3R - 194

REPORTS

DATE:

2/14/1996

EPFS
EL PASO FIELD SERVICES

P.O. BOX 4990
FARMINGTON, NM 87499

February 14, 1996

RECEIVED
FEB 15 1996
Environmental Bureau
Oil Conservation Division

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504

Re: Semi-annual Report for the Jaquez Com. C #1 & Jaquez Com. E #1

Dear Mr. Olson:

Enclosed for your review is EPNG's semi annual report of the Jaquez Com. C #1 and Jaquez Com. E #1 remediation project of 1993. This report includes the following:

Tab A: Status report
Tab B: Site map
Tab C: BTEX analysis summary with graphs
Tab D: Most recent PAH analysis
Tab E: Water elevation summary with graphs
Tab F: Water gradient map

If you have any questions regarding the data, please do not hesitate to contact me at 599-2141.

Sincerely,

Sandra D. Miller
Superintendent, Environmental Compliance

xc: Mr. John Jaquez, Jr., Landowner
Mr. Denny Foust, NMOCD - Aztec
Mr. W.D. Hall, EPNG

Jaquez Com. E #1 and Jaquez Com. C #1
Soil & Groundwater Remediation

BACKGROUND INFORMATION

The Jaquez Com. C #1 and Jaquez Com. E #1 meter sites are currently owned and operated by El Paso Field Services (EPFS). They are located in Section 6, Township 29N, and Range 9W, near the town of Blanco, NM. The two meter houses are situated approximately 40 feet of each other on the same location. This location historically had an earthen pit(s) which was used to collect pipeline liquids. Listed below is a brief chronology of events which lead to this follow up report.

Late 1992 - Landowner expressed concern regarding potential hydrocarbon contamination in a garden area located near the meter site location.

March 1993 - Comprehensive soil and groundwater investigation performed on meter site location and in the nearby garden area.

June 1993 - EPNG submits a remedial plan to NMOCD for the site.

July 1993 - NMOCD approves the remedial plan.

August 1993 - Remediation activities commenced.

September 1993 - Remediation activities completed.

September 1993 to present - Floating product has been observed in monitor wells R-1 and R-2 during the months of seasonally low groundwater levels (i.e. late January to approximately early May). Use of passive skimmer systems were implemented to remove floating product during these time frames. Monitor wells on site were initially sampled monthly and are currently sampled on a quarterly basis.

CURRENT STATUS

All monitor wells are sampled on a quarterly basis for BTEX. Samples for Polynuclear Aromatic Hydrocarbons (PAH's) are obtained on an annual basis. BTEX analysis is not performed when LNAPL's are present. See Tab C for a BTEX analysis summary and Tab D for the most recent PAH analysis. A site sketch for identification of monitor well locations is located under Tab B.

R-1: Light Non-aqueous Phase Liquids (LNAPL) have been observed in this well during the time periods of seasonally low groundwater, especially during the months of February, March, and April in 1994 and 1995. This well has been checked three times since January 1, 1996. As of February 5, LNAPL has begun to reappear in this well. The

last sampling event was in November 1995 and indicates levels of benzene, toluene, and xylenes above NMWQCC regulatory limits.

R-2: Light Non-aqueous Phase Liquids (LNAPL) have been observed in this well during the time periods of seasonally low groundwater, especially during the months of February, March, and April in 1994 and 1995 (consistently to a lesser extent than R-1). This well has been checked twice since January 1, 1996. Approximately 1000 mls of LNAPL was removed from the passive skimmer system on February 1, 1996.

R-3: October and December of 1993 indicated levels of benzene slightly above the regulatory limit. All parameters for BTEX have been below regulatory limits since December 1993. Analytical data for PAH's was obtained in February 1995. All parameters are below regulatory limits.

R-4: Benzene levels have consistently exceeded regulatory limits. All other constituents for BTEX have been consistently below regulatory limits. Benzene levels have shown a 3 fold increase from September 1993 (i.e. from ~110 ppb to ~ 300 ppb). Analysis for PAH's indicate approximately 1/2 the regulatory limit for napthalenes with no parameters exceeding limits.

R-5: BTEX and PAH levels have remained nondetectable throughout the sampling period.

M-1: BTEX and PAH levels have remained nondetectable throughout the sampling period.

M-2: BTEX and PAH levels have remained nondetectable throughout the sampling period with the exception of October and November of 1993 which indicated trace amounts of benzene and toluene (i.e. 2ppb).

M-3: Concentrations for toluene, ethylbenzene, and xylenes have been below regulatory limits since September 1993. Concentrations of benzene have been below or very near the regulatory limit (February and August 1995 showed benzene at ~11.5ppb) since December of 1993. The quarterly sample taken in May 1995 had a result of 180 ppb benzene. The reason for this is not known and considered an anomaly. The November 1995 sample was a nondetect for benzene. PAH concentrations were nondetects in February 1995. The next sampling event is scheduled for February 1996.

M-4: Concentrations for toluene, ethylbenzene, and xylenes have been below regulatory limits since September 1993. Benzene levels have been consistently above regulatory limits throughout the sampling period (i.e. ranging from 100 ppb to 200 ppb). Over the last two quarters however, benzene concentrations have dropped dramatically to <30 ppb. PAH analysis from February 1995 were all below regulatory limits.

M-5: BTEX and PAH levels have remained nondetectable throughout the sampling period.

SUMMARY

Garden area south of Citizen's Ditch

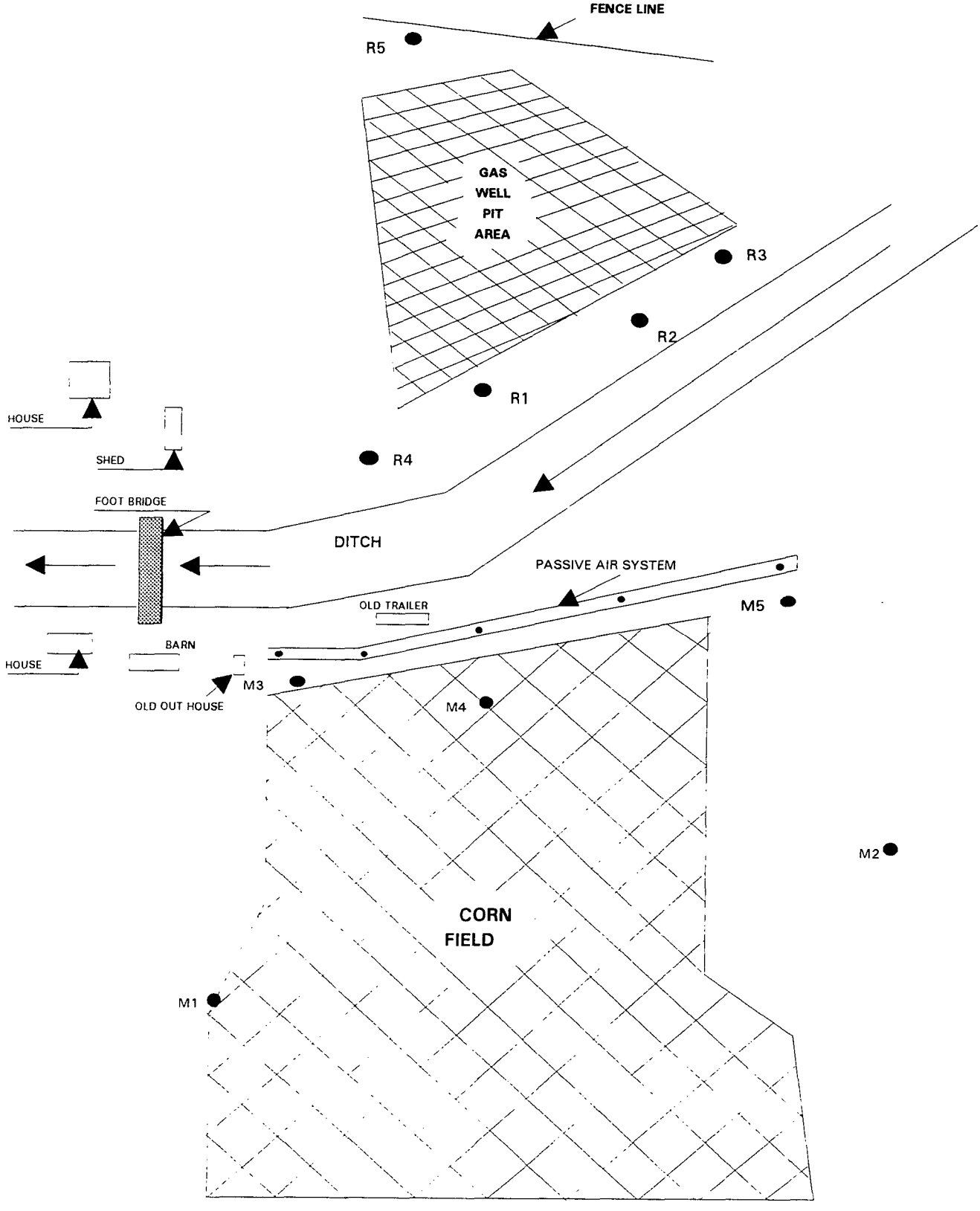
No further action (with the exception of monitoring) is proposed for the area south of the ditch. Concentrations of benzene in monitor well M-4 have declined dramatically over the last two quarters. With the exception of the benzene spike detected in May 1995, monitor well M-3 appears to be below regulatory limits. In addition, no BETX components have been detected in downgradient wells. It is anticipated that the benzene concentrations will continue to decrease due to natural biodegradation in monitor well M-4.

Meter site location north of Citizen's Ditch

EPFS will continue to monitor wells R-1 and R-2 for the appearance of LNAPL. We will continue to utilize the passive skimmer system (Petrotrap) in R-2 and R-1 if needed, for the removal of LNAPL.

EPFS is currently evaluating various methods of introducing oxygen and/or microbes for possible application to the meter site location. If a method is selected, EPFS will request approval from NMOCD prior to application to the site. A determining factor will be the future observations of R-1 and R-2 with regard to the presence of LNAPL.

EPFS will continue to monitor groundwater quality for BTEX on a quarterly basis and for PAH's on an annual basis in all wells.


FENCE LINE
R5
GAS
WELL
PIT
AREA
R3
R2
R1
HOUSE
SHED
R4
FOOT BRIDGE
DITCH
PASSIVE AIR SYSTEM
OLD TRAILER
M5
HOUSE
BARN
M3
OLD OUT HOUSE
M4
M2
CORN
FIELD
M1

JAQUEZ COM. C #1 & JAQUEZ COM. E #1
MONITOR WELL SUMMARY

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-1	N30969	9/7/93	991	164	113	1111	2379	No	ND
R-1	N31056	10/4/93	1280	1328	74	799	3481	No	1"
R-1	N31240	11/10/93	242	322	15.0	93.9	673	No	ND
R-1	N31384	12/15/93	328	411	26.6	196	962	No	ND
R-1	940026	1/12/94	1830	1965	90.3	1053	4938	No	17"
R-1	940233	2/9/94	1255	1504	42.3	730	3531	No	32"
R-1	940491	3/7/94	7600	8500	280	2700	19080	Yes	4"
R-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	10"
R-1	941003	6/13/94	1450	1930	70.0	944	4394	No	11"
R-1	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	2"
R-1	941619	12/15/94	1890	2130	105.0	990	5115	No	TR
R-1	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR
R-1	951178	11/2/95	2330	2400	108	946	5784	No	ND
R-2	N30970	9/7/93	278	651	59.0	538	1526	No	ND
R-2	N31057	10/4/93	509	789	73.0	741	2112	No	ND
R-2	N31241	11/10/93	284	470	38.0	401	1193	No	ND
R-2	N31385	12/15/93	529	864	65.3	709	2167	No	1"
R-2	940027	1/12/94	1722	2501	150	1702	6075	No	24"
R-2	940234	2/9/94	2806	3667	89.5	1520	8083	No	26"
R-2	940492	3/7/94	5600	6800	290	2700	15390	Yes	4"
R-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	7"
R-2	941004	6/13/94	3210	3790	139	1670	8809	No	7"
R-2	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-2	941620	12/15/94	1140	2200	148	1520	5008	No	0.6"
R-2	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR
R-2	951179	11/2/95	1250	2030	116	1010	4406	No	TR

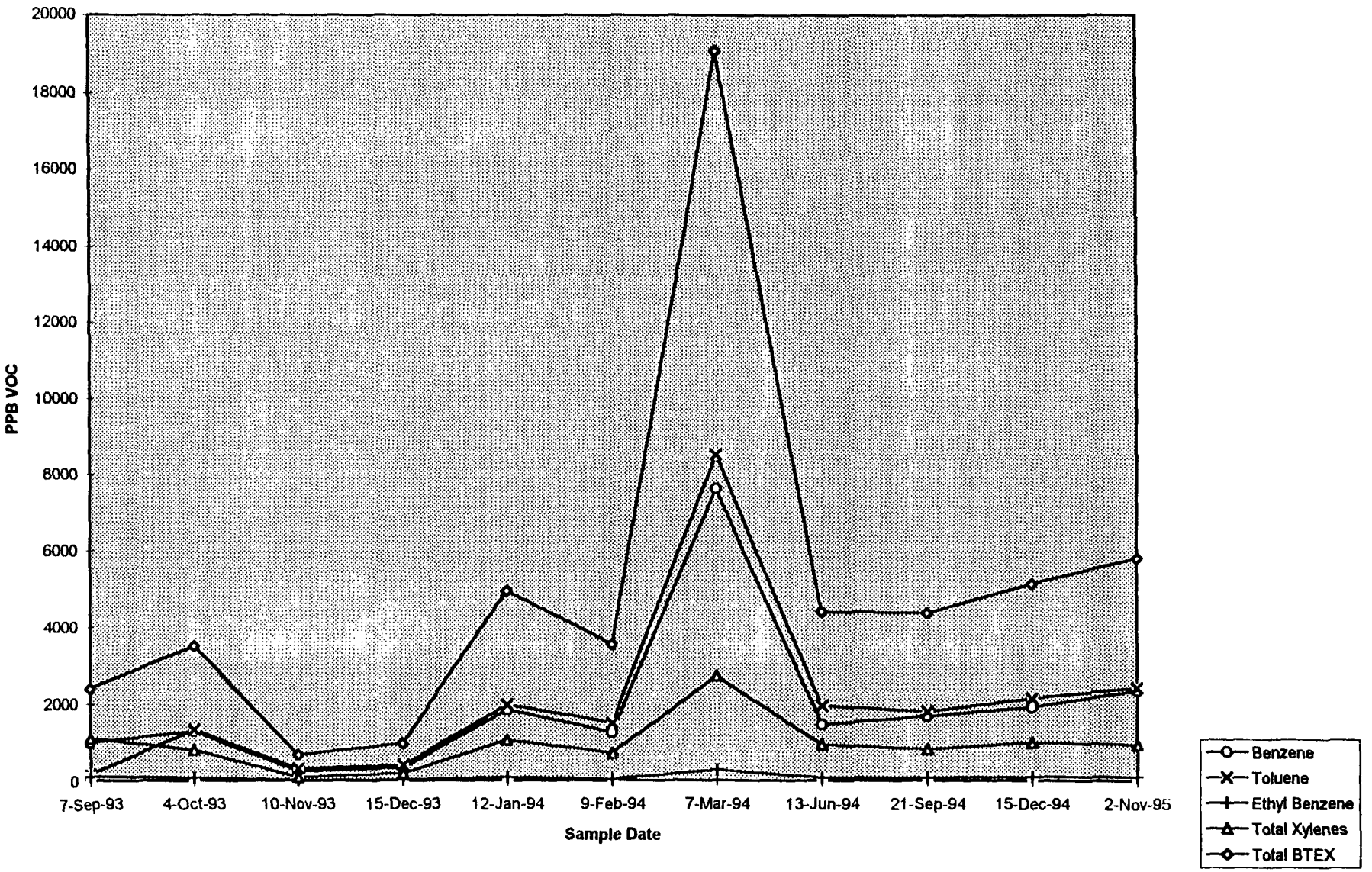
Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-3	N30971	9/7/93	<2.0	61.4	22.0	207	290	No	ND
R-3	N31058	10/4/93	21	179	32.0	310	542	No	ND
R-3	N31242	11/10/93	6.19	27.7	10.4	89.2	134	No	ND
R-3	N31386	12/15/93	26	88.4	19.4	178	312	No	ND
R-3	940028	1/12/94	4.4	2.9	2.7	18	28	No	ND
R-3	940235	2/9/94	<2.0	10.9	8.3	59.6	79	No	ND
R-3	940493	3/7/94	7.7	43	24	220	295	Yes	ND
R-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-3	941005	6/13/94	3.03	41.4	18.4	188	251	No	ND
R-3	941259	9/7/94	<2.5	18	6.9	67.9	93	No	ND
R-3	941621	12/15/94	11.7	12.2	12.4	114	150	No	ND
R-3	950099	2/9/95	7.36	2.7	2.68	20.8	34	Yes	ND
R-3	950562	5/8/95	16.6	11.7	13.9	126	168	No	ND
R-3	950896	8/25/95	<2.5	15.2	13.6	101	130	No	ND
R-3	951180	11/2/95	<2.5	14.0	9.3	82	105	No	ND
R-4	N30972	9/7/93	104	267	39.9	370	781	No	ND
R-4	N31060	10/4/93	118	266	41	364	789	No	ND
R-4	N31243	11/10/93	93.6	132	40.4	347	613	No	ND
R-4	N31387	12/15/93	102	161	48.4	418	729	No	ND
R-4	940030	1/12/94	124	101	38.5	353	617	No	ND
R-4	940237	2/9/94	120	51.4	20.8	150	342	No	ND
R-4	940494	3/7/94	150	63	20	190	423	Yes	ND
R-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-4	941007	6/13/94	179	60.6	17.2	176	433	No	ND
R-4	941260	9/7/94	238	102	26	218	584	No	ND
R-4	941622	12/15/94	222	63.3	26.9	213	525	No	ND
R-4	950100	2/9/95	273	61	20.4	165	519	Yes	ND
R-4	950564	5/8/95	278	251	23.1	220	772	No	ND
R-4	950897	8/25/95	646	278	50.8	544	1519	No	ND
R-4	951181	11/2/95	343	60.4	35.1	284	723	No	ND

