug/L	8015M
Ethylbenzene	02.26.96	96530	0	0.3	ug/L	8015M
Total Xylene Isomers	02.26.96	96530	0	0.6	ug/L	8015M
TPH (Gasoline Range)	02.26.96	96530	0	100	ug/L	8015M
a,a,a-Trifluorotoluene Rep.	02.26.96	96530	49.2	0.5	ug/L	8015M
a,a,a-Trifluorotoluene Th.	02.26.96	96530	50.0	NA	ug/L	8015M
2. GRO	B6021362*1					
Date Analyzed	02.23.96	96529	02/23/96	NA	Date	8015M.TX
Benzene	02.23.96	96529	0	0.5	ug/L	8015M.TX
Toluene	02.23.96	96529	0	0.5	ug/L	8015M.TX
Ethylbenzene	02.23.96	96529	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	02.23.96	96529	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	02.23.96	96529	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Rep.	02.23.96	96529	50.0	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Th.	02.23.96	96529	50.0	NA	ug/L	8015M.TX
GRO	B6021257*1					
Date Analyzed	02.21.96	96527	02/21/96	NA	Date	8015M.TX
Benzene	02.21.96	96527	0	0.5	ug/L	8015M.TX
Toluene	02.21.96	96527	0	0.5	ug/L	8015M.TX
Ethylbenzene	02.21.96	96527	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	02.21.96	96527	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	02.21.96	96527	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Rep.	02.21.96	96527	53.3	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Th.	02.21.96	96527	50.0	NA	ug/L	8015M.TX

SURROGATE RECOVERIES :
BC ANALYTICAL : GLEN LAB : 10:16:19 28 FEB 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9602389*1							
8015M.	TXa,a,a-Trifluorotoluene	Re96530	02/26/96	71.5	50.0	143	
9602389*2							
8015M.	TXa,a,a-Trifluorotoluene	Re96530	02/26/96	296	250	118	
9602389*3							
8015M.	TXa,a,a-Trifluorotoluene	Re96529	02/23/96	50.9	50.0	102	
9602389*4							
8015M.	TXa,a,a-Trifluorotoluene	Re96529	02/23/96	2610	2500	104	
9602389*5							
8015M.	TXa,a,a-Trifluorotoluene	Re96529	02/23/96	54.7	50.0	109	
9602389*6							
8015M.	TXa,a,a-Trifluorotoluene	Re96529	02/23/96	53.1	50.0	106	
9602389*7							
8015M.	TXa,a,a-Trifluorotoluene	Re96527	02/21/96	49.1	50.0	98	
9602389*8							
8015M.	TXa,a,a-Trifluorotoluene	Re96527	02/21/96	46.9	50.0	94	

SURROGATE RECOVERIES :
BC ANALYTICAL : GLEN LAB : 10:16:20 28 FEB 1996 - P. 1 :

THOD ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9602323*9*R1						
8015M.TXa,a,a-Trifluorotoluene	Re96527	02/21/96	51.5	50.0	103	
02323*9*S1						
8015M.TXa,a,a-Trifluorotoluene	Re96527	02/21/96	57.7	50.0	115	
02323*9*S2						
8015M.TXa,a,a-Trifluorotoluene	Re96527	02/21/96	57.2	50.0	114	
02323*9*T						
15M.TXa,a,a-Trifluorotoluene	Re96527	02/21/96	50.0	50.0	100	
9602392*1*R1						
15M.TXa,a,a-Trifluorotoluene	Re96529	02/23/96	49.3	50.0	99	
9602392*1*S1						
15M.TXa,a,a-Trifluorotoluene	Re96529	02/23/96	51.4	50.0	103	
02392*1*S2						
8015M.TXa,a,a-Trifluorotoluene	Re96529	02/23/96	56.5	50.0	113	
02392*1*T						
8015M.TXa,a,a-Trifluorotoluene	Re96529	02/23/96	50.0	50.0	100	
02518*2*R1						
15M a,a,a-Trifluorotoluene	Re96530	02/26/96	50.9	50.0	102	
9602518*2*S1						
15M a,a,a-Trifluorotoluene	Re96530	02/26/96	53.8	50.0	108	
9602518*2*S2						
15M a,a,a-Trifluorotoluene	Re96530	02/26/96	51.4	50.0	103	
02518*2*T						
8015M a,a,a-Trifluorotoluene	Re96530	02/26/96	50.0	50.0	100	
021257*1*MB						
8015M.TXa,a,a-Trifluorotoluene	Re96527	02/21/96	53.3	50.0	107	
021362*1*MB						
15M.TXa,a,a-Trifluorotoluene	Re96529	02/23/96	50.0	50.0	100	

