

3R - 194

REPORTS

DATE:

3/1998

JAQUEZ COM. C #1 AND JAQUEZ COM. E #1
Annual Report for Soil and Groundwater Remediation

March 1998

RECEIVED

JUN 02 1998

Environmental Bureau
Oil Conservation Division

Prepared For

**EL PASO FIELD SERVICES
COMPANY, FARMINGTON,
NEW MEXICO**

Project 17444



**4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262**

TABLE OF CONTENTS

1. INTRODUCTION.....	1
2. 1997 ACTIVITIES	2
2.1 BELT SKIMMER INSTALLATION AND PRODUCT REMOVAL.....	2
2.2 TEMPORARY MONITORING WELL INSTALLATION	3
2.3 QUARTERLY SAMPLING.....	4
2.4 OXYGENATE SOCKS.....	4
3. CONCLUSIONS	5
4. RECOMMENDATIONS	5

LIST OF TABLES

TABLE 1 - PRODUCT RECOVERY DATA

TABLE 2 - SUMMARY OF BTEX RESULTS

LIST OF FIGURES

FIGURE 1 - SITE MAP

FIGURE 2 - 1997 1ST QUARTER GROUNDWATER ELEVATION MAP

FIGURE 3 - 1997 2ND QUARTER GROUNDWATER ELEVATION MAP

FIGURE 4 - 1997 3RD QUARTER GROUNDWATER ELEVATION MAP

FIGURE 5 - 1997 4TH QUARTER GROUNDWATER ELEVATION MAP

FIGURE 6 - 1998 1ST QUARTER GROUNDWATER ELEVATION MAP

LIST OF APPENDICES

APPENDIX A - PRODUCT THICKNESS VS. TIME FOR R-1 AND R-2

APPENDIX B - GROUNDWATER ELEVATIONS VS. TIME

APPENDIX C - RECORD OF SUBSURFACE EXPLORATION FORMS AND TEMPORARY
MONITORING WELL INSTALLATION

APPENDIX D - BTEX FORMS AND PAH ANALYTICAL LAB REPORTS FOR THE CURRENT
PERIOD

1. INTRODUCTION

At the request of El Paso Field Services Company (EPFS), Philip Services Corporation (Philip) has prepared the following annual report and recommendations for soil and groundwater remediation at the Jaquez Com. C #1 and Jaquez Com. E #1 meter sites.

The Jaquez Com. C #1 and Jaquez Com. E #1 meter sites are currently owned and operated by EPFS. The meter sites are located in Section 6, Township 29N, Range 9W, in San Juan County, New Mexico, near Blanco, New Mexico. The two meter stations are located within 40 feet of one another on the same site location. Past practices included discharge of pipeline liquids into earthen pit(s) at the site. Listed below is a brief description of activities at the site:

- Late 1992 - Landowner expressed concern regarding potential hydrocarbon contamination in a garden area near the meter site location.
- March 1993 - Comprehensive soil and groundwater investigation performed on meter site location and nearby garden area.
- June 1993 - EPNG submits a remedial plan to NMOCD.
- July 1993 - NMOCD approves the remedial plan.
- August 1993 - Remediation activities initiated.
- September 1993 - Remediation activities completed.
- September 1993 - Monitoring wells R-1 through R-5 and M-1 through M-5 were installed north and south of Citizen's Ditch. Initial sampling for benzene, toluene, ethylbenzene, and xylene (BTEX) indicated monitoring wells R-1, R-2, R-4, M-3, and M-4 were above New Mexico Water Quality Control Commission (NMWQCC) standards. Monitoring wells at the site were initially sampled monthly and are now sampled quarterly.
- October 1993 to October 1996 - Floating product was observed in monitor wells R-1 and R-2 during the months of seasonally low groundwater levels (i.e., January through May). Passive skimmer systems were installed to remove floating product during periods of product accumulation.
- November 1996 - A pumping test was initiated to determine if light non-aqueous phase liquids (LNAPL) could be removed during high seasonal groundwater by depressing the water table in and around R-1 and R-2.