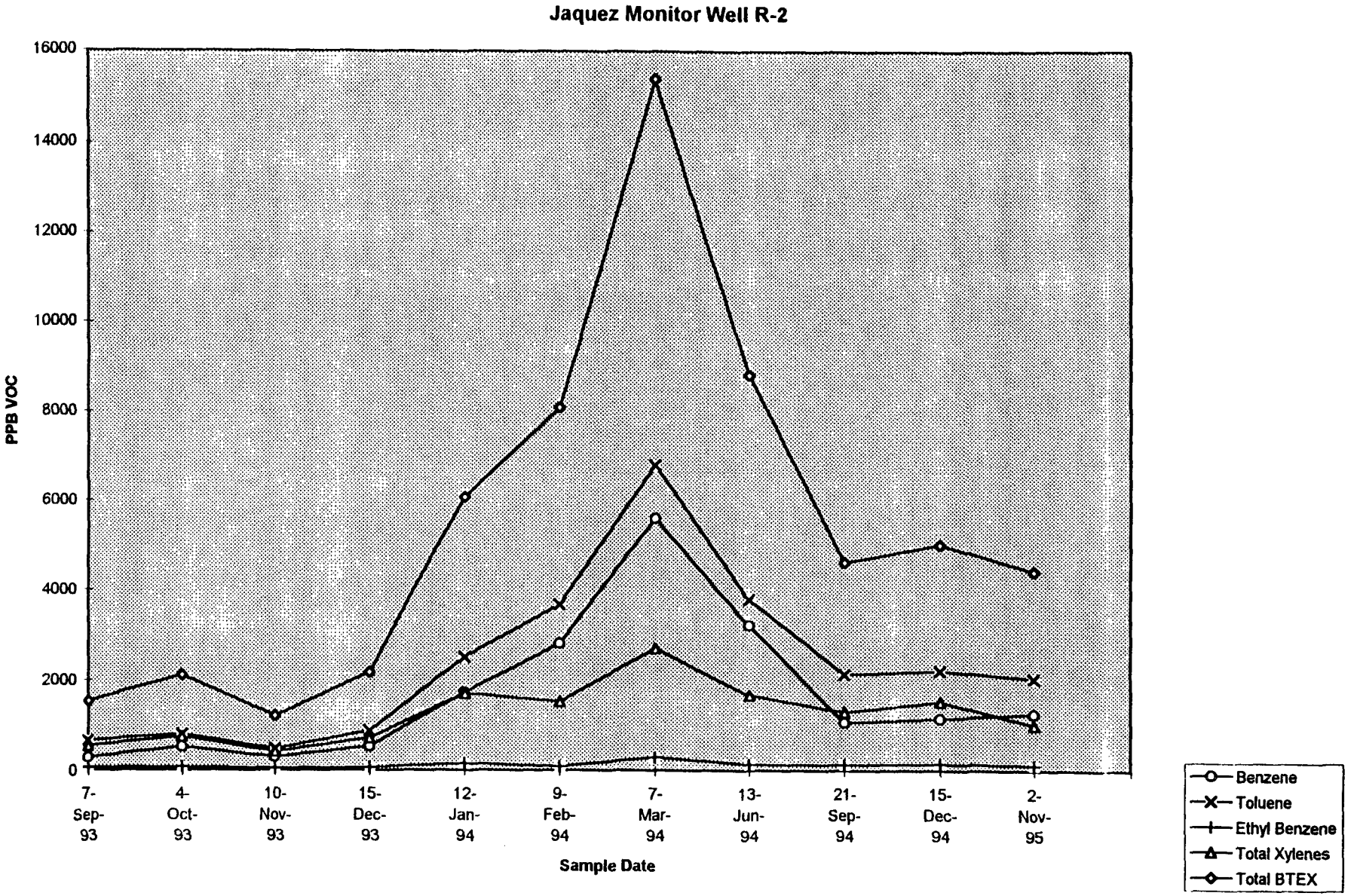
Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-5	N30973	9/7/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	N31061	10/4/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	N31244	11/10/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	N31388	12/15/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	940031	1/12/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	940238	2/9/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	940496	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
R-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-5	941008	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	941261	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	941623	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	950102	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
R-5	950565	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	950898	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	951182	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	N30974	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	N31062	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	N31245	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	N31389	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	940032	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	940239	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	940497	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
M-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-1	941009	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	941262	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	941624	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	950103	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-1	950566	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	950899	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	951183	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
M-2	N30975	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	N31063	10/5/93	2.0	2.0	<2.0	<2.0	4.0	No	ND
M-2	N31246	11/11/93	2.3	2.0	<2.0	<2.0	4.3	No	ND
M-2	N31390	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	940033	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	940240	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	940498	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
M-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-2	941010	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	941263	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	941625	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	950104	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-2	950567	5/5/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	950900	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	951184	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-3	N30976	9/8/93	116	<2.0	3.0	37.6	157	No	ND
M-3	N31064	10/5/93	306	<2.0	4.0	19	329	No	ND
M-3	N31247	11/11/93	8.4	5.3	<2.0	2.6	16	No	ND
M-3	N31391	12/16/93	42	<2.0	<2.0	<2.0	42	No	ND
M-3	940034	1/13/94	19	2.1	<2.0	<2.0	21	No	ND
M-3	940241	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-3	940499	3/7/94	<0.5	<0.5	<0.5	2.5	3	Yes	ND
M-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-3	941011	6/13/94	3.65	<2.0	<2.0	<2.0	4	No	ND
M-3	941264	9/7/94	2.87	<2.5	<2.5	2.5	5	No	ND
M-3	941626	12/15/94	<2.5	<2.5	<2.5	5.61	6	No	ND
M-3	950105	2/9/95	11.4	<2.5	<2.5	<2.5	11	Yes	ND
M-3	950568	5/8/95	180	67.2	<2.5	53.9	301	No	ND
M-3	950901	8/25/95	11.8	<2.5	<2.5	16.8	29	No	ND
M-3	951185	11/2/95	<2.5	<2.5	<2.5	5.03	5	No	ND

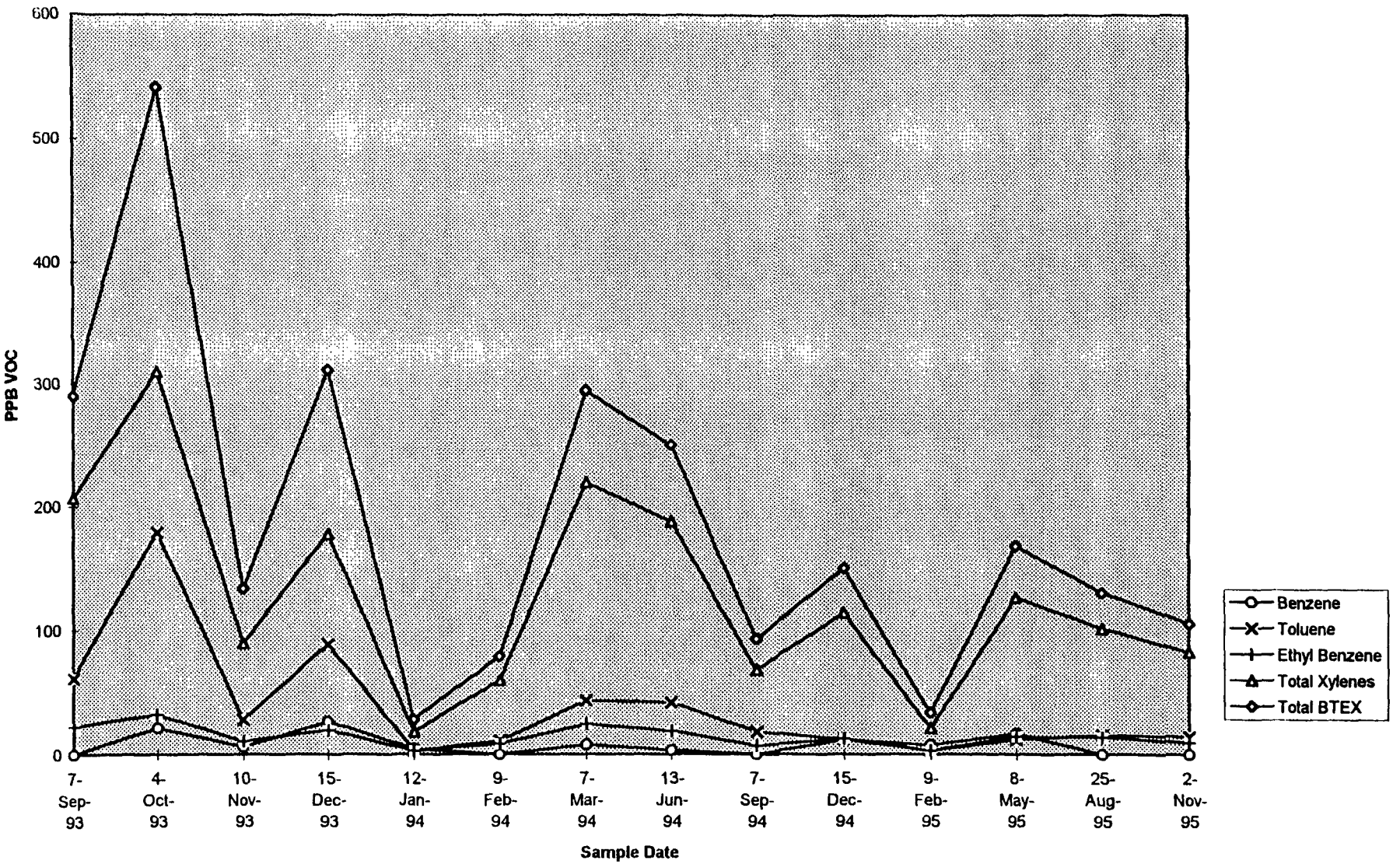
Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
M-4	N30977	9/8/93	213	13.3	58	519	803	No	ND
M-4	N31065	10/5/93	302	2.0	55	395	754	No	ND
M-4	N31248	11/11/93	234	2.0	56	383	675	No	ND
M-4	N31392	12/16/93	171	<2.0	34.3	244	449	No	ND
M-4	940035	1/13/94	175	2.5	38	288	504	No	ND
M-4	940242	2/10/94	137	<2.0	29.8	192	359	No	ND
M-4	940500	3/7/94	120	<2.5	27	220	367	Yes	ND
M-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-4	941012	6/13/94	151	<2.0	28.4	246	425	No	ND
M-4	941265	9/7/94	145	<2.5	24.1	231	400	No	ND
M-4	941628	12/15/94	184	<2.5	22.3	215	421	No	ND
M-4	950106	2/9/95	160	<2.5	19.6	186	366	Yes	ND
M-4	950569	5/8/95	108	<2.5	11.7	119	239	No	ND
M-4	950902	8/25/95	29.3	<2.5	13	116	158	No	ND
M-4	951187	11/2/95	15.1	<2.5	12.9	136	164	No	ND
M-5	N30979	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	N31066	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	N31250	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	N31393	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	940036	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	940243	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	940501	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
M-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-5	941013	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	941267	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	941629	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	950107	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-5	950570	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	950904	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	951188	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND