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
R6021372*1*MB							
8015M	a,a,a-Trifluorotoluene	Re96530	02/26/96	49.2	50.0	98	
022314*1*LC							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	63.0	50.0	126	
022314*1*LT							
8015M.TX	a,a,a-Trifluorotoluene	Re96527	02/21/96	50.0	50.0	100	
022616*1*LC							
15M.TX	a,a,a-Trifluorotoluene	Re96529	02/23/96	59.2	50.0	118	
C6022616*1*LT							
15M.TX	a,a,a-Trifluorotoluene	Re96529	02/23/96	50.0	50.0	100	
C6022631*1*LC							
15M	a,a,a-Trifluorotoluene	Re96530	02/26/96	57.5	50.0	115	
022631*1*LT							
8015M	a,a,a-Trifluorotoluene	Re96530	02/26/96	50.0	50.0	100	

G9602389

Chain-of-Custody

Page 1 of 1

Texaco Environmental Services
108 Cutting Boulevard
Richmond, California 94804
Phone: (510) 236-3541
FAX: (510) 237-7621

Forward Results to BLAINE TECH, ATTN. Caron French
Texaco Project Corordinator: Karen Petryna

Site Name: Texaco Loc# 624880148
Site Address: 20499 Hesperian Blvd, Hayward, CA
Contractor Project Number: 960214-K3
Contractor Name: Blaine Tech Services, Inc.
Address: 985 Timothy Drive San Jose, CA 95133
Project Contact: Jim Keller
Phone/FAX: /

Laboratory: B C Analytical
Turn Around Time: As Contracted
Samplers (PRINT NAME): Keith Brown
Sampler Signature: [signature]
Date Samples Collected: 2/14/96

Cooler Temp: 5°
Sample Condition: Good

Sample Number	Lab Sample Number	Date/Time Collected	No. of Containers	Type of Containers	Sample Matrix	Preservative	TPH gas/BTEX	TPH Diesel	O&G/TRPH (418.1)	TPH Ex. (C8-C36+)	VOCs 8240/824	P. Halocarbons 8010/60	P. Aromatics 8020/602	Organic Lead			Comments
MW4A	—	2/14 1345	3	VOA	W	Hcl	X										6248801418 Alameda KEP FKEP1011C
MW4B	—	1425	↓	↓	↓	↓	X										-1
MW4D	—	1255					X										-2
MW4E	—	1435					X										-3
MW4I	—	1405					X										-4
MW4K	—	1325					X										-5
EB	—	—	↓				X										-6
TB	—	↓ —	2	↓	↓	↓	X										-7
																	-8

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
[signature]	2/16/96	1525	Bill Lyons	2-16-96	1525
Bill Lyons	2-16-96	5:00	Jan White	2/16/96	5:00
Jan White	2/16/96	5:30			

Method of Shipment:

Lab Comments:

ATTACHMENT J

FIRST QUARTER 1996 FIELD DATA SHEETS AND ANALYTICAL RESULTS FOR FORMER SHELL SERVICE STATION 20500 HESPERIAN BOULEVARD

BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

February 29, 1996

Shell Oil Company
P.O. Box 4023
Concord, CA 94524

Attn: R. Jeff Granberry

Shell WIC #204-3336-1704
20500 Hesperian Blvd.
Hayward, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960214-K-2

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 995-5535 ext. 201.

Yours truly,

Francis Thie

attachments: Table of Well Gauging Data
Chain of Custody
Field Data Sheets
Certified Analytical Report

cc: Enviros, Inc.
P.O. Box 259
Sonoma, CA 95476-0259
Attn: Diane Lundquist

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-1	02/14/96	TOC	–	NONE	–	–	7.53	24.32

SHELL WELL MONITORING DATA SHEET

Shell 20500 Hesperian Blvd., Hayward

Project #:	960214-K2	Wic #:	204-3336-1704
Sampler:	KCB	Start Date:	2/14
Well I.D.:	S-1	Well Diameter: (circle one)	2 3 (4) 6 ___
Total Well Depth: Before	24.32 After	Depth to Water: Before	7.53 After
Depth to Free Product:	—	Thickness of Free Product (feet):	
Measurements referenced to:	(TOC)	Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