- December 1996 - Philip injected approximately 500 gallons of urea nitrate in water into the passive vent system and installed magnesium peroxide socks in monitoring wells M-3 and M-4 to supply oxygen to enhance natural biodegradation of hydrocarbons in groundwater.
- January, 1997 - Philip installed a belt skimmer in R-2 to remove free phase hydrocarbons.
- February, 1997 - Philip installed a belt skimmer in R-1 to remove free phase hydrocarbons.
- November, 1997 - Philip installed two temporary monitoring wells inside the excavated area north of R-1 to determine if free phase hydrocarbons could be recovered during high groundwater season.

2. 1997 ACTIVITIES

In 1997 activities included the following:

- Belt skimming systems were installed in recovery wells R-1 and R-2, and product recovery was initiated.
- Two temporary monitoring wells were installed in the original excavation north of R-1 to determine if free phase hydrocarbons could be recovered during the high groundwater season.
- Quarterly groundwater sampling in monitoring wells which were not producing free phase hydrocarbons.
- Continued use of ORC[®] magnesium peroxide socks in monitoring wells south of Citizen's Ditch.

2.1 Belt Skimmer Installation and Product Removal

The belt skimming system installed in R-1 and R-2 is housed in a standard lockable meter house and consists of an intrinsically safe electric motor which turns a 7/8-inch hydrophobic urethane belt suspended in the well by a weighted pulley. With each revolution, hydrocarbons are collected on the belt, brought to the surface, and then removed by specially designed wiper blades. The hydrocarbons are then deposited into the unit's collection box, where they drain by gravity into a 55-gallon drum. The drum is fitted with a high-level control switch designed to shut the system off when the drum is full. The drum and control switch are housed in a secondary containment system to contain any potential spills. Once a week, a representative visits the site and checks each system for proper operation, product, and water levels in the recovery wells and surrounding monitoring wells. This information is documented in a project-specific field

notebook. The locations of recovery wells R-1 and R-2 as well as other site features are presented in Figure 1.

On February 14, 1997, the belt skimming system in R-2 was installed and product removal initiated. Product removal continued sporadically until May 28, 1997 when the skimmer was shut down for the season. From February 14, 1997 to May 28, 1997, approximately 11.48 gallons of free phase hydrocarbons were removed from R-2. On January 14, 1998, 1.91 feet of free phase hydrocarbons had returned to recovery well R-2 and product removal was again initiated. Approximately 1.53 gallons of product and 1.91 gallons of water were removed from R-2 in the first week of operation and free phase hydrocarbons have not returned since. Approximately 13.01 gallons of free phase hydrocarbons have been recovered from R-2 since installing the belt skimming system.

On April 4, 1997, free phase hydrocarbon removal was initiated in recovery well R-1 using the belt skimming system. Product removal continued until June 27, 1997, when product disappeared from the well for the season. From April 4, 1997 to June 27, 1997, approximately 99.92 gallons of free phase hydrocarbons were recovered from recovery well R-1. On January 14, 1998, 2.08 feet of free phase hydrocarbons had returned to R-1 and product removal was reinitiated. From January 14, 1998 to March 4, 1998, approximately 99.04 gallons of free phase hydrocarbons were recovered from R-1. Total free phase hydrocarbons removed from R-1 since skimmer installation is approximately 198.99 gallons. All weekly product thickness, product recovery information and groundwater elevations are presented in Table 1. Graphic displays of product thickness vs. time for R-1 and R-2 is presented in Appendix A. Graphic displays of product elevations and groundwater elevations vs. time are presented in Appendix B.

As in previous years, product accumulation decreased dramatically in the month of May. Product thickness reduction in R-1 appeared to be related more to seasonal fluctuations than to product removal. Also as in previous years, product returned to R-1 and R-2 in significant volumes in the month of January. Groundwater elevation maps showing quarterly changes in groundwater are included in Figures 2, 3, 4, 5 and 6.