Jaquez Monitor Well R-1

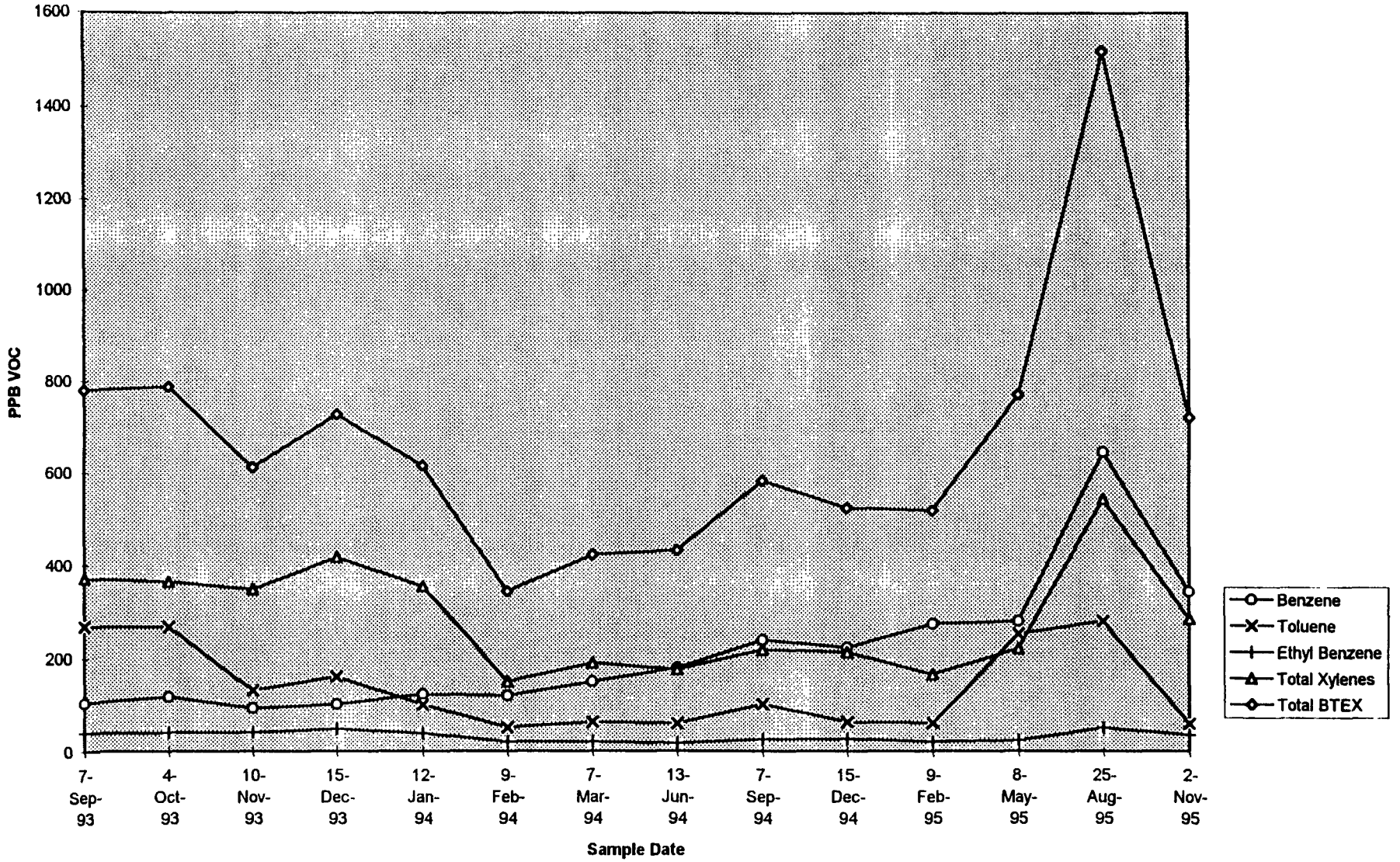



Jaquez Monitor Well R-2
PPB VOC
16000
14000
12000
10000
8000
6000
4000
2000
0
7-Sep-93
4-Oct-93
10-Nov-93
15-Dec-93
12-Jan-94
9-Feb-94
7-Mar-94
13-Jun-94
21-Sep-94
15-Dec-94
2-Nov-95
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