10.9	x	3	=	32.7
1 Case Volume		Specified Volumes		gallons

Purging: Bailer / Disposable Bailer / Middleburg / Electric Submersible ✓ / Extraction Pump / Other ___

Sampling: Bailer ✓ / Disposable Bailer / Extraction Port / Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
957	66.8	6.6	1900	102.8	11	
958	66.8	6.4	1400	73.6	22	
1000	67.2	6.4	1300	12.9.2	33	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 330

Sampling Time:	1005	Sampling Date:	2/14
Sample I.D.:	S-1	Laboratory:	NA

Analyzed for: (TPH-G) (BTEX) TPH-D OTHER: (Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER: (Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 960306-161 Wic #: 204-3336-1704

Sampler: CCB Start Date: 3/6

Well I.D.: S-1 Well Diameter: (circle one) 2 3 (4) 6 ____

Total Well Depth: Before 24.33 After

Depth to Water: Before 6.34 After

Depth to Free Product: ____ Thickness of Free Product (feet):

Measurements referenced to: (PVC) Grade Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

1 Case Volume	x	Specified Volumes	=	gallons
11.7	x	3	=	35.1

Purging: Bailer
Disposable Bailer
Middleburg
Electric Submersible ✓
Extraction Pump
Other ____

Sampling: Bailer ✓
Disposable Bailer
Extraction Port
Other ____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
921	66.8	6.8	1800	94.4	12.0	
923	66.4	6.8	2400	108.1	24.0	slight silty
924	66.8	6.8	1600	148.3	36.0	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 36.0

Sampling Time: 930 Sampling Date: 3/6

Sample I.D.: S-1 Laboratory: Nor

Analyzed for: TPH-G BTEX (TPH-D) (OTHER:) MTBE
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

NET NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 02/23/1996
NET Client Acct. No: 1821
NET Job No: 96.00554
Received: 02/16/1996

Client Reference Information

Shell 20500 Hesperian Blvd., Hayward, CA/960214-K1

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. All positive results have been confirmed as required. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee

Ginger Brinlee
Project Coordinator

Enclosure(s)

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960214-K1

SAMPLE DESCRIPTION: S-1
NET SAMPLE NUMBER: 260484

DATE TAKEN: 02/14/1996
TIME TAKEN:

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						02/21/1996	3550
Purgeable TPH	ND		50	ug/L	5030/M8015		02/21/1996	3550
Carbon Range: C6 to C12	--						02/21/1996	3550
8020 (GC, Liquid)	--						02/21/1996	3550
Benzene	ND		0.5	ug/L	8020		02/21/1996	3550
Toluene	ND		0.5	ug/L	8020		02/21/1996	3550
Ethylbenzene	ND		0.5	ug/L	8020		02/21/1996	3550
Xylenes (Total)	ND		0.5	ug/L	8020		02/21/1996	3550
SURROGATE RESULTS	--						02/21/1996	3550
Bromofluorobenzene (SURR)	87			% Rec.	8020		02/21/1996	3550

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960214-K1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)								
Purgeable TPH	100.0	0.50	0.50		mg/L	02/21/1996	lss	3550
Benzene	86.4	4.32	5.00		ug/L	02/21/1996	lss	3550
Toluene	87.2	4.36	5.00		ug/L	02/21/1996	lss	3550
Ethylbenzene	88.8	4.44	5.00		ug/L	02/21/1996	lss	3550
Xylenes (Total)	92.5	13.87	15.0		ug/L	02/21/1996	lss	3550
Bromofluorobenzene (SURR)	92.0	92	100		% Rec.	02/21/1996	lss	3550

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00554

Date: 02/23/1996
ELAP Cert: 1386
Page: 4

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960214-K1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	02/21/1996	lss	3550
Benzene	ND	0.5		ug/L	02/21/1996	lss	3550
Toluene	ND	0.5		ug/L	02/21/1996	lss	3550
Ethylbenzene	ND	0.5		ug/L	02/21/1996	lss	3550
Xylenes (Total)	ND	0.5		ug/L	02/21/1996	lss	3550
Bromofluorobenzene (SURR)	87			% Rec.	02/21/1996	lss	3550