2.2 Temporary Monitoring Well Installation

On November 4, 1997, two temporary monitoring wells were installed to test for the presence of free phase hydrocarbons in the original excavation area north of R-1.

The first boring was drilled approximately 10 feet north of R-1, which should have been inside the excavation area. Based on the soils encountered in the boring, it did not appear that it was, in fact, in the excavated area. No free phase hydrocarbons were noted in the temporary monitoring well at the time of installation.

The second boring was drilled approximately 10 feet north of the first boring. The upper 12 feet of the boring consisted of a clean, dry, clayey sand, which appeared to be backfill material. Impacted soil was noted below the backfill material. Water was encountered at approximately 13.5 feet, but no free phase hydrocarbons were noted in the temporary monitoring well after installation.

The temporary monitoring wells were checked periodically for the presence of free phase hydrocarbons for approximately 15 days after installation. As no free phase hydrocarbons were observed, on November 19, 1997 the wells were pulled and the boreholes grouted to the surface. The Record of Subsurface Exploration forms and Temporary Monitoring Well Installation forms are included in Appendix C.

2.3 Quarterly Sampling

BTEX samples are not collected from monitoring wells when LNAPL are present, which includes recovery wells R-1 and R-2. Currently, all other monitoring wells are sampled quarterly for BTEX, and annually for polynuclear aromatic hydrocarbons (PAH's). PAH samples were collected on February 19, 1997, and are presented in Appendix D with the BTEX laboratory reports.. In the period covered by this report, nitrate sampling has also taken place on a quarterly basis to monitor the effect of nutrients injected in the passive venting system on the south side of Citizen's Ditch. A summary of BTEX and nitrate analysis is included in Table 2, and the BTEX laboratory reports for the previous year are included in Appendix D.

2.4 Oxygenate Socks

On December 19, 1996, approximately 500 gallons of urea nitrate-water solution were injected into the passive vent system on the south side of Citizen's Ditch. The nutrient solution consisted of seven parts potable water to one part urea nitrate. The solution was mixed thoroughly in a 500-gallon poly tank and pumped directly into the vent stacks of the passive vent system. ORC[®] magnesium peroxide socks were then installed in monitoring wells M-3 and M-4 to supply oxygen to enhance natural biodegradation of hydrocarbons in groundwater.

The socks continue to be used in monitoring wells M-3 and M-4. The socks are removed 30 days prior to sample collection and are reinstalled after sampling is complete. Following nutrient injection, nitrate monitoring was initiated on a quarterly basis as discussed above. Nitrate analysis showed elevated nitrate levels in M-3 and M-4 for three quarters after injection. Nitrate levels have declined steadily and are now below detection limits in both M-3 and M-4.

3. CONCLUSIONS

Garden Area South of Citizen's Ditch

BTEX concentrations continue to decline in this area with the exception of M-4, which has shown a sporadic increase in benzene concentrations, usually during periods of seasonal low groundwater levels. Since the installation of the oxygenate socks and the injection of nutrients into the passive venting system, monitoring well M-3 has been below NMWQCC standards for BTEX in groundwater for four out of the last five quarters sampled.

Meter Site Location North of Citizen's Ditch

Free phase hydrocarbons continue to accumulate in R-1 and R-2 during periods of low groundwater. As in previous years, product accumulation decreases rapidly with the beginning of the irrigation season and increased flow in Citizen's Ditch. Approximately 198.97 gallons of free phase hydrocarbons have been removed from recovery well R-1 since the belt skimming system has been in place. Although significant amounts of free phase hydrocarbons continue to be removed from R-1, it appears that dissolved phase hydrocarbons are decreasing in R-3, which is directly down gradient of R-1. Last year, recovery well R-2 produced 11.48 gallons of product. This year only 1.53 gallons of product have been removed due to the absence of free phase hydrocarbons in R-2, indicating a significant reduction in free phase hydrocarbons in the area of R-2.