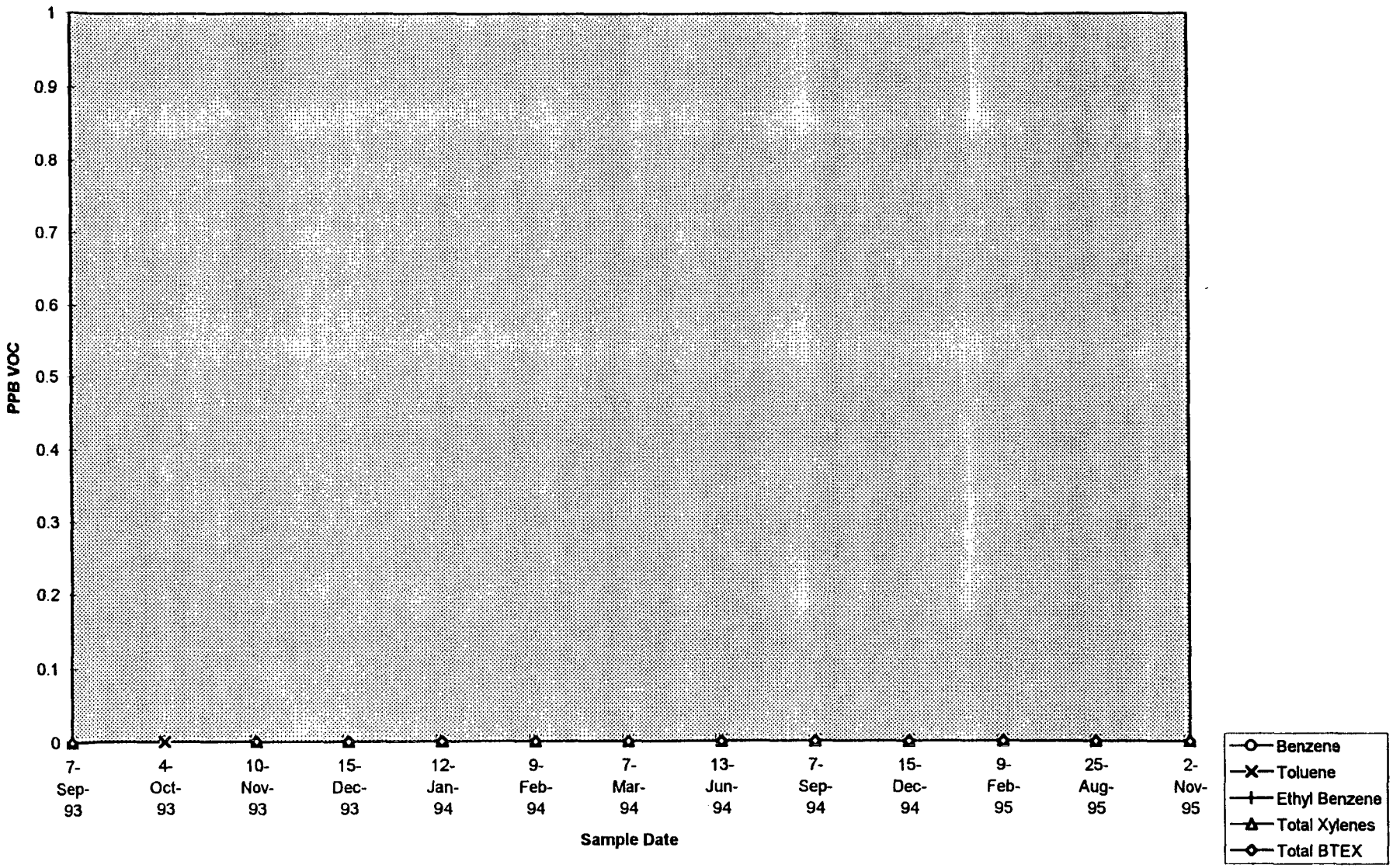
Jaquez Monitor Well R-3



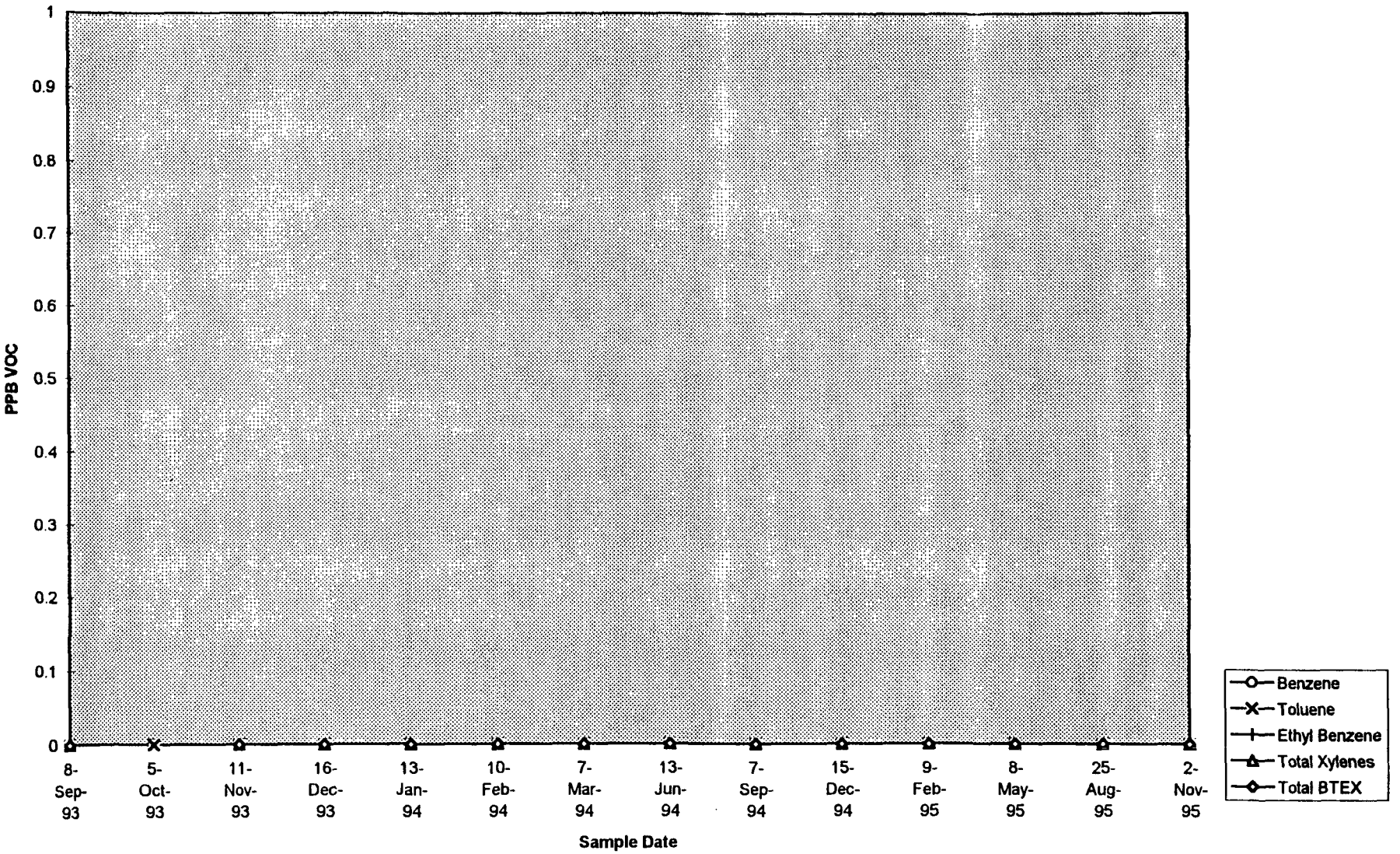
Jaquez Monitor Well R-4



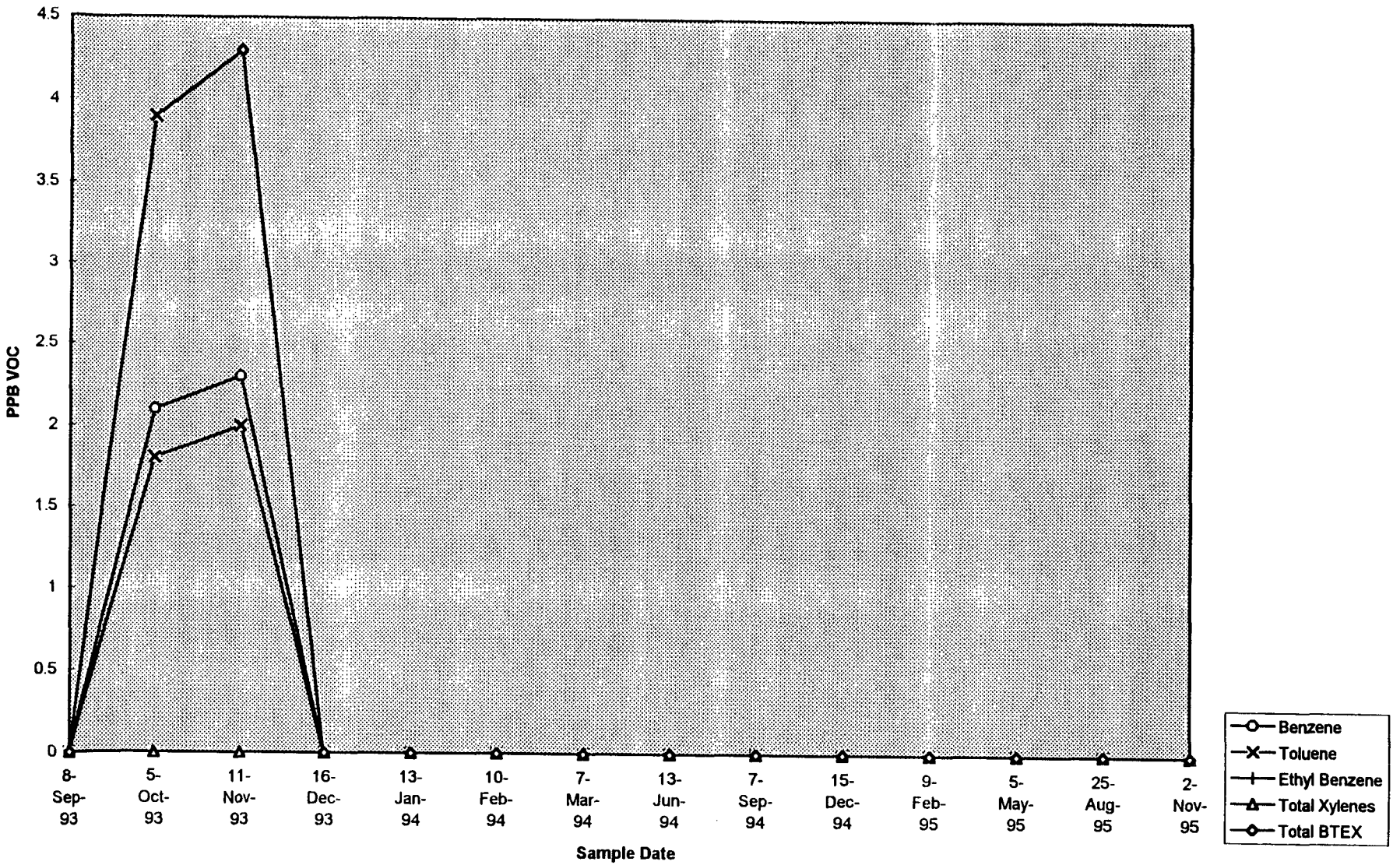
Jaquez Monitor Well R-5

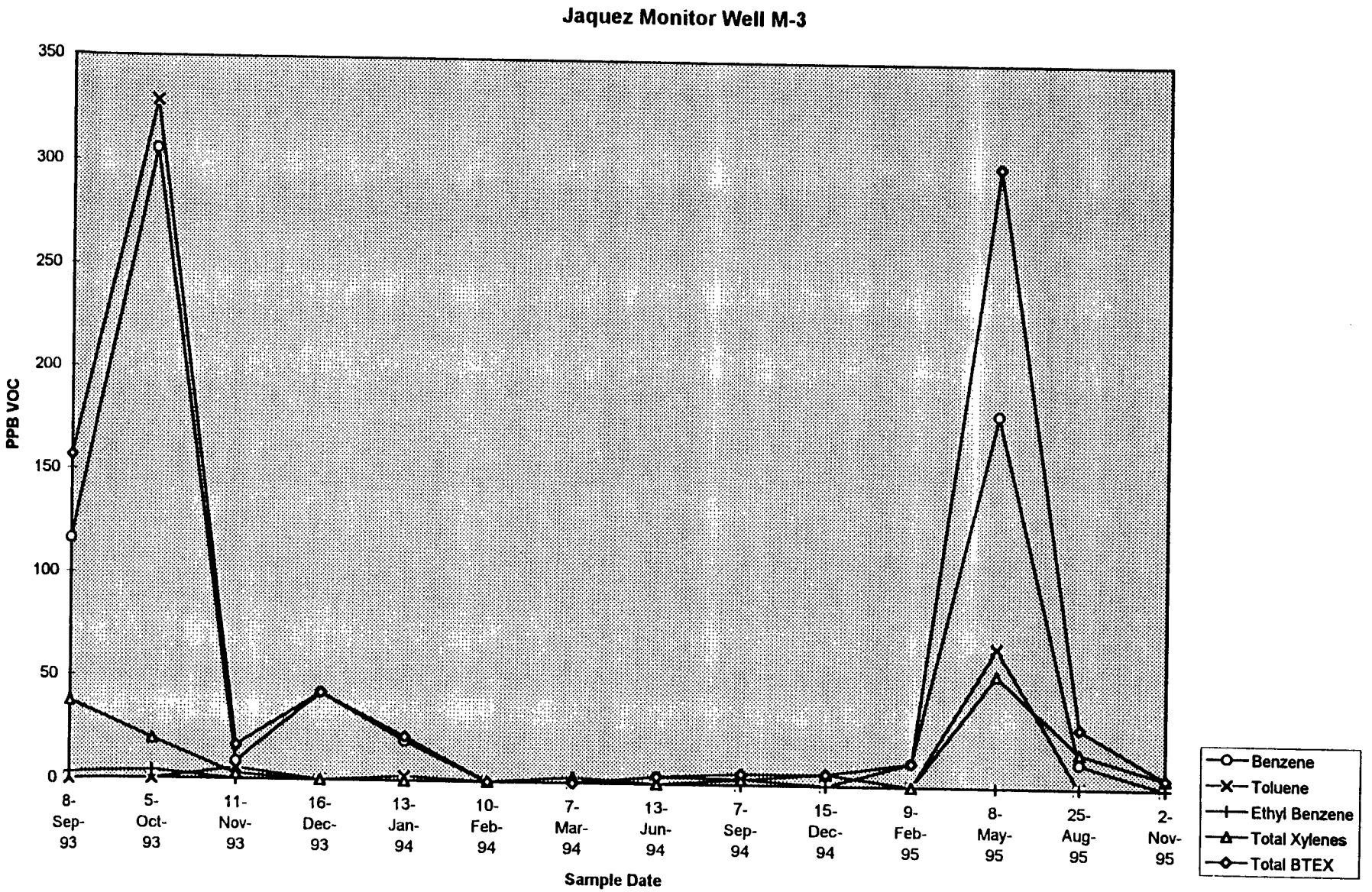


Jaquez Monitor Well M-1

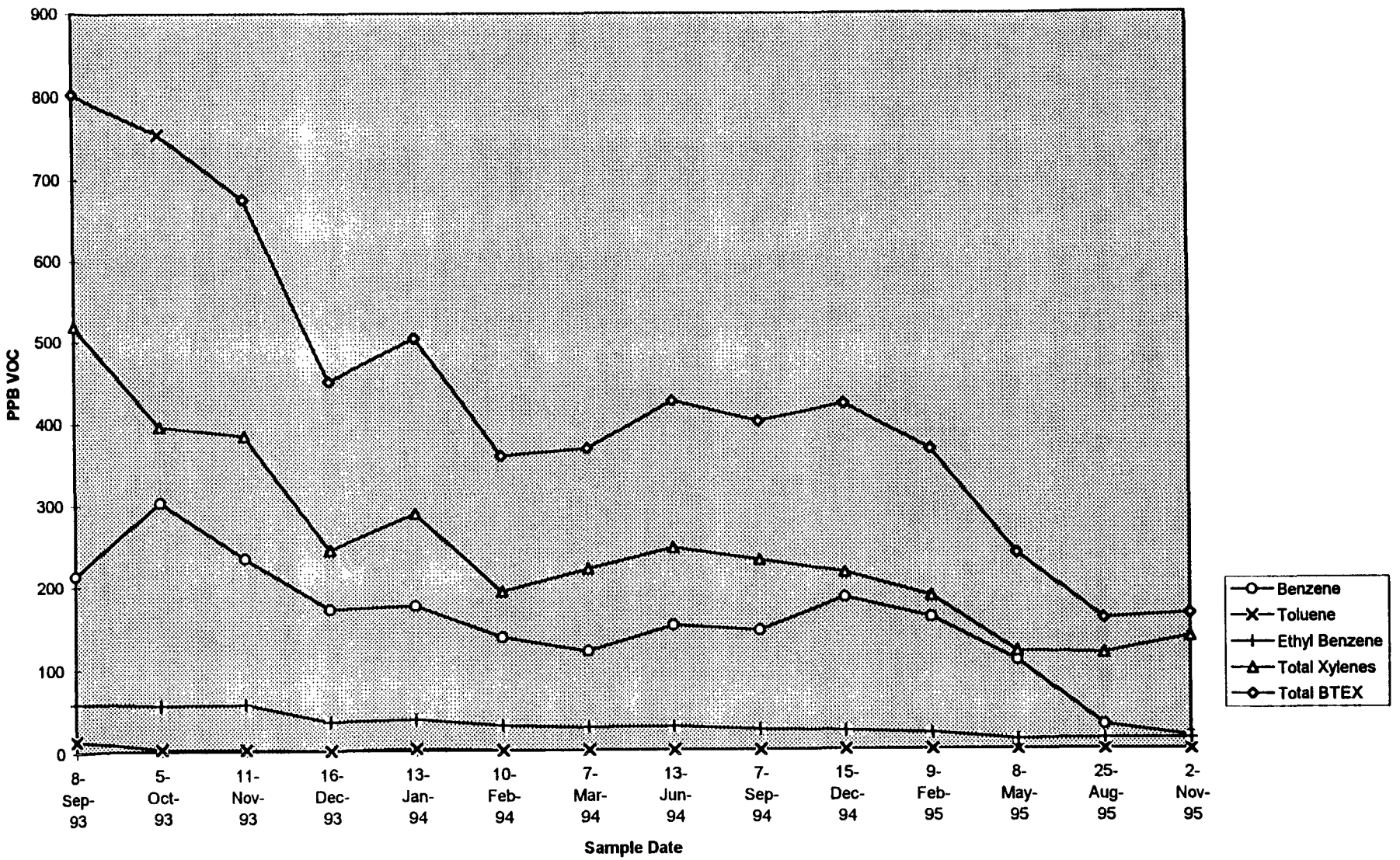


Jaquez Monitor Well M-2

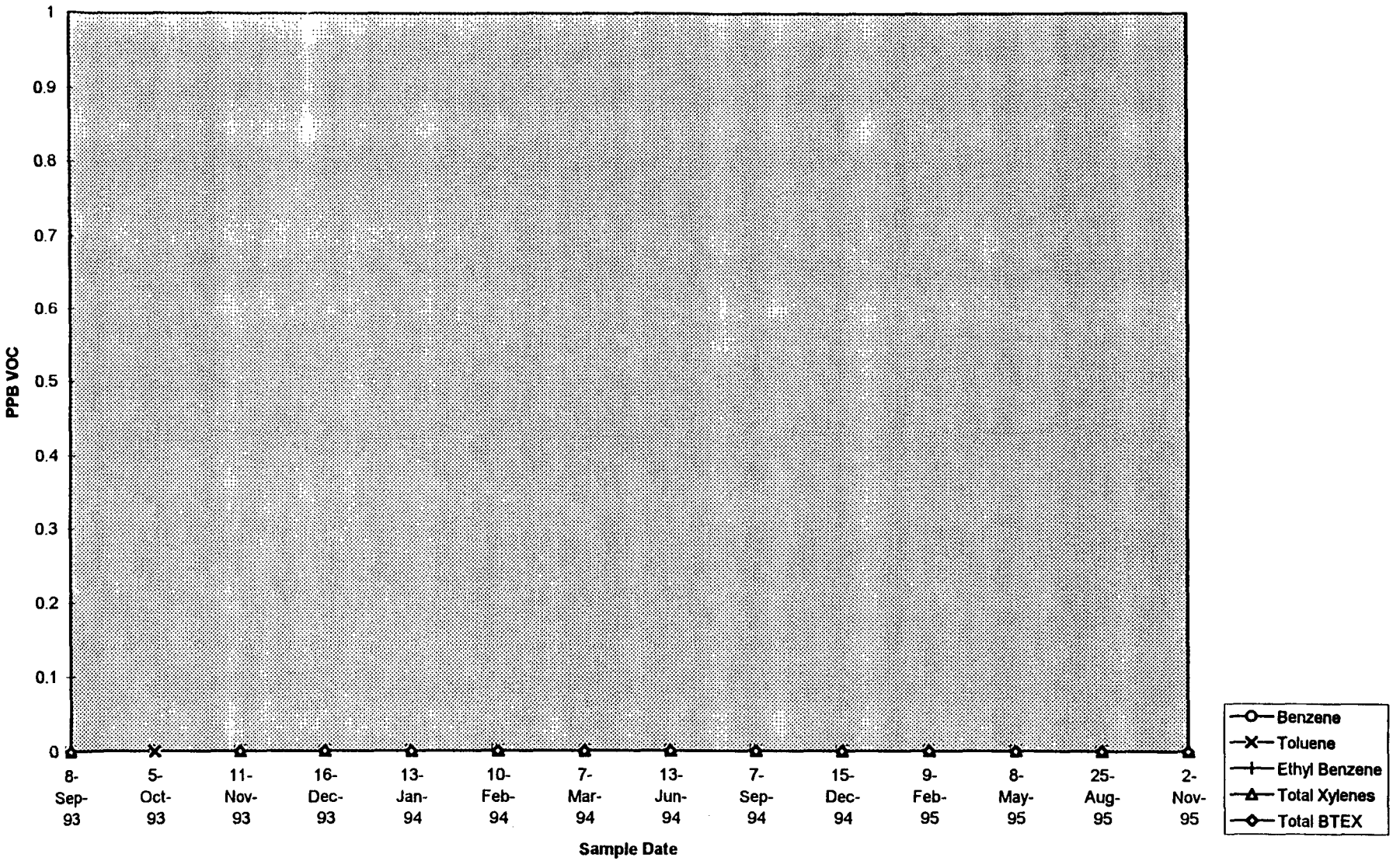



Jaquez Monitor Well M-3
PPB VOC
350
300
250
200
150
100
50
0
8-Sep-93
5-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

Jaquez Monitor Well M-4



Jaquez Monitor Well M-5



Jaquez PAH Results

Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **502358**

March 1, 1995

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: JAQUEZ M.W.

Attention: John Lambdin

On **02/10/95**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

All analyses were performed by Analytical Technologies, Inc., 225 Commerce Drive, Fort Collins, CO.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

CLIENT : EL PASO NATURAL GAS CO.
PROJECT # : (NONE)
PROJECT NAME : JAQUEZ M.W.

DATE RECEIVED : 02/20/95
REPORT DATE : 03/01/95

ATI ID: 502358

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	950099 - mw R-3	AQUEOUS	02/09/95
02	950100 - mw R-4	AQUEOUS	02/09/95
03	950101 - mw R-4 Field Dup	AQUEOUS	02/09/95
04	950102 - mw R-5	AQUEOUS	02/09/95
05	950103 - mw m-1	AQUEOUS	02/09/95
06	950104 - mw m-2	AQUEOUS	02/09/95
07	950105 - mw m-3	AQUEOUS	02/09/95
08	950106 - mw m-4	AQUEOUS	02/09/95
09	950107 - mw m-5	AQUEOUS	02/09/95

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	9

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-01

Sample Matrix: Water
Cleanup: N/A

Sample ID

950099

mw R-3

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	0.31	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	0.035	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a.h)anthracene	ND	0.030
Benzo(g.h.i)perylene	ND	0.040
Indeno(1.2.3-c.d)pyrene	ND	0.030

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	84	15 - 117

ND = Not Detected at or above client requested detection limit.

Approved JE 3-23-95

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS
Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-02

Sample Matrix: Water
Cleanup: N/A

Sample ID: **950100** MW R-4

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	1.9	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	3.8	0.30
2-Methylnaphthalene	7.2	0.30
Acenaphthene	ND	0.50
Fluorene	0.88	0.040
Phenanthrene	0.68	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	0.11	0.040
Benzo(a)anthracene	0.15	0.010
Chrysene	0.21	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	78	15 - 117

PASSED JF 3-23-95

ND = Not Detected at or above client requested detection limit.

Naph + MonoNaph = 12.9 ppb
Limit = 30 ppb

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS
Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-03

Sample Matrix: Water
Cleanup: N/A

Sample ID: **950101**

MW R-4
Field Duplicate

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	2.0	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	4.9	0.30
2-Methylnaphthalene	9.4	0.30
Acenaphthene	ND	0.50
Fluorene	1.2	0.040
Phenanthrene	0.89	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	0.22	0.010
Chrysene	0.50	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

This was a Field QA/QC Sample. Passed ✓

2.23.95

RPD = 23%
Acceptable ✓

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	76	15 - 117

ND = Not Detected at or above client requested detection limit.

Naph + Mono Naph - 16.3 ppb
Limit = 30 ppb

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-04

Sample Matrix: Water
Cleanup: N/A

Sample ID: **950102** MW R-5

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	ND	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

PASSED 3-23-95

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	82	15 - 117

ND = Not Detected at or above client requested detection limit.

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-05

Sample Matrix: Water
Cleanup: N/A

Sample ID

950103

mw m-1

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	ND	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

PASSED 3-27-95

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	80	15 - 117

ND = Not Detected at or above client requested detection limit.

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN – 502358
Lab Sample ID: 95-02-095-06

Sample Matrix: Water
Cleanup: N/A

Sample ID

950104

mw m-2

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	ND	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

PAISED 3-27-95

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	80	15 - 117

ND = Not Detected at or above client requested detection limit.

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-07

Sample Matrix: Water
Cleanup: N/A

Sample ID: **950105** mw m-3

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/21/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	ND	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	100	15 - 117

ND = Not Detected at or above client requested detection limit.

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-08

Sample Matrix: Water
Cleanup: N/A

Sample ID: **950106**

mw m-4

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/22/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	3.0	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	1.4	0.30
2-Methylnaphthalene	2.5	0.30
Acenaphthene	ND	0.50
Fluorene	0.31	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

Pyrene 2-27-95

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	80	15 - 117

ND = Not Detected at or above client requested detection limit.

AnalyticalTechnologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: 95-02-095-09

Sample Matrix: Water
Cleanup: N/A

Sample ID

950107 MW M-5

Date Collected: 02/09/95
Date Extracted: 02/15/95
Date Analyzed: 02/22/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	ND	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a.h)anthracene	ND	0.030
Benzo(g.h.i)perylene	ND	0.040
Indeno(1.2.3-c.d)pyrene	ND	0.030

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	77	15 - 117

ND = Not Detected at or above client requested detection limit.

2-23-95

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS
Method 8310

Lab Name: Analytical Technologies Inc.
Client Name: ATI-NM
Client Project ID: EPN -- 502358
Lab Sample ID: WRB1 02/15/95

Sample Matrix: Water
Cleanup: N/A

Sample ID: **Reagent Blank**

Date Collected: N/A
Date Extracted: 02/15/95
Date Analyzed: 02/22/95

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	ND	0.30
Acenaphthylene	ND	0.30
1-Methylnaphthalene	ND	0.30
2-Methylnaphthalene	ND	0.30
Acenaphthene	ND	0.50
Fluorene	ND	0.040
Phenanthrene	ND	0.030
Anthracene	ND	0.010
Fluoranthene	ND	0.030
Pyrene	ND	0.040
Benzo(a)anthracene	ND	0.010
Chrysene	ND	0.020
Benzo(b)fluoranthene	ND	0.010
Benzo(k)fluoranthene	ND	0.010
Benzo(a)pyrene	ND	0.010
Dibenzo(a,h)anthracene	ND	0.030
Benzo(g,h,i)perylene	ND	0.040
Indeno(1,2,3-c,d)pyrene	ND	0.030

Acceptable
3-6-95

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	78	15 - 117

ND = Not Detected at or above client requested detection limit.