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00554

Date: 02/23/1996
ELAP Cert: 1386
Page: 5

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960214-K1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
5030/8015-M/8020 (Shell)												260484
Purgeable TPH	104.0	102.0	1.9	0.50	ND	0.52	0.51		mg/L	02/21/1996	3550	260484
Benzene	102.4	98.8	3.5	6.72	ND	6.88	6.64		ug/L	02/21/1996	3550	260484
Toluene	109.1	98.3	10.3	24.1	ND	26.3	23.7		ug/L	02/21/1996	3550	260484
Bromofluorobenzene (SURR)	100.0	96.0	4.0	100	87	100	96		% Rec.	02/21/1996	3550	260484

KEY TO RESULT FLAGS

*	: RPD between sample duplicates exceeds 30%.
*M	: RPD between sample duplicates or MS/MSD exceeds 20%.
+	: Correlation coefficient for the Method of Standard Additions is less than 0.995.
<	: Sample result is less than reported value.
B-I	: Value is between Method Detection Limit and Reporting Limit.
B-0	: Analyte found in blank and sample.
C	: The result confirmed by secondary column or GC/MS analysis.
CNA	: Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level.
COMP	: Sample composited by equal volume prior to analysis.
D-	: The result has an atypical pattern for Diesel analysis.
D1	: The result for Diesel is an unknown hydrocarbon which consists of a single peak.
DH	: The result appears to be a heavier hydrocarbon than Diesel.
DL	: The result appears to be a lighter hydrocarbon than Diesel.
DR	: Elevated Reporting Limit due to Matrix.
DS	: Surrogate diluted out of range.
DX	: The result for Diesel is an unknown hydrocarbon which consists of several peaks.
FA	: Compound quantitated at a 2X dilution factor.
FB	: Compound quantitated at a 5X dilution factor.
FC	: Compound quantitated at a 10X dilution factor.
FD	: Compound quantitated at a 20X dilution factor.
FE	: Compound quantitated at a 50X dilution factor.
FF	: Compound quantitated at a 100X dilution factor.
FG	: Compound quantitated at a 200X dilution factor.
FH	: Compound quantitated at a 500X dilution factor.
FI	: Compound quantitated at a 1000X dilution factor.
FJ	: Compound quantitated at a greater than 1000x dilution factor.
FK	: Compound quantitated at a 25X dilution factor.
FL	: Compound quantitated at a 250X dilution factor.
G-	: The result has an atypical pattern for Gasoline.
G1	: The result for Gasoline is an unknown hydrocarbon which consists of a single peak.
GH	: The result appears to be a heavier hydrocarbon than Gasoline.
GL	: The result appears to be a lighter hydrocarbon than Gasoline.
GX	: The result for Gasoline is an unknown hydrocarbon which consists of several peaks.
HX	: Peaks detected within the quantitation range do not match standard used.
J	: Value is estimated.
MI	: Matrix Interference Suspected.
MSA	: Value determined by Method of Standard Additions.
MSA*	: Value obtained by Method of Standard Additions; Correlation coefficient is <0.995.
NI1	: Sample spikes outside of QC limits; matrix interference suspected.
NI2	: Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant.
NI3	: Matrix Spike values exceed established QC limits, post digestion spike is in control.
P7	: pH of sample > 2; sample analyzed past 7 days.
RSC	: Refer to subcontract laboratory report for QC data.
S2	: Matrix interference confirmed by repeat analysis.
SCN	: Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide.
UMDL	: Undetected at the Method Detection Limit.

KEY TO ABBREVIATIONS

ICVS	: Initial Calibration Verification Standard (External Standard).
mean	: Average; sum of measurements divided by number of measurements.
mg/Kg	: Concentration in units of milligrams of analyte per kilogram of sample.
mg/L	: Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	: Milliliters per liter per hour.
MPN/100 mL	: Most probable number of bacteria per one hundred milliliters of sample.
N/A	: Not applicable.
NA	: Not analyzed.
ND	: Not detected.
NTU	: Nephelometric turbidity units.
RPD	: Relative percent difference.
SNA	: Standard not available.
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample.
ug/L	: Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	: Micromhos per centimeter.