The drilling and installation of temporary monitoring wells showed that free phase hydrocarbons did not exist just inside the original excavation. However, the medium to coarse grained sands abundant in the smear zone inside the old excavation makes the potential use of vent sparge technology possible.

4. RECOMMENDATIONS

Based on the current site activities, Philip recommends the following:

- Continue removing free phase hydrocarbons from R-1 and R-2 whenever present.
- Re-inject the passive venting system south of Citizen's Ditch with urea nitrate and replace the existing ORC[®] magnesium peroxide socks with new socks in M-3 and M-4 to stimulate biodegradation.
- Install ORC[®] magnesium peroxide socks in R-3 and R-4 and begin sampling annually. Quarterly sampling in R-4 should resume when BTEX values have decreased significantly.
- Discontinue quarterly sampling of M-1, M-2, M-5, and R-5, and begin sampling these wells annually, since BTEX levels in these wells have remained below standards since sampling was initiated.
- Continue sampling monitoring wells M-3 and M-4 quarterly for BTEX and nitrates.

- Discontinue annual PAH sampling in wells M-1, M-2, M-3, M-5, R-3, and R-5. These wells have been consistently below standards for PAH's.
- Discontinue sampling recovery wells R-1 and R-2 entirely until free phase hydrocarbons have been removed.
- At the conclusion of the low groundwater season, evaluate the feasibility of using vent sparge technology to continue groundwater clean-up throughout the year.

Table 1 - Product Recovery Data

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-1	02/07/97	19.97	17.55	2.42	0.00	99.07	77.24	79.66	Prior to Skimmer Installation
R-1	02/19/98	20.16	17.68	2.48	0.00	99.07	77.05	79.53	Prior to Skimmer Installation
R-1	02/26/97	20.17	17.64	2.53	0.00	99.07	77.04	79.57	Prior to Skimmer Installation
R-1	03/05/97	20.18	17.83	2.35	0.00	99.07	77.03	79.38	Prior to Skimmer Installation
R-1	03/12/97	20.28	17.81	2.47	0.00	99.07	76.93	79.40	Prior to Skimmer Installation
R-1	03/17/97	20.61	18.22	2.39	0.00	99.07	76.60	78.99	Prior to Skimmer Installation
R-1	04/03/97	20.85	18.43	2.42	0.00	99.07	76.36	78.78	Prior to Skimmer Installation
R-1	04/04/97	20.81	18.43	2.38	0.00	99.07	76.40	78.78	Start up of skimmer
R-1	04/09/97	20.40	18.23	2.17	13.01	99.07	76.81	78.98	Increased timer to 24 hrs. 4/10/97
R-1	04/16/97	20.49	18.81	1.68	38.99	99.07	76.72	78.40	Will leave skimmer set to run 24 hours per day
R-1	04/23/97	20.25	18.70	1.55	62.90	99.07	76.96	78.51	Running 24 hours per day
R-1	05/01/97	17.56	17.53	0.03	86.81	99.07	79.65	79.68	Set Skimmer to run 12 hours per day
R-1	05/07/97	16.26	16.15	0.11	90.74	99.07	80.95	81.06	Still running 12 hours per day
R-1	05/13/97	16.14	16.13	0.01	93.80	99.07	81.07	81.08	Skimmer running before measurements taken
R-1	05/21/97	16.48	16.41	0.07	96.29	99.07	80.73	80.80	Running 12 hours per day
R-1	05/28/97	16.68	16.63	0.05	99.54	99.07	80.53	80.58	Running 12 hours per day
R-1	06/04/97	16.55	16.55	0.00	99.54	99.07	80.66	80.66	Shut system down
R-1	06/11/97	16.44	16.24	0.00	N/A	99.07	80.77	80.97	Restart system
R-1	06/18/97	16.57	16.57	0.00	99.92	99.07	80.64	80.64	Shut system down
R-1	06/27/97	16.38	16.35	0.03	N/A	99.07	80.83	80.86	Leave system shut down
R-1	07/02/97	16.25	16.22	0.03	N/A	99.07	80.96	80.99	Leave system shut down
R-1	07/09/97	15.69	15.66	0.03	N/A	99.07	81.52	81.55	Leave system shut down for the season
R-1	10/30/97	17.49	17.39	0.10	N/A	99.07	79.72	79.82	Temporary well installation
R-1	11/04/97	17.64	17.56	0.08	N/A	99.07	79.57	79.65	Temporary well installation
R-1	11/14/97	16.33	16.23	0.10	N/A	99.07	80.88	80.98	Temporary well installation
R-1	11/21/97	16.63	16.55	0.08	N/A	99.07	80.58	80.66	Temporary well installation
R-1	11/25/97	16.92	16.86	0.06	N/A	99.07	80.29	80.35	Temporary well installation
R-1	12/16/97	17.81	17.71	0.10	N/A	99.07	79.40	79.50	
R-1	01/14/98	19.79	17.71	2.08	N/A	99.07	77.42	79.50	Skimmer startup, running 24 hrs/day
R-1	01/21/98	19.73	17.97	1.76	105.47	99.07	77.48	79.24	Running 24 hrs