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS BLANK SPIKE

Method 8310

Lab Name: Analytical Technologies Inc.

Lab Sample ID: WBS1,2 02/15/95

Client Name: ATI-NM
Client Project ID: EPN -- 502358

Date Extracted: 02/15/95
Date Analyzed: 02/22/95

Sample Matrix: Water

GC Column: DB-17/DB-1701

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Spike Added (ug/L)	BS Concentration (ug/L)	BS Percent Recovery	QC Limits % Rec
Acenaphthylene	10.0	4.62	46	23 - 122
Phenanthrene	1.00	0.770	77	34 - 112
Pyrene	1.00	0.591	59	35 - 116
Dibenzo(a,h)anthracene	1.00	0.781	78	33 - 123
Benzo(k)fluoranthene	0.250	0.205	82	39 - 119

Analyte	Spike Added (ug/L)	BSD Concentration (ug/L)	BSD Percent Recovery	RPD	QC Limits RPD
Acenaphthylene	10.0	4.66	47	1	20
Phenanthrene	1.00	0.790	79	3	20
Pyrene	1.00	0.589	59	0	20
Dibenzo(a,h)anthracene	1.00	0.732	73	7	20
Benzo(k)fluoranthene	0.250	0.204	82	1	20

SURROGATE RECOVERY BS/BSD

Analyte	% Recovery(BS)	% Recovery(BSD)	% Rec Limits
2-Chloroanthracene	78	78	15 -117

Acceptable
3-3-95

JAQUEZ COM. C #1 & JAQUEZ COM. E #1
WATER ELEVATION SUMMARY

Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
R-1	9/7/93	85.9	85.9	0.0
R-1	10/4/93	85.3	85.4	1.2
R-1	11/10/93	83.7	83.7	0.0
R-1	12/15/93	82.9	82.9	0.0
R-1	1/12/94	81.0	82.4	16.8
R-1	2/9/94	80.5	83.2	31.8
R-1	3/7/94	83.1	83.5	4.2
R-1	5/17/94	84.5	85.3	9.6
R-1	6/13/94	84.3	85.2	10.8
R-1	9/7/94	86.1	86.3	2.4
R-1	12/15/94	84.2	84.2	0.0
R-1	2/16/95	81.0	83.2	26.4
R-1	2/21/95	80.7	83.0	27.6
R-1	2/23/95	80.6	82.8	26.4
R-1	2/27/95	80.4	82.6	26.4
R-1	2/28/95	80.4	82.6	26.4
R-1	3/1/95	80.3	82.5	27.0
R-1	3/3/95	80.5	82.7	26.4
R-1	3/7/95	80.6	82.8	27.0
R-1	3/8/95	80.5	82.9	29.4
R-1	3/9/95	80.8	82.9	25.8
R-1	3/14/95	80.3	82.9	31.8
R-1	3/20/95	80.6	83.1	30.6
R-1	3/21/95	81.1	83.1	24.6
R-1	3/22/95	81.0	83.0	24.0
R-1	3/23/95	80.9	82.9	24.6
R-1	3/24/95	80.8	83.0	27.0
R-1	3/24/95	81.4	83.0	19.8
R-1	3/27/95	80.5	82.5	24.0
R-1	3/27/95	81.1	82.2	13.8
R-1	3/28/95	80.5	82.5	24.0
R-1	3/29/95	80.5	82.5	24.0
R-1	3/29/95	81.9	82.2	3.6
R-1	3/30/95	80.4	82.3	23.4
R-1	3/31/95	80.3	82.4	25.2
R-1	3/31/95	81.0	82.0	12.0
R-1	4/3/95	80.4	81.2	9.6
R-1	4/3/95	80.9	81.9	12.0
R-1	4/4/95	80.4	82.0	19.2
R-1	4/5/95	80.3	82.4	25.2
R-1	4/6/95	80.4	82.3	22.8
R-1	4/10/95	81.0	83.5	30.0
R-1	4/12/95	81.1	83.6	30.0

Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
R-1	4/12/95	82.1	82.8	8.4
R-1	4/13/95	81.3	83.3	24.0
R-1	4/18/95	81.5	84.1	31.2
R-1	4/19/95	82.9	83.8	10.8
R-1	4/20/95	83.1	83.6	6.0
R-1	4/24/95	81.6	83.8	26.4
R-1	4/25/95	81.8	83.9	25.2
R-1	4/27/95	81.4	83.5	25.2
R-1	4/28/95	81.9	84.2	27.6
R-1	5/1/95	81.3	82.6	15.6
R-1	5/2/95	81.3	82.6	15.6
R-1	5/3/95	81.8	83.4	19.8
R-1	5/8/95	80.4	82.5	25.8
R-1	5/9/95	81.4	83.5	25.8
R-1	5/10/95	81.5	83.6	25.2
R-1	5/12/95	81.6	83.7	25.8
R-1	5/15/95	81.5	83.3	22.2
R-1	5/17/95	83.7	84.3	7.2
R-1	5/18/95	83.9	84.4	6.0
R-1	5/19/95	84.2	84.2	0.0
R-1	5/22/95	84.0	84.0	0.0
R-1	5/23/95	84.0	84.0	0.0
R-1	5/25/95	83.7	84.1	4.8
R-1	5/30/95	84.3	84.6	3.6
R-1	5/31/95	84.6	84.8	2.4
R-1	6/2/95	84.7	84.8	1.2
R-1	6/5/95	84.6	84.6	0.0
R-1	6/7/95	84.5	84.5	0.0
R-1	9/8/95	84.4	84.4	0.0
R-1	6/9/95	84.4	84.4	0.0
R-1	6/12/95	84.3	84.3	0.0
R-1	6/13/95	84.3	84.3	0.0
R-1	6/14/95	84.3	84.3	0.0
R-1	6/15/95	84.5	84.5	0.0
R-1	6/19/95	84.8	84.8	0.0
R-1	8/25/95	84.8	84.8	0.0
R-1	11/2/95	84.4	84.4	0.0
R-2	9/7/93	86.2	86.2	0.0
R-2	10/4/93	85.0	85.0	0.0
R-2	11/10/93	83.8	83.8	0.0
R-2	12/15/93	83.0	83.1	1.2
R-2	1/12/94	81.1	83.1	24.0
R-2	2/9/94	81.0	83.2	26.4
R-2	3/7/94	83.3	83.6	3.0

Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
R-2	5/17/94	84.9	85.5	6.6
R-2	6/13/94	84.7	85.3	6.6
R-2	9/7/94	85.3	85.3	0.0
R-2	12/15/94	84.2	84.3	0.6
R-2	2/16/95	81.7	82.7	12.0
R-2	2/21/95	82.0	82.4	4.8
R-2	2/23/95	81.4	81.4	0.0
R-2	2/27/95	81.8	81.8	0.0
R-2	2/28/95	81.8	81.8	0.0
R-2	3/1/95	81.5	81.5	0.0
R-2	3/3/95	81.7	81.7	0.0
R-2	3/7/95	81.6	81.6	0.0
R-2	3/8/95	82.2	82.2	0.0
R-2	3/9/95	83.0	83.0	0.0
R-2	3/14/95	81.8	81.8	0.0
R-2	3/20/95	82.2	82.6	4.8
R-2	3/21/95	82.5	82.7	2.4
R-2	3/22/95	82.3	82.5	1.8
R-2	3/23/95	82.2	82.2	0.0
R-2	3/24/95	81.9	81.9	0.0
R-2	3/24/95	81.9	81.9	0.0
R-2	3/27395	81.7	81.7	0.0
R-2	3/27395	81.7	81.7	0.0
R-2	3/28/95	81.7	81.7	0.0
R-2	3/29/95	81.7	81.7	0.0
R-2	3/29/95	81.7	81.7	0.0
R-2	3/30/95	81.5	81.5	0.0
R-2	3/31/95	81.4	81.4	0.0
R-2	3/31/95	81.4	81.4	0.0
R-2	4/3/95	81.4	81.4	0.0
R-2	4/3/95	81.4	81.4	0.0
R-2	4/4/95	81.4	81.4	0.0
R-2	4/5/95	81.4	81.4	0.0
R-2	4/6/95	81.4	81.4	0.0
R-2	4/10/95	82.6	83.1	6.0
R-2	4/12/95	81.6	82.8	14.4
R-2	4/12/95	82.8	82.8	0.0
R-2	4/13/95	82.0	82.9	10.8
R-2	4/18/95	82.1	83.5	16.8
R-2	4/19/95	83.5	83.5	0.0
R-2	4/20/95	83.4	83.4	0.0
R-2	4/24/95	83.7	83.7	0.0
R-2	4/25/95	83.1	83.1	0.0
R-2	4/27/95	82.4	83.4	12.6
R-2	4/28/95	82.9	84.1	14.4

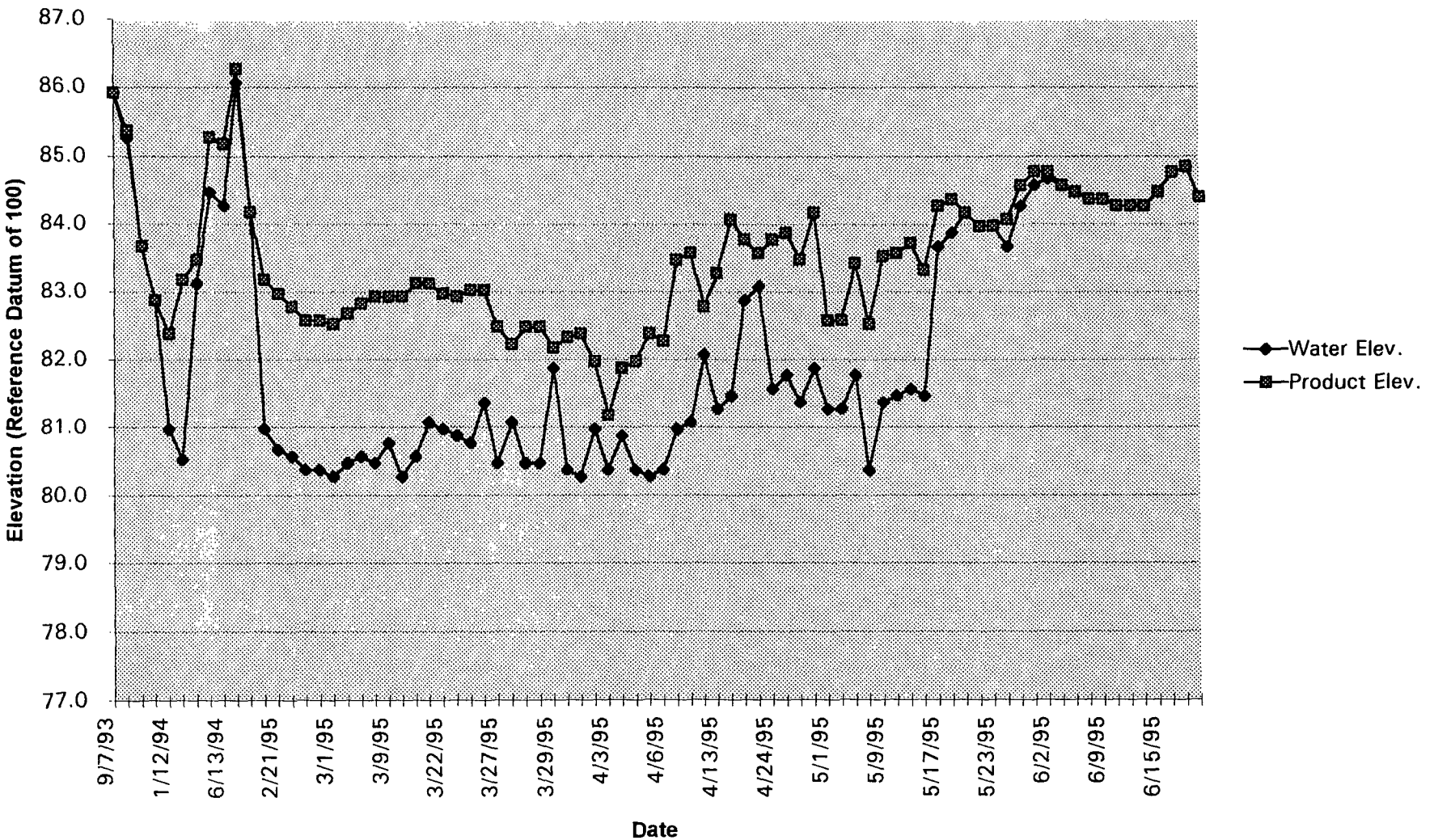
Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
R-2	5/1/95	82.2	83.5	15.6
R-2	5/2/95	82.3	83.6	15.6
R-2	5/3/95	82.8	83.1	3.6
R-2	5/8/95	80.5	82.3	21.0
R-2	5/9/95	82.5	83.1	7.2
R-2	5/10/95	82.9	83.1	2.4
R-2	5/12/95	82.9	83.1	2.4
R-2	5/15/95	82.5	83.3	10.2
R-2	5/17/95	84.2	84.2	0.0
R-2	5/18/95	84.3	84.3	0.0
R-2	5/19/95	84.1	84.1	0.0
R-2	5/22/95	83.9	83.9	0.0
R-2	5/23/95	84.0	84.0	0.0
R-2	5/25/95	83.9	83.9	0.0
R-2	5/30/95	84.8	84.8	0.0
R-2	5/31/95	85.0	85.0	0.0
R-2	6/2/95	85.1	85.1	0.0
R-2	6/5/95	84.9	84.9	0.0
R-2	6/7/95	84.8	84.8	0.0
R-2	6/8/95	84.7	84.7	0.0
R-2	6/9/95	84.7	84.7	0.0
R-2	6/12/95	84.7	84.7	0.0
R-2	6/13/95	84.7	84.7	0.0
R-2	6/14/95	84.7	84.7	0.0
R-2	6/15/95	84.9	84.9	0.0
R-2	6/19/95	85.3	85.3	0.0
R-2	8/25/95	85.0	85.0	0.0
R-2	11/2/95	84.5	84.5	0.0
R-3	9/7/93	86.5	N/A	ND
R-3	10/4/93	85.4	N/A	ND
R-3	11/10/93	84.6	N/A	ND
R-3	12/15/93	83.3	N/A	ND
R-3	1/12/94	82.3	N/A	ND
R-3	2/9/94	82.9	N/A	ND
R-3	3/7/94	84.5	N/A	ND
R-3	5/17/94	85.7	N/A	ND
R-3	6/13/94	86.0	N/A	ND
R-3	9/7/94	86.9	N/A	ND
R-3	12/15/94	84.8	N/A	ND
R-3	2/9/95	82.7	N/A	ND
R-3	5/8/95	83.6	N/A	ND
R-3	8/25/95	85.9	N/A	ND
R-3	11/2/95	85.4	N/A	ND

Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
R-4	9/7/93	85.7	N/A	ND
R-4	10/4/93	84.6	N/A	ND
R-4	11/10/93	83.5	N/A	ND
R-4	12/15/93	82.7	N/A	ND
R-4	1/12/94	81.8	N/A	ND
R-4	2/9/94	82.3	N/A	ND
R-4	3/7/94	83.8	N/A	ND
R-4	5/17/94	84.9	N/A	ND
R-4	6/13/94	85.2	N/A	ND
R-4	9/7/94	86.1	N/A	ND
R-4	12/15/94	84.0	N/A	ND
R-4	2/9/95	82.2	N/A	ND
R-4	5/8/95	83.0	N/A	ND
R-4	8/25/95	85.2	N/A	ND
R-4	11/2/95	84.7	N/A	ND
R-5	9/7/93	86.0	N/A	ND
R-5	10/4/93	85.2	N/A	ND
R-5	11/10/93	84.3	N/A	ND
R-5	12/15/93	83.6	N/A	ND
R-5	1/12/94	82.6	N/A	ND
R-5	2/9/94	82.8	N/A	ND
R-5	3/7/94	84.3	N/A	ND
R-5	5/17/94	85.1	N/A	ND
R-5	6/13/94	85.6	N/A	ND
R-5	9/7/94	86.3	N/A	ND
R-5	12/15/94	84.7	N/A	ND
R-5	2/9/95	83.2	N/A	ND
R-5	5/8/95	83.4	N/A	ND
R-5	8/25/95	85.4	N/A	ND
R-5	11/2/95	85.1	N/A	ND
M-1	9/8/93	81.0	N/A	ND
M-1	10/5/93	80.0	N/A	ND
M-1	11/11/93	79.4	N/A	ND
M-1	12/16/93	78.6	N/A	ND
M-1	1/13/94	78.3	N/A	ND
M-1	2/10/94	78.9	N/A	ND
M-1	3/7/94	79.3	N/A	ND
M-1	5/17/94	79.2	N/A	ND
M-1	6/13/94	80.4	N/A	ND
M-1	9/7/94	80.9	N/A	ND
M-1	12/15/94	79.8	N/A	ND
M-1	2/9/95	78.7	N/A	ND
M-1	5/8/95	79.0	N/A	ND
M-1	8/25/95	80.4	N/A	ND

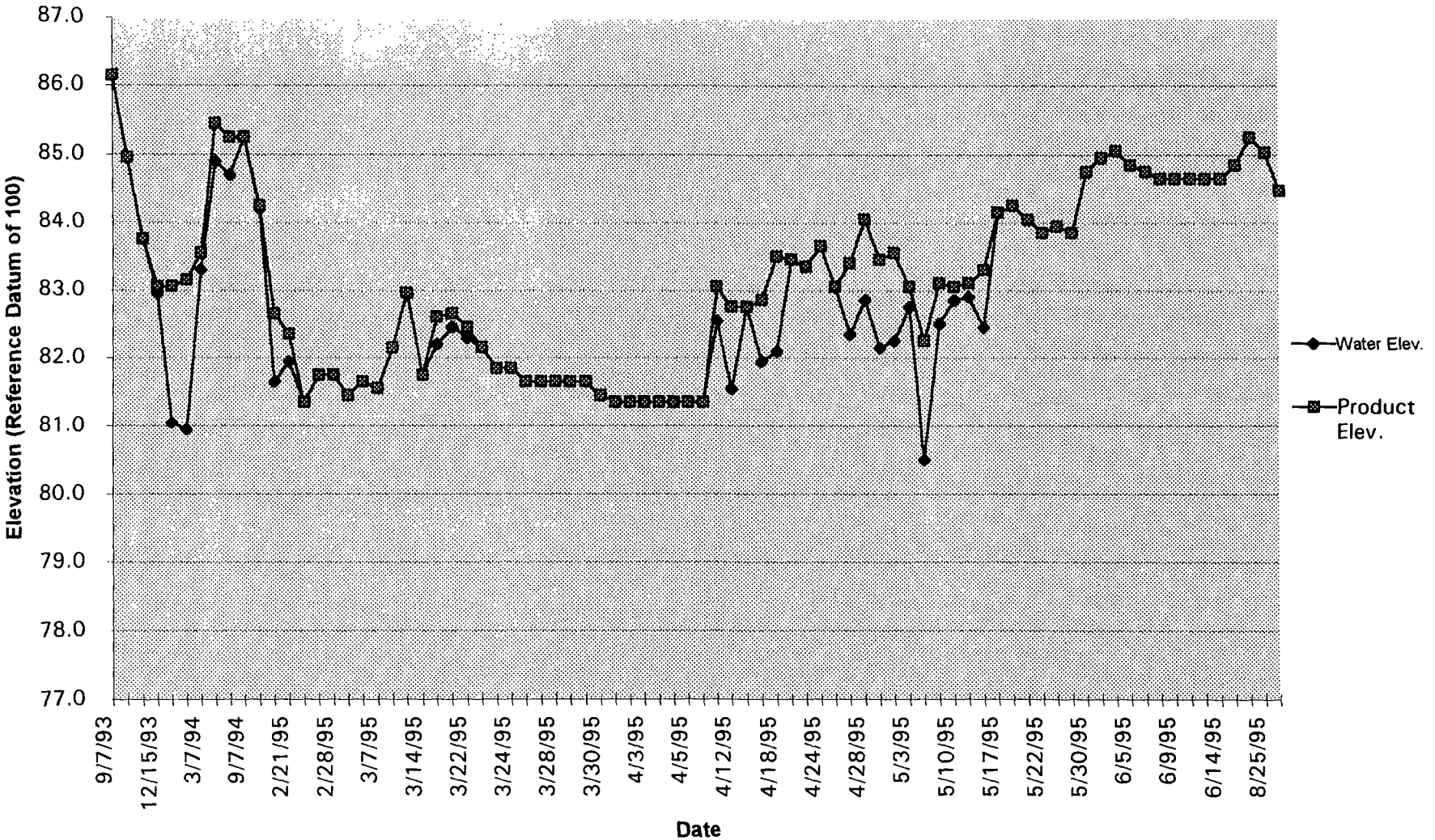
Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
M-1	11/2/95	79.5	N/A	ND
M-2	9/8/93	82.9	N/A	ND
M-2	10/5/93	81.4	N/A	ND
M-2	11/11/93	80.5	N/A	ND
M-2	12/16/93	79.9	N/A	ND
M-2	1/13/94	79.3	N/A	ND
M-2	2/10/94	79.5	N/A	ND
M-2	3/7/94	80.5	N/A	ND
M-2	5/17/94	81.7	N/A	ND
M-2	6/13/94	81.6	N/A	ND
M-2	9/7/94	82.2	N/A	ND
M-2	12/15/94	81.0	N/A	ND
M-2	2/9/95	79.9	N/A	ND
M-2	5/5/95	80.4	N/A	ND
M-2	8/25/95	81.7	N/A	ND
M-2	11/2/95	81.4	N/A	ND
M-3	9/8/93	83.5	N/A	ND
M-3	10/5/93	82.5	N/A	ND
M-3	11/11/93	81.7	N/A	ND
M-3	12/16/93	80.9	N/A	ND
M-3	1/13/94	80.2	N/A	ND
M-3	2/10/94	81.2	N/A	ND
M-3	3/7/94	81.9	N/A	ND
M-3	5/17/94	82.9	N/A	ND
M-3	6/13/94	83.1	N/A	ND
M-3	9/7/94	84.2	N/A	ND
M-3	12/15/94	82.3	N/A	ND
M-3	2/9/95	80.6	N/A	ND
M-3	5/8/95	81.2	N/A	ND
M-3	8/25/95	83.3	N/A	ND
M-3	11/2/95	82.9	N/A	ND
M-4	9/8/93	85.4	N/A	ND
M-4	10/5/93	84.2	N/A	ND
M-4	11/11/93	83.5	N/A	ND
M-4	12/16/93	82.6	N/A	ND
M-4	1/13/94	82.4	N/A	ND
M-4	2/10/94	82.9	N/A	ND
M-4	3/7/94	83.1	N/A	ND
M-4	5/17/94	84.7	N/A	ND
M-4	6/13/94	84.9	N/A	ND
M-4	9/7/94	85.8	N/A	ND
M-4	12/15/94	84.0	N/A	ND

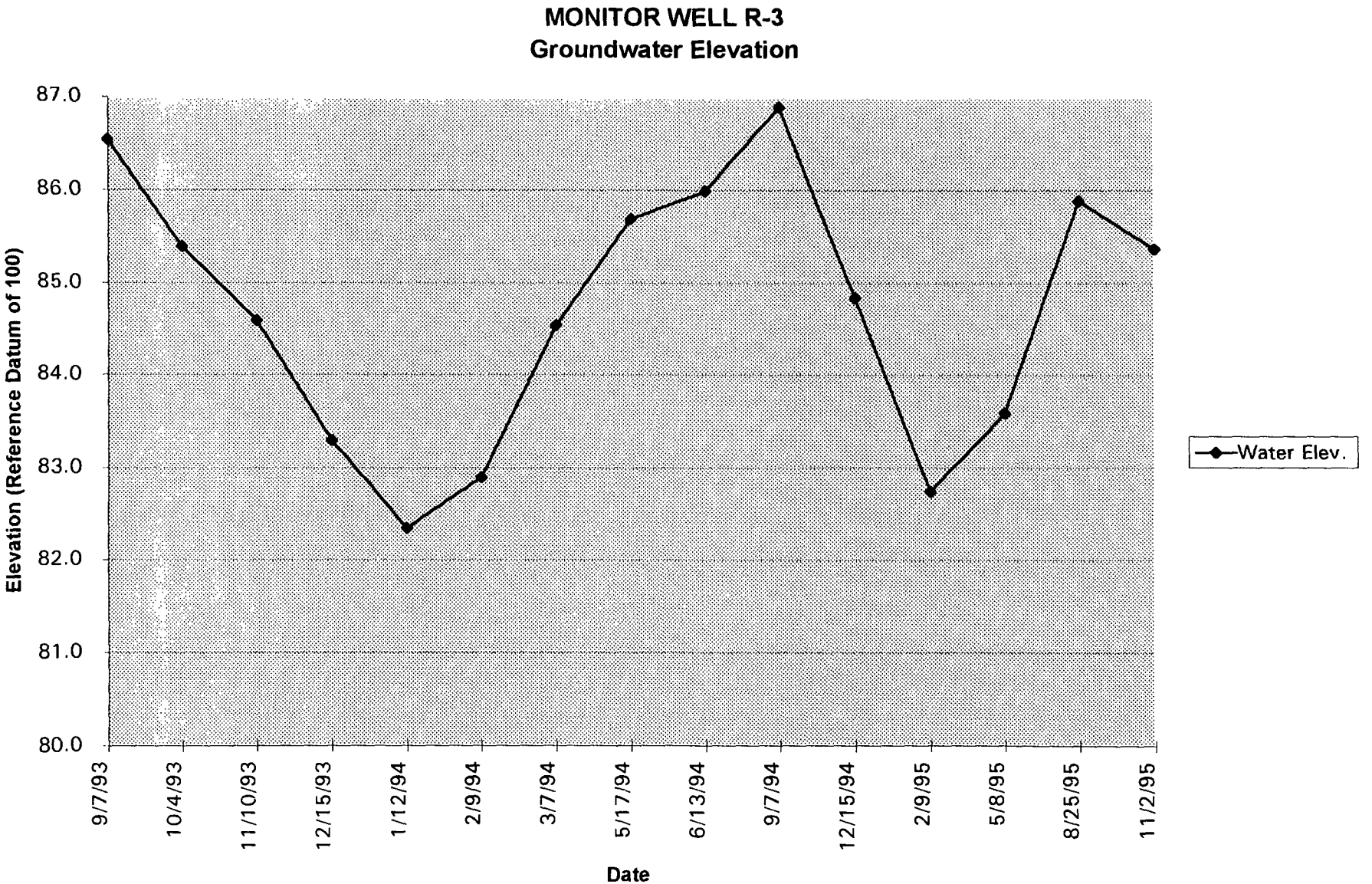
Well Number	Date	Water Elev.	Product Elev.	Floating Product Inches
M-4	2/9/95	82.5	N/A	ND
M-4	5/8/95	83.1	N/A	ND
M-4	8/25/95	85.0	N/A	ND
M-4	11/2/95	84.6	N/A	ND
M-5	9/8/93	83.3	N/A	ND
M-5	10/5/93	82.1	N/A	ND
M-5	11/11/93	81.1	N/A	ND
M-5	12/16/93	80.3	N/A	ND
M-5	1/13/94	79.6	N/A	ND
M-5	2/10/94	80.0	N/A	ND
M-5	3/7/94	81.2	N/A	ND
M-5	5/17/94	82.3	N/A	ND
M-5	6/13/94	82.4	N/A	ND
M-5	9/7/94	83.4	N/A	ND
M-5	12/15/94	81.6	N/A	ND
M-5	2/9/95	80.1	N/A	ND
M-5	5/8/95	80.7	N/A	ND
M-5	8/25/95	82.6	N/A	ND
M-5	11/2/95	82.2	N/A	ND

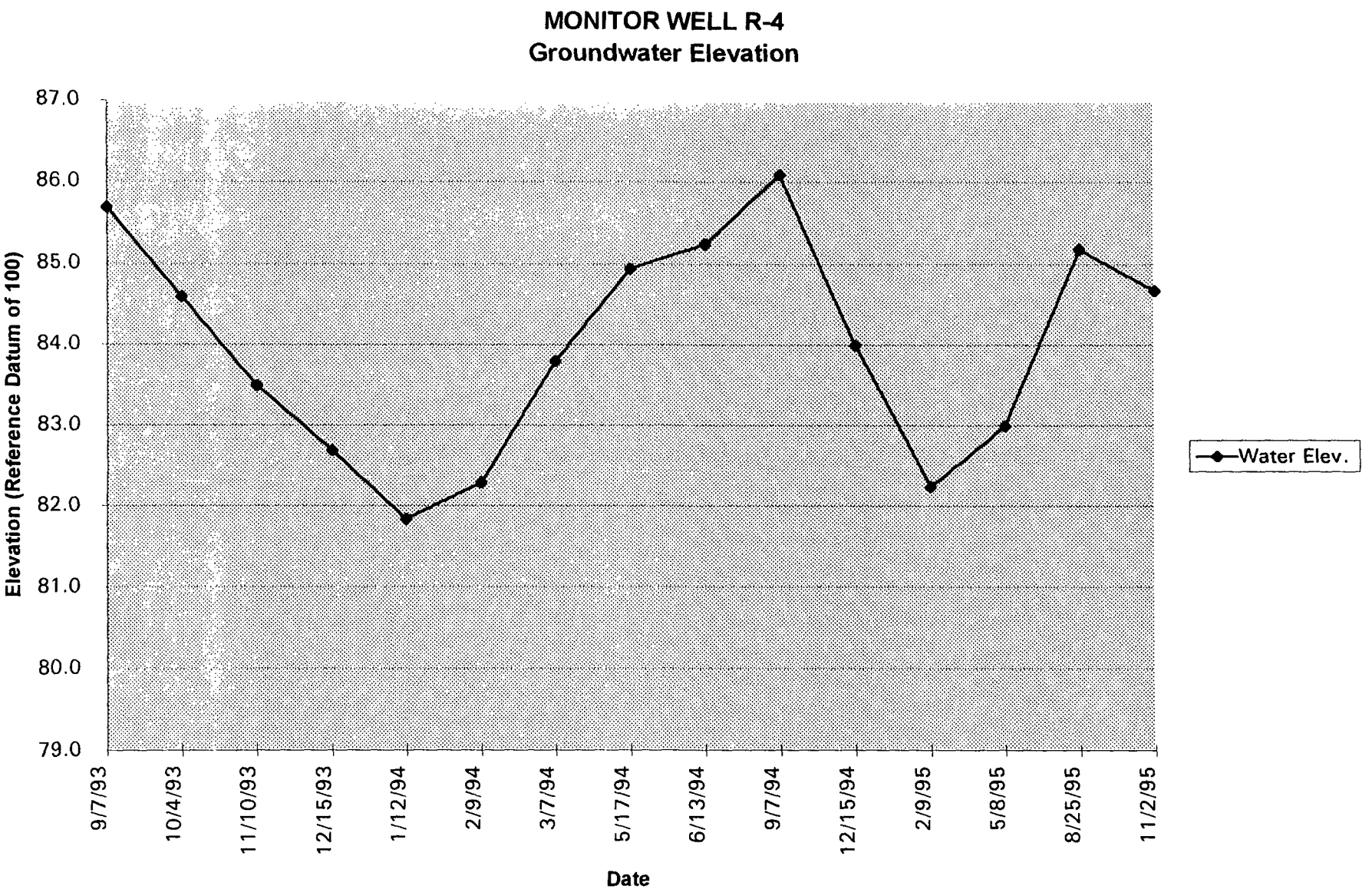
MONITOR WELL R-1
Product Elevation vs. Groundwater Elevation