#0304

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960214-101

Date: 2/14/96
Page 1 of 1

Site Address: 20500 Hesperian Blvd, Hayward, CA

WIC#: 204-3336-1704

Shell Engineer: R. Jeff Granberry | Phone No.: (510) 675-6169 Fax #:675-6172

Consultant Name & Address: Blaine Tech Services 985 Timothy Drive, San Jose, CA

Consultant Contact: Jim Keller | Phone No.: (408) 458-9765 Fax #:293-8773

Comments:

Sampled by: KCB

Printed Name: Keith Baur

LAB: Nor

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-1	2/14			W		3						X								

Analysis Required

CHECK ONE (1) BOX ONLY	C1/01	TURN AROUND TIME
Quarterly Monitoring	6441	24 hours
Site Investigation	6441	48 hours
Soil Closure/Disposal	6442	16 days (Normal)
Water Closure/Disposal	6443	Other
Soil/Air Rem. or Sys. O & M	6442	
Water Rem. or Sys. O & M	6443	
Other		

NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

CUSTODY SEALED
Date 2/15/96 Time 0823 Initials KB
SEAL INTACT?
Yes ✓ No ____ Initials

	Printed Name	Date/Time		Printed Name	Date/Time
Relinquished By (signature):	Keith C. Baur	Date: 2-15 Time: 1525	Received (signature):	P. Smart	Date: 2/15/96 Time: 1525
Relinquished By (signature):	P. Smart	Date: 2-15 Time: 1823	Received (signature):	PAM GREENS	Date: 2/16/96 Time: 08:00
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

VIA: NC

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 03/18/1996
NET Client Acct. No: 1821
NET Job No: 96.00861-A
Received: 03/08/1996

Client Reference Information

Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. All positive results have been confirmed as required. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee

Ginger Brinlee
Project Coordinator

Enclosure(s)

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

SAMPLE DESCRIPTION: S-1
NET SAMPLE NUMBER: 261742

DATE TAKEN: 03/06/1996
TIME TAKEN:

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Batch No.
TPH (Gas/BTXE,Liquid)								
8020 (GC,Liquid)	--						03/11/1996	3583
DILUTION FACTOR*	1						03/11/1996	3583
Methyl-tert-butyl ether	5.2		2	ug/L	8020		03/11/1996	3583
SURROGATE RESULTS	--						03/11/1996	3583
Bromofluorobenzene (SURR)	96			% Rec.	5030		03/11/1996	3583

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)								
as Gasoline	98.0	0.49	0.50		mg/L	03/11/1996		3583
Benzene	95.8	4.79	5.00		ug/L	03/11/1996		3583
Toluene	91.4	4.57	5.00		ug/L	03/11/1996		3583
Ethylbenzene	95.8	4.79	5.00		ug/L	03/11/1996		3583
Xylenes (Total)	97.2	14.58	15.0		ug/L	03/11/1996		3583
Bromofluorobenzene (SURR)	94.7	94.7	100		% Rec.	03/11/1996	aal	3583

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	ND	0.05		mg/L	03/11/1996		3583
Benzene	ND	0.5		ug/L	03/11/1996		3583
Toluene	ND	0.5		ug/L	03/11/1996		3583
Ethylbenzene	ND	0.5		ug/L	03/11/1996		3583
Xylenes (Total)	ND	0.5		ug/L	03/11/1996		3583
Methyl-tert-butyl ether	ND	2		ug/L	03/11/1996	aal	3583
Bromofluorobenzene (SURR)	97			% Rec.	03/11/1996	aal	3583

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
TPH (Gas/BTXE,Liquid)												261734
as Gasoline	100.0	100.0	0.0	0.5	0.08	0.58	0.58		mg/L	03/11/1996	3583	261734
Benzene	111.6	109.6	1.8	6.74	ND	7.52	7.39		ug/L	03/11/1996	3583	261734
Toluene	102.3	102.1	0.2	25.47	ND	26.06	26.00		ug/L	03/11/1996	3583	261734
Bromofluorobenzene (SURR)	104.0	108.0	3.8	100	81	104	108		% Rec.	03/11/1996	3583	261734

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

SAMPLE DESCRIPTION: S-1
NET SAMPLE NUMBER: 261742

DATE TAKEN: 03/06/1996
TIME TAKEN:

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Batch No.
3510/8015-M (Shell)						03/13/1996		
DILUTION FACTOR*	1						03/14/1996	1205
Extractable TPH	80		50	ug/L	3510/M8015		03/14/1996	1205
Carbon range: C9 to C24	--						03/14/1996	1205

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
3510/8015-M (Shell) Extractable TPH	110.6	1106	1000		mg/L	03/14/1996	dla	1205
3510/8015-M (Shell) Extractable TPH	112.7	1127	1000		mg/L	03/14/1996	dla	1205
3510/8015-M (Shell) Extractable TPH	97.3	973	1000		mg/L	03/18/1996		1206
3510/8015-M (Shell) Extractable TPH	96.2	962	1000		mg/L	03/18/1996		1206