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-1	01/28/98	18.59	18.40	0.19	116.18	99.07	78.62	78.81	Adjust to run 12 hrs / Day
R-1	02/05/98	19.51	18.58	0.93	126.86	99.07	77.70	78.63	Adjust to run 24 hrs/ Day
R-1	02/11/98	19.15	18.73	0.42	148.48	99.07	78.06	78.48	Adjust to run 12 hrs/ Day, Ditch empty
R-1	02/19/98	19.98	18.82	1.16	164.35	99.07	77.23	78.39	Adjust to run 24 hrs/ Day, Ditch empty
R-1	02/25/98	19.25	19.19	0.06	185.77	99.07	77.96	78.02	Adjust to run 12 hrs/ Day, Ditch empty
R-1	03/04/98	19.99	19.24	0.75	198.98	99.07	77.22	77.97	Adjust to run 24 hrs/ Day, Ditch empty
R-1	03/11/98	19.52	19.32	0.20	207.97	99.07	77.69	77.89	Adjust to run 12 hrs/ Day, Ditch empty
R-1	03/18/98	19.94	19.54	0.40	224.24	99.07	77.27	77.67	Adjust to run 24 hrs/ Day, Ditch empty
R-1	03/25/98	19.08	19.03	0.05	248.16	99.07	78.13	78.18	Adjust to run 12 hrs/ day, Ditch empty
R-1	04/02/98	17.31	17.31	0.00	258.30	99.07	79.90	79.90	Shut skimmer down, Ditch running again
R-1	04/08/98	16.77	16.61	0.16	258.30	99.07	80.44	80.60	Adjust to run 4 hrs/ Day, Ditch running full
R-1	04/15/98	16.42	16.42	0.00	264.03	99.07	80.79	80.79	Shut skimmer down, Ditch running full
R-1	04/23/98	16.02	15.87	0.15	264.03	99.07	81.19	81.34	Adjust to run 4 hrs/ Day, Ditch running full
R-1	04/29/98	16.04	16.04	0.00	264.03	99.07	81.17	81.17	Shut system down, ditch running full
R-1	05/08/98	15.42	15.32	0.10	258.30	99.07	81.79	81.89	Leave system shut down, Ditch still running
R-2	02/07/97	18.66	16.52	2.14	0.00	98.05	77.49	79.63	
R-2	02/14/97	18.76	16.65	2.11	0.00	98.05	77.39	79.50	Start skimmer, running 12 hours/day
R-2	02/15/97	17.28	17.22	0.06	3.06	98.05	78.87	78.93	
R-2	02/18/97	17.33	17.14	0.19	4.78	98.05	78.82	79.01	Adjust to run 10 hours/day
R-2	02/26/97	17.31	17.20	0.11	7.46	98.05	78.84	78.95	
R-2	03/05/97	17.39	17.33	0.06	7.46	98.05	78.76	78.82	
R-2	03/12/97	17.35	17.34	0.01	9.95	98.05	78.80	78.81	
R-2	03/17/97	16.84	16.83	0.01	10.14	98.05	79.31	79.32	
R-2	04/03/97	18.00	18.00	0.00	10.71	98.05	78.15	78.15	No measurable product, shut down to recover
R-2	04/09/97	17.67	17.67	0.00	0.00	98.05	78.48	78.48	Will leave shut down until product returns
R-2	04/16/97	18.12	18.12	0.00	0.00	98.05	78.03	78.03	No measurable product
R-2	04/23/97	18.01	18.01	0.00	0.00	98.05	78.14	78.14	No measurable product
R-2	05/01/97	16.75	16.28	0.47	0.00	98.05	79.40	79.87	Reactivate Skimmer to run 10 hours/day
R-2	05/07/97	14.89	14.89	0.00	11.48	98.05	81.26	81.26	No measurable product. Shut system down