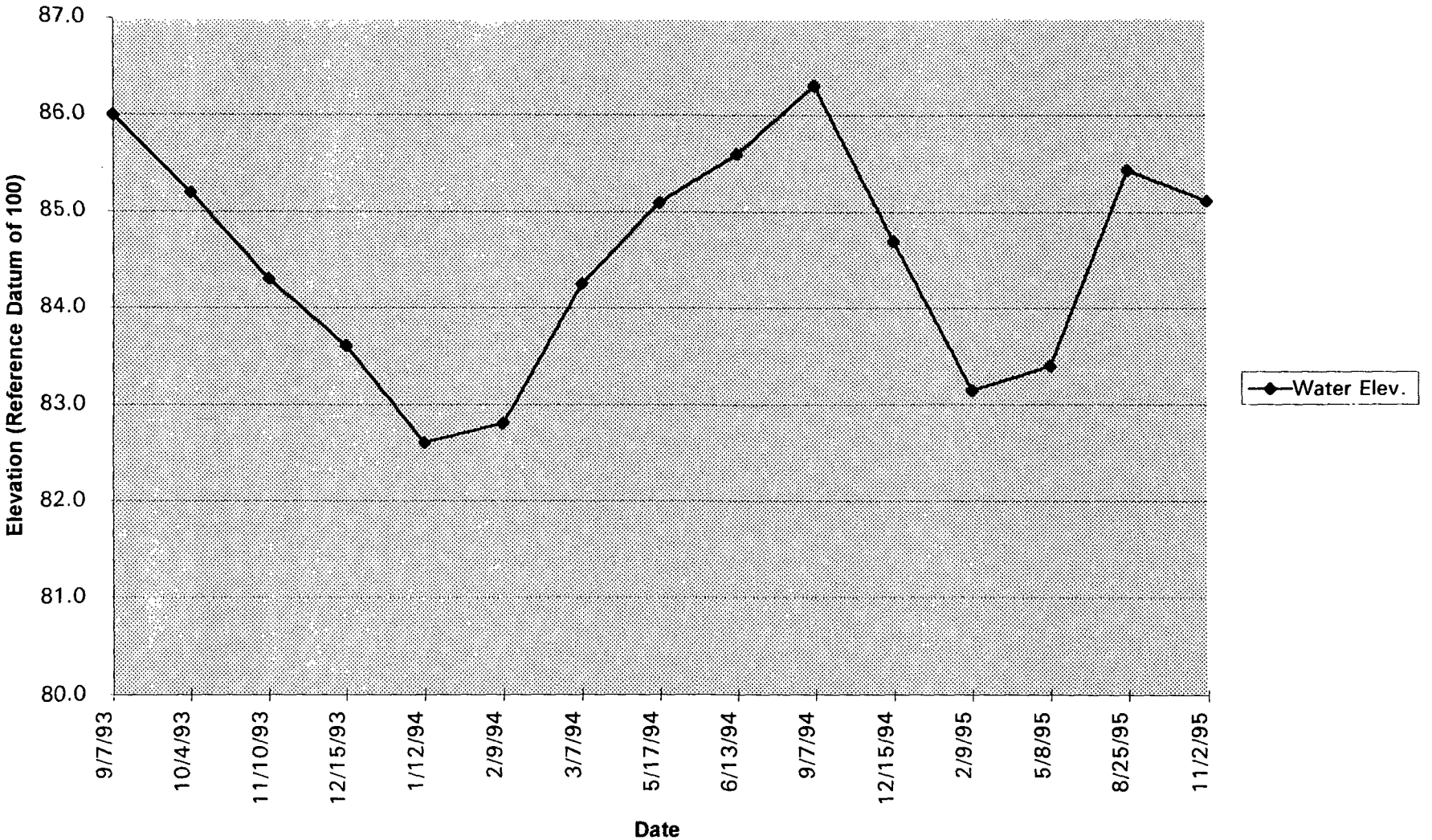
MONITOR WELL R-2
Product Elevation vs. Groundwater Elevation

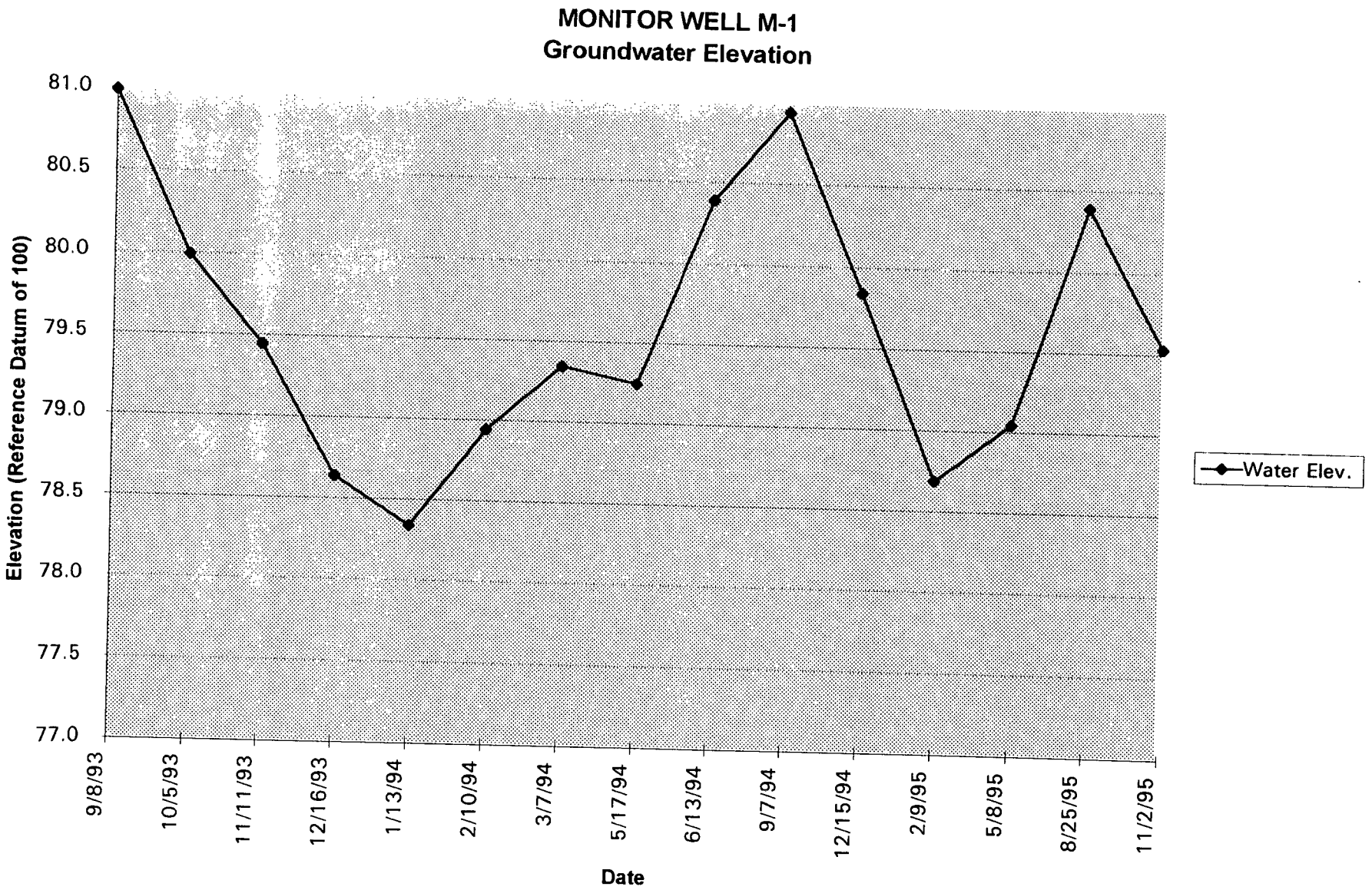


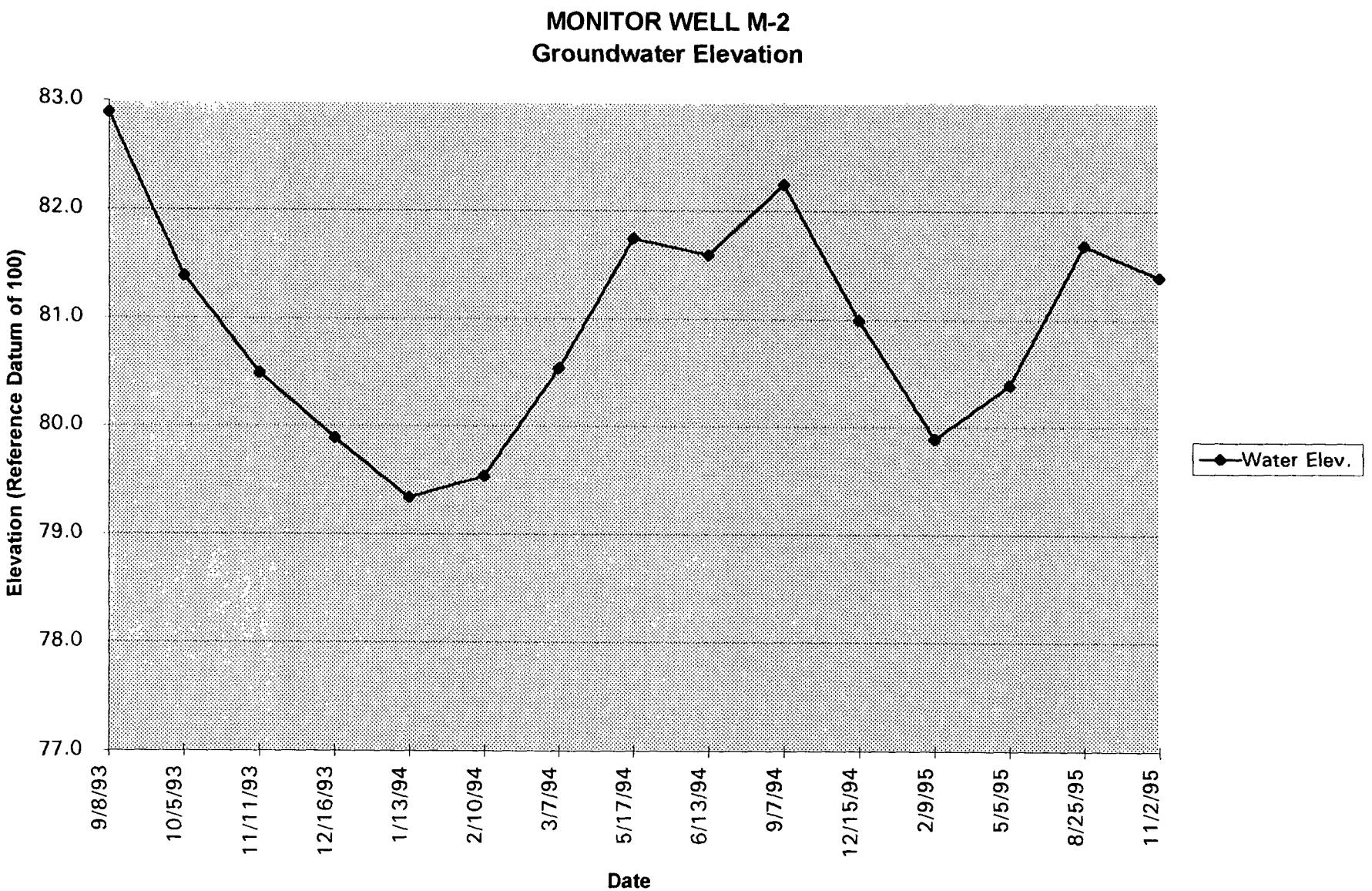

MONITOR WELL R-3
Groundwater Elevation
Elevation (Reference Datum of 100)
87.0
86.0
85.0
84.0
83.0
82.0
81.0
80.0
9/7/93
10/4/93
11/10/93
12/15/93
1/12/94
2/9/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/8/95
8/25/95
11/2/95
Date
Water Elev.

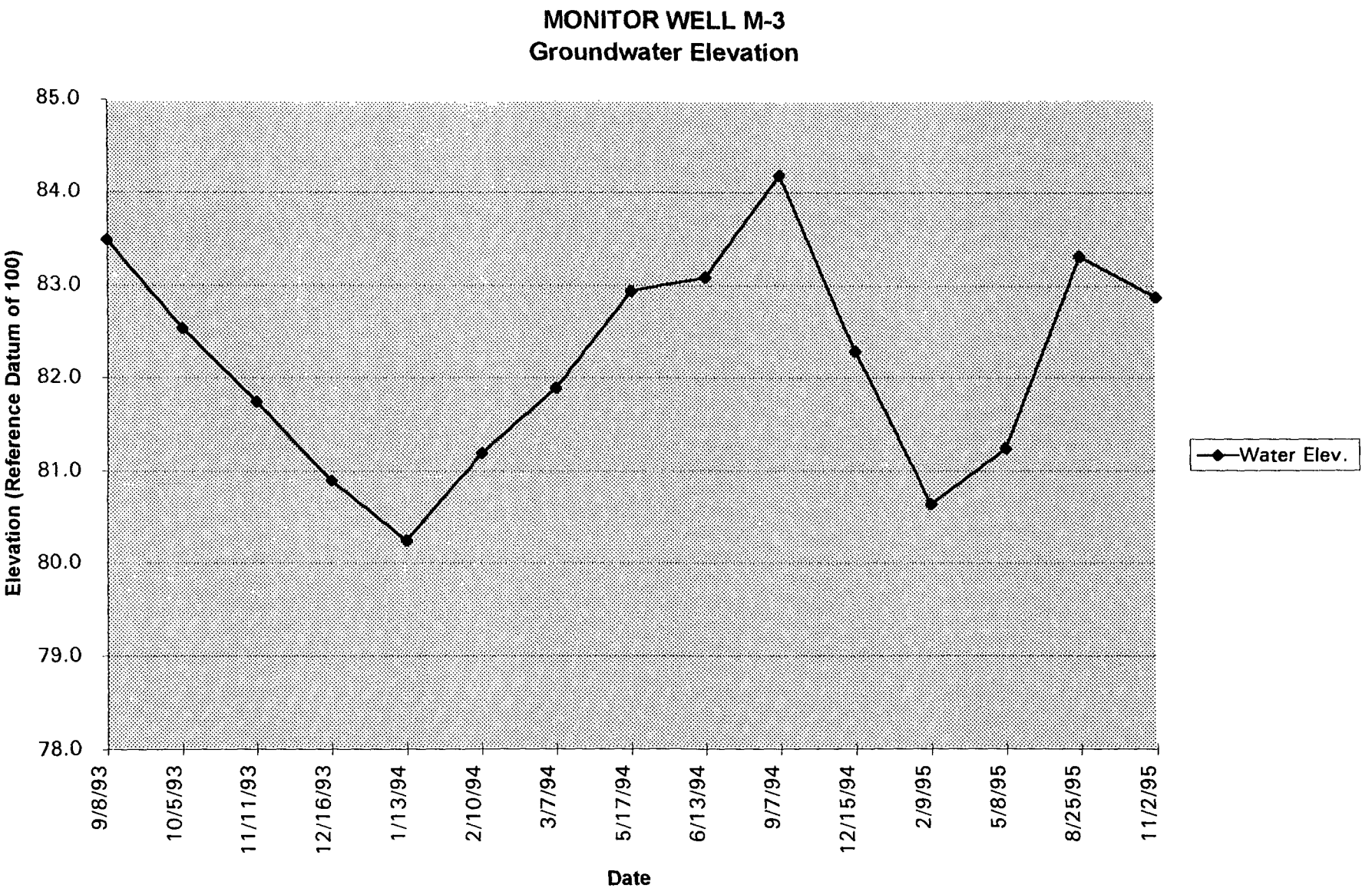

MONITOR WELL R-4
Groundwater Elevation
Elevation (Reference Datum of 100)
87.0
86.0
85.0
84.0
83.0
82.0
81.0
80.0
79.0
9/7/93
10/4/93
11/10/93
12/15/93
1/12/94
2/9/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/8/95
8/25/95
11/2/95
Date
Water Elev.