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00861

Date: 03/18/1996
ELAP Cert: 1386
Page: 4

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
3510/8015-M (Shell) Extractable TPH	ND	0.05		mg/L	03/14/1996	dla	1205
3510/8015-M (Shell) Extractable TPH	ND	0.05		mg/L	03/18/1996		1206

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00861

Date: 03/18/1996
ELAP Cert: 1386
Page: 5

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
3510/8015-M (Shell)												261653
Extractable TPH	45.3	84.2	60.1	1.90	0.80	1.66	2.4	DH	mg/L	03/14/1996	1205	261653
3510/8015-M (Shell)												261905
Extractable TPH	85.2	78.6	8.1	1.96	ND	1.67	1.54		mg/L	03/18/1996	1206	261905

Ref: Shell 20500 Hesperian Blvd., Hayward, CA/960306-K1

LABORATORY CONTROL SAMPLE REPORT

Parameter	LCS % Rec.	DUP LCS % Rec.	RPD	LCS Amount Found	DUP LCS Amount Found	LCS Amount Exp.	Flags	Units	Date Analyzed	Analyst Initials	Run Batch
3510/8015-M (Shell) Extractable TPH	50.0			0.50		1.00		mg/L	03/14/1996	dla	1205
3510/8015-M (Shell) Extractable TPH	49.0			0.49		1.00		mg/L	03/18/1996		1206

KEY TO RESULT FLAGS

*	: RPD between sample duplicates exceeds 30%.
*M	: RPD between sample duplicates or MS/MSD exceeds 20%.
+	: Correlation coefficient for the Method of Standard Additions is less than 0.995.
<	: Sample result is less than reported value.
B-I	: Value is between Method Detection Limit and Reporting Limit.
B-0	: Analyte found in blank and sample.
C	: The result confirmed by secondary column or GC/MS analysis.
CNA	: Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level.
COMP	: Sample composited by equal volume prior to analysis.
D-	: The result has an atypical pattern for Diesel analysis.
D1	: The result for Diesel is an unknown hydrocarbon which consists of a single peak.
DH	: The result appears to be a heavier hydrocarbon than Diesel.
DL	: The result appears to be a lighter hydrocarbon than Diesel.
DR	: Elevated Reporting Limit due to Matrix.
DS	: Surrogate diluted out of range.
DX	: The result for Diesel is an unknown hydrocarbon which consists of several peaks.
FA	: Compound quantitated at a 2X dilution factor.
FB	: Compound quantitated at a 5X dilution factor.
FC	: Compound quantitated at a 10X dilution factor.
FD	: Compound quantitated at a 20X dilution factor.
FE	: Compound quantitated at a 50X dilution factor.
FF	: Compound quantitated at a 100X dilution factor.
FG	: Compound quantitated at a 200X dilution factor.
FH	: Compound quantitated at a 500X dilution factor.
FI	: Compound quantitated at a 1000X dilution factor.
FJ	: Compound quantitated at a greater than 1000x dilution factor.
FK	: Compound quantitated at a 25X dilution factor.
FL	: Compound quantitated at a 250X dilution factor.
G-	: The result has an atypical pattern for Gasoline.
G1	: The result for Gasoline is an unknown hydrocarbon which consists of a single peak.
GH	: The result appears to be a heavier hydrocarbon than Gasoline.
GL	: The result appears to be a lighter hydrocarbon than Gasoline.
GX	: The result for Gasoline is an unknown hydrocarbon which consists of several peaks.
HX	: Peaks detected within the quantitation range do not match standard used.
J	: Value is estimated.
MI	: Matrix Interference Suspected.
MSA	: Value determined by Method of Standard Additions.
MSA*	: Value obtained by Method of Standard Additions; Correlation coefficient is <0.995.
NI1	: Sample spikes outside of QC limits; matrix interference suspected.
NI2	: Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant.
NI3	: Matrix Spike values exceed established QC limits, post digestion spike is in control.
P7	: pH of sample > 2; sample analyzed past 7 days.
RSC	: Refer to subcontract laboratory report for QC data.
S2	: Matrix interference confirmed by repeat analysis.
SCN	: Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide.
UMDL	: Undetected at the Method Detection Limit.