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-2	05/13/97	14.94	14.93	0.01	0.00	98.05	81.21	81.22	Will leave skimmer shut down
R-2	05/21/97	15.28	15.24	0.04	0.00	98.05	80.87	80.91	Reactivate skimmer to run 10 hours per day
R-2	05/28/97	15.48	15.48	0.00	39.57 (water)	98.05	80.67	80.67	No measurable product. Shut system down
R-2	06/04/97	15.37	15.37	0.00	N/A	98.05	80.78	80.78	Shut system down
R-2	06/11/97	15.12	15.11	0.01	N/A	98.05	81.03	81.04	Leave system shut down
R-2	06/18/97	15.41	15.37	0.04	N/A	98.05	80.74	80.78	Leave system shut down
R-2	06/27/97	15.18	15.18	0.00	N/A	98.05	80.97	80.97	Leave system shut down
R-2	07/02/97	15.08	15.06	0.02	N/A	98.05	81.07	81.09	Leave system shut down
R-2	07/09/97	14.45	14.45	0.00	N/A	98.05	81.70	81.70	Leave system shut down for the season
R-2	10/30/97	16.47	16.25	0.22	N/A	98.05	79.68	79.90	Temporary well installation
R-2	11/04/97	16.64	16.43	0.21	N/A	98.05	79.51	79.72	Temporary well installation
R-2	11/14/97	15.14	15.06	0.08	N/A	98.05	81.01	81.09	Temporary well installation
R-2	11/21/97	15.58	15.39	0.19	N/A	98.05	80.57	80.76	Temporary well installation
R-2	11/25/97	15.90	15.69	0.21	N/A	98.05	80.25	80.46	Temporary well installation
R-2	12/16/97	16.89	16.54	0.35	N/A	98.05	79.26	79.61	
R-2	01/14/98	18.58	16.67	1.91	N/A	98.05	77.57	79.48	Skimmer startup, running 12 hrs/day
R-2	01/21/98	17.30	17.30	0.00	14.92	98.05	78.85	78.85	No measurable product, shut down to recover
R-2	01/28/98	17.48	17.30	0.18	0.00	98.05	78.67	78.85	Leave system shut down
R-2	02/05/98	17.83	17.71	0.12	0.00	98.05	78.32	78.44	Leave system shut down
R-2	02/11/98	17.86	17.74	0.12	0.00	98.05	78.29	78.41	Leave system shut down, Ditch empty
R-2	02/19/98	18.13	18.02	0.11	0.00	98.05	78.02	78.13	Leave system shut down, Ditch empty
R-2	02/25/98	19.25	19.19	0.06	0.00	98.05	76.90	76.96	Leave system shut down, Ditch empty
R-2	03/04/98	18.48	18.31	0.17	0.00	98.05	77.67	77.84	Leave system shut down, Ditch empty
R-2	03/11/98	18.40	18.26	0.14	0.00	98.05	77.75	77.89	Leave system shut down, Ditch empty
R-2	03/18/98	18.07	17.99	0.08	0.00	98.05	78.08	78.16	Leave system shut down, Ditch empty
R-2	03/25/98	18.02	17.94	0.08	0.00	98.05	78.13	78.21	Leave system shut down, Ditch empty
R-2	04/02/98	16.28	15.92	0.36	0.00	98.05	79.87	80.23	Leave system shut down, Ditch running
R-2	04/08/98	15.64	15.30	0.34	0.00	98.05	80.51	80.85	Turn system on, running 4 hrs/ day, Ditch full
R-2	04/15/98	15.30	15.30	0.00	15.39	98.05	80.85	80.85	Shut system down, Ditch running full
R-2	04/23/98	14.70	14.70	0.00	15.39	98.05	81.45	81.45	Leave system shut down, Ditch running