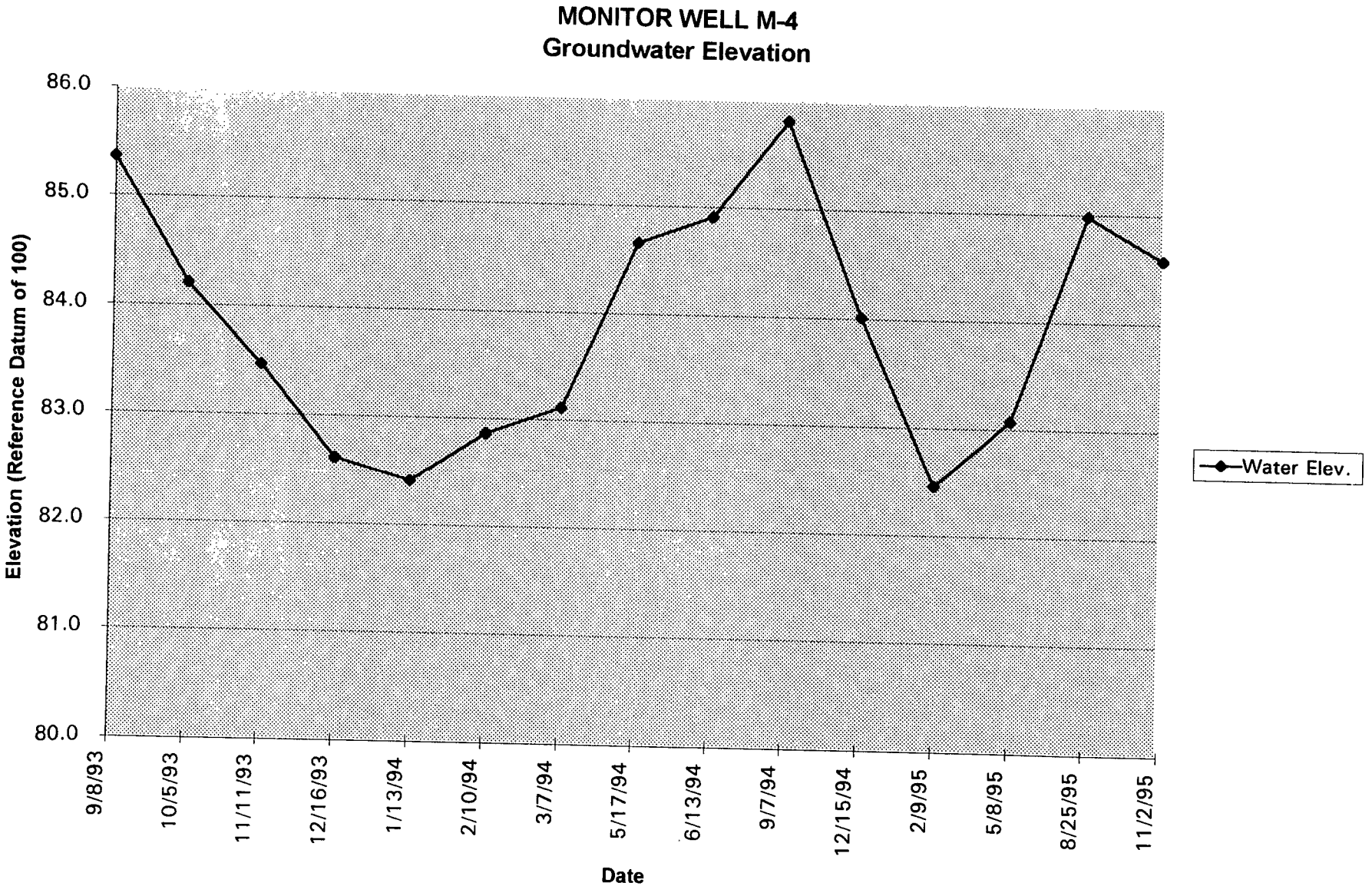
MONITOR WELL R-5

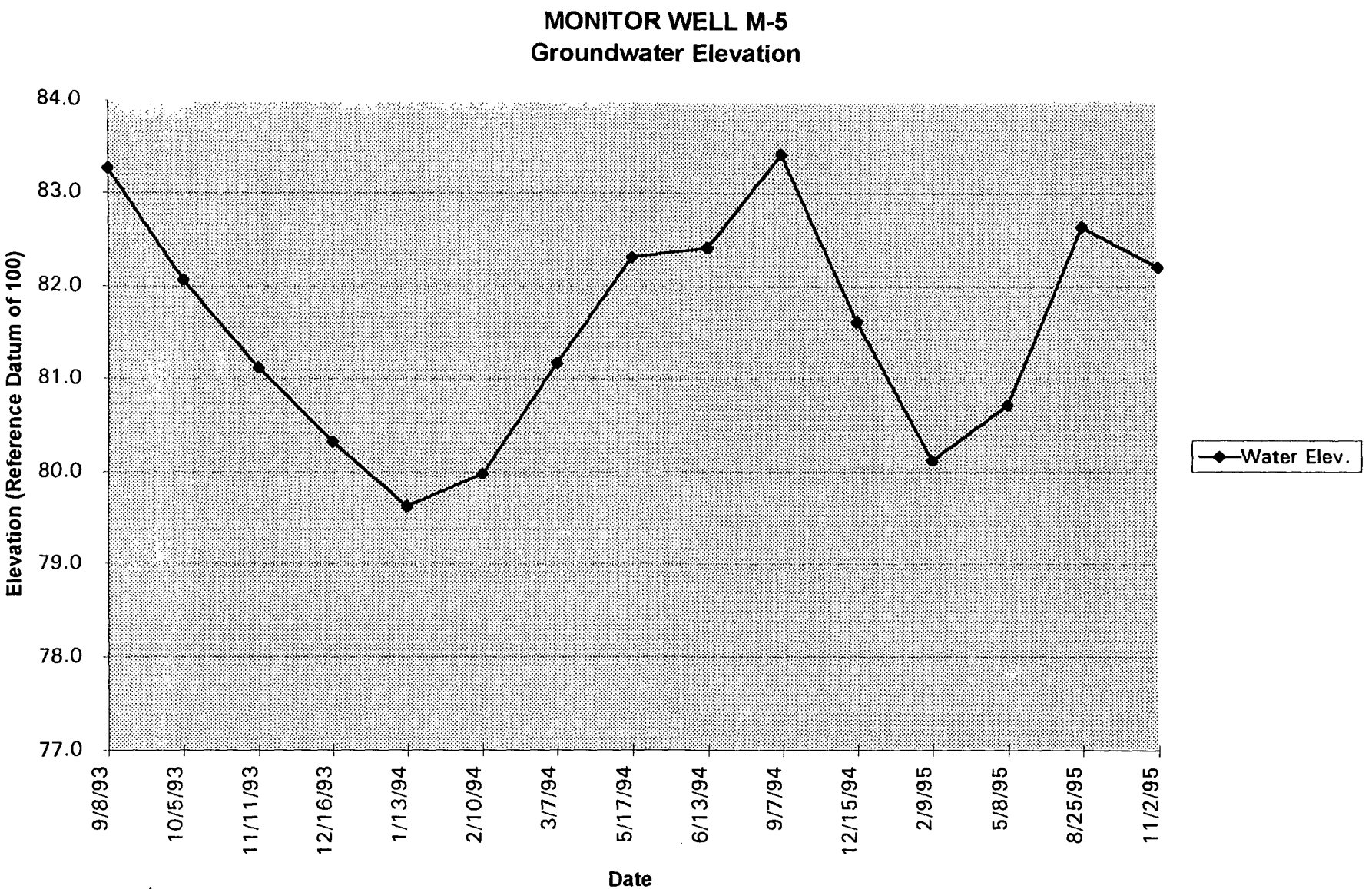


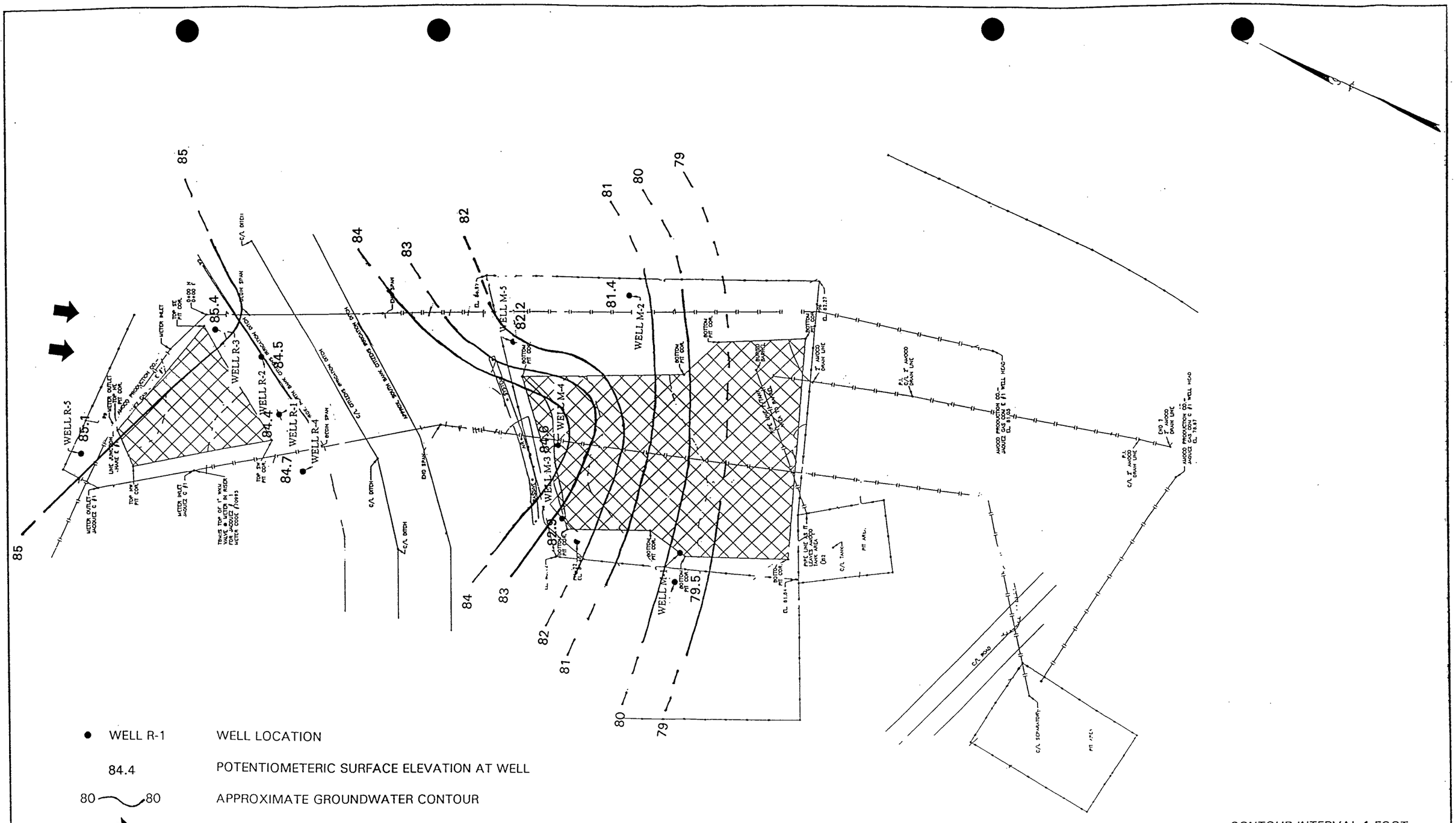

MONITOR WELL M-1
Groundwater Elevation
Elevation (Reference Datum of 100)
81.0
80.5
80.0
79.5
79.0
78.5
78.0
77.5
77.0
9/8/93
10/5/93
11/11/93
12/16/93
1/13/94
2/10/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/8/95
8/25/95
11/2/95
Date
Water Elev.


MONITOR WELL M-2
Groundwater Elevation
Elevation (Reference Datum of 100)
83.0
82.0
81.0
80.0
79.0
78.0
77.0
9/8/93
10/5/93
11/11/93
12/16/93
1/13/94
2/10/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/5/95
8/25/95
11/2/95
Date
Water Elev.


MONITOR WELL M-3
Groundwater Elevation
85.0
84.0
83.0
82.0
81.0
80.0
79.0
78.0
Elevation (Reference Datum of 100)
9/8/93
10/5/93
11/11/93
12/16/93
1/13/94
2/10/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/8/95
8/25/95
11/2/95
Date
Water Elev.


MONITOR WELL M-4
Groundwater Elevation
Elevation (Reference Datum of 100)
86.0
85.0
84.0
83.0
82.0
81.0
80.0
9/8/93
10/5/93
11/11/93
12/16/93
1/13/94
2/10/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/8/95
8/25/95
11/2/95
Date
Water Elev.


MONITOR WELL M-5
Groundwater Elevation
Elevation (Reference Datum of 100)
84.0
83.0
82.0
81.0
80.0
79.0
78.0
77.0
9/8/93
10/5/93
11/11/93
12/16/93
1/13/94
2/10/94
3/7/94
5/17/94
6/13/94
9/7/94
12/15/94
2/9/95
5/8/95
8/25/95
11/2/95
Date
Water Elev.



- ● WELL R-1 — WELL LOCATION
- 84.4 — POTENTIOMETERIC SURFACE ELEVATION AT WELL
- 80 ~ 80 — APPROXIMATE GROUNDWATER CONTOUR
- ➡ — GROUNDWATER FLOW DIRECTION

CONTOUR INTERVAL 1 FOOT

Nov. 1995

EIPaso NATURAL GAS COMPANY

WATER LEVEL CONTOUR MAP
CONTOUR INTERVAL ONE FOOT
JACQUEZ GAS COM E #1 & C #1 WELLS

SE/4 SECTION 6, T-29-N, R-9-W, N.M.P.M.