KEY TO ABBREVIATIONS

ICVS	: Initial Calibration Verification Standard (External Standard).
mean	: Average; sum of measurements divided by number of measurements.
mg/Kg	: Concentration in units of milligrams of analyte per kilogram of sample.
mg/L	: Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	: Milliliters per liter per hour.
MPN/100 mL	: Most probable number of bacteria per one hundred milliliters of sample.
N/A	: Not applicable.
NA	: Not analyzed.
ND	: Not detected.
NTU	: Nephelometric turbidity units.
RPD	: Relative percent difference.
SNA	: Standard not available.
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample.
ug/L	: Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	: Micromhos per centimeter.

NET *Santa Rosa Division* LOGIN CHECKLIST

CLIENT: Blaine Tech JOB #: LOG #: 2608

Project ID: 960306-K1

Samples Received On : 3/8/96 Checked In on : 3/8/96

1) Custody Seals: ☐ N/A ☑ Present ☐ Absent ☐ Broken

2) Chain of Custody Forms: ☑ Present ☐ Absent #(s):
☐ Complete ☐ Incomplete

3) Type of packing material used: ice

4) Temperature(s) 1 °C Thermometer #(s)

5) Sample Container(s) ☑ Intact ☐ Broken

6) Container Label(s) ☑ Match COC ☐ Do Not Match

7) Sample Volume ☑ Sufficient ☐ Insufficient

8) Preservative(s) ☑ Correct ☐ Incorrect ☐ pH verified ☐ Res.Cl chk (CN & PHLs)

9) Headspace (VOAs) ☑ None ☐ Present (list ID's / number vials affected)

Sample ID	# of Vials	Sample ID	# of Vials

10) Form Completed By: [signature] Date: 3/8/96

Attach shipper's packing slip to this form before routing

Problem Resolution:

1) ☐ Project Coordinator Verbally Informed on

2) ☐ Client Informed on By

Project Coordinator: Date Resolved: ☐ Y ☐ N

Comments:

qamisc\lognfrm

Oleo

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960306-KC1

Date: 3/6/96
Page 1 of 1

Site Address: 20500 Hesperian Blvd, Hayward, CA

WIC#: 204-3336-1704

Shell Engineer: R. Jeff Granberry — Phone No.: (510) 675-6169 Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services 985 Timothy Drive, San Jose, CA

Consultant Contact: Jim Keller — Phone No.: (408) 458-9765 Fax #: 293-8773

Comments:

Sampled by: KCB

Printed Name: Keith Brown

LAB: Ntr

Analysis Required

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring [X]	5441
Site Investigation [ ]	5441
Soil Classify/Disposal [ ]	5442
Water Classify/Disposal [ ]	5443
Soil/Air Rem. or Sys. O & M [ ]	5452
Water Rem. or Sys. O & M [ ]	5453
Other [ ]	

TURN AROUND TIME

- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ]

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	MTBE		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-1	3/6			W		5		X					X							

CUSTODY SEALED
Date 3/7/96 Time 1610 Initials CS
SEAL INTACT?
Yes ✓ No___ Initials [illegible]

Relinquished By (signature): [signature]	Printed Name: Keith Brown	Date: 3/7/96 Time: 1144	Received (signature): [signature]	Printed Name: P. Smart	Date: 3/7/96 Time: 1144
Relinquished By (signature): [signature]	Printed Name: P. Smart	Date: 3-7-96 Time: 1610	Received (signature): [signature]	Printed Name: PAM GREENE	Date: 3/8/96 Time: 08:00
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

VIA: NCS

ATTACHMENT K

FIRST QUARTER 1996 FIELD DATA SHEETS AND ANALYTICAL RESULTS FOR FORMER UNOCAL STATION NO. 5590 20501 HESPERIAN BOULEVARD

Site: UNOCAL S/S #5590
20501 HESPERIAN BLVD.
HAYWARD

MPDS SERVICES, INCORPORATED

TABLE 1

SUMMARY OF MONITORING DATA

(Monitored and Sampled on 2/14/96)

Well #	Depth to Water (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)	Product Purged (ounces)
MW2	9.30	0	No	9.0	0
MW3	9.40	0	No	9.5	0
MW4	8.65	0	No	9.5	0
MW5	8.97	0	No	9.5	0
MW6	9.90	0	No	9.5	0
MW7	8.72	0	No	10.5	0
MW8	10.15	0	No	8.50	0

◆ DEPTH TO WATER LEVEL MEASUREMENTS WERE TAKEN FROM THE TOP OF THE WELL CASINGS.

2401 Stanwell Drive, Suite 300, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

PDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal 95590, 20501 Hesperian, Hayward
Sample Matrix: Water
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 602-1153

Sampled: Feb 14, 1996
Received: Feb 14, 1996
Reported: Mar 1, 1996

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 602-1153 MW-8*
Extractable Hydrocarbons	50	590
Chromatogram Pattern:		Unidentified Hydrocarbons <C15

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	2/20/96
Date Analyzed:	2/22/96
Instrument Identification:	HP-3B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
* This sample does not appear to contain diesel. * Unidentified Hydrocarbons <C15* are probably gasoline.

6021147.MPD <5>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5590, 20501 Hesperian, Hayward
Sample Matrix: Water
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 602-1147

Sampled: Feb 14, 1996
Received: Feb 14, 1996
Reported: Mar 1, 1996

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 602-1147 MW-2 *	Sample I.D. 602-1148 MW-3 *	Sample I.D. 602-1149 MW-4 *	Sample I.D. 602-1150 MW-5	Sample I.D. 602-1151 MW-6	Sample I.D. 602-1152 MW-7
Extractable Hydrocarbons	50	130	370	2,000	N.D.	N.D.	N.D.
Chromatogram Pattern:		Unidentified Hydrocarbons <C15	Unidentified Hydrocarbons <C15	Unidentified Hydrocarbons <C15	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	2/20/96	2/20/96	2/20/96	2/20/96	2/20/96	2/20/96
Date Analyzed:	2/22/96	2/22/96	2/22/96	2/22/96	2/22/96	2/22/96
Instrument Identification:	HP-3B	HP-3B	HP-3B	HP-3B	HP-3B	HP-3B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
* This sample does not appear to contain diesel. * Unidentified Hydrocarbons <C15" are probably gasoline.

Sequoia Analytical
680 Chesapeake Drive, Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5590, 20601 Hesperian, Hayward
Sample Descript: Water
Analysis for: MTBE (Modified EPA 8020)
First Sample #: 602-1147

Sampled: Feb 14, 1996
Received: Feb 14, 1996
Analyzed: 2/27 & 28/96
Reported: Mar 1, 1996

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
602-1147	MW-2	40	N.D.
602-1148	MW-3	40	N.D.
602-1149	MW-4	40	52
602-1150	MW-5	40	N.D.
602-1151	MW-6	40	N.D.
602-1152	MW-7	40	N.D.
602-1153	MW-8	40	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

IPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5580, 20501 Hesperian, Hayward
Matrix Descript: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 602-1147

Sampled: Feb 14, 1996
Received: Feb 14, 1996
Reported: Mar 1, 1996

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
602-1147	MW-2	220	1.8	0.87	ND	1.9
602-1148	MW-3	210	1.6	ND	2.1	0.88
602-1149	MW-4	2,500	20	6.2	ND	3.0
602-1150	MW-5	ND	ND	ND	ND	ND
602-1151	MW-6	ND	ND	ND	ND	ND
602-1152	MW-7	ND	ND	ND	ND	ND
602-1153	MW-8	2,100	20	12	8.4	11
602-1154	ES-1	ND	ND	ND	ND	ND
602-1155	ES-2	ND	ND	ND	ND	ND
602-1156	ES-3	ND	ND	ND	ND	ND
Detection Limits:		50	0.50	0.50	0.50	0.50

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

8021147.MPD <1>

Sequoia Analytical
680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5590, 20501 Hesperian, Hayward
Matrix Descript: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 602-1147

Sampled: Feb 14, 1996
Received: Feb 14, 1996
Reported: Mar 1, 1996

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
602-1147	MW-2	Gasoline	1.0	2/27/96	HP-5	90
602-1148	MW-3	Gasoline	1.0	2/27/96	HP-5	88
602-1149	MW-4	Gasoline	10	2/28/96	HP-2	114
602-1150	MW-5	–	1.0	2/27/96	HP-5	91
602-1151	MW-6	–	1.0	2/27/96	HP-5	92
602-1152	MW-7	–	1.0	2/27/96	HP-5	91
602-1153	MW-8	Gasoline	5.0	2/28/96	HP-2	114
602-1154	ES-1	–	1.0	2/27/96	HP-11	97
602-1155	ES-2	–	1.0	2/27/96	HP-11	98
602-1156	ES-3	–	1.0	2/27/96	HP-11	96

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Signature on File

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Project Manager