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-2	04/29/98	14.83	14.83	0.00	15.39	98.05	81.32	81.32	Leave system shut down, Ditch running
R-2	05/08/98	14.13	14.13	0.00	15.39	98.05	82.02	82.02	Leave system shut down, Ditch running
R-3	02/19/98	16.29	N/A	N/A	N/A	99.29	83.00	N/A	
R-3	02/26/97	16.24	N/A	N/A	N/A	99.29	83.05	N/A	
R-3	03/05/97	16.36	N/A	N/A	N/A	99.29	82.93	N/A	
R-3	03/12/97	16.37	N/A	N/A	N/A	99.29	82.92	N/A	
R-3	03/17/97	16.81	N/A	N/A	N/A	99.29	82.48	N/A	
R-3	04/09/97	16.75	N/A	N/A	N/A	99.29	82.54	N/A	
R-3	04/16/97	17.22	N/A	N/A	N/A	99.29	82.07	N/A	
R-3	04/23/97	17.11	N/A	N/A	N/A	99.29	82.18	N/A	
R-3	05/01/97	15.43	N/A	N/A	N/A	99.29	83.86	N/A	
R-3	05/07/97	13.94	N/A	N/A	N/A	99.29	85.35	N/A	
R-3	05/13/97	13.96	N/A	N/A	N/A	99.29	85.33	N/A	
R-3	05/21/97	14.26	N/A	N/A	N/A	99.29	85.03	N/A	
R-3	05/28/97	14.48	N/A	N/A	N/A	99.29	84.81	N/A	
R-3	06/04/97	14.34	N/A	N/A	N/A	99.29	84.95	N/A	
R-3	06/11/97	14.13	N/A	N/A	N/A	99.29	85.16	N/A	
R-3	06/18/97	14.33	N/A	N/A	N/A	99.29	84.96	N/A	
R-3	06/27/97	14.17	N/A	N/A	N/A	99.29	85.12	N/A	
R-3	07/02/97	14.02	N/A	N/A	N/A	99.29	85.27	N/A	
R-3	07/09/97	14.02	N/A	N/A	N/A	99.29	85.27	N/A	
R-3	08/21/97	13.41	N/A	N/A	N/A	99.29	85.88	N/A	
R-3	11/10/97	14.87	N/A	N/A	N/A	99.29	84.42	N/A	
R-3	01/21/98	16.34	N/A	N/A	N/A	99.29	82.95	N/A	
R-3	01/28/98	16.38	N/A	N/A	N/A	99.29	82.91	N/A	
R-3	02/05/98	16.20	N/A	N/A	N/A	99.29	83.09	N/A	
R-3	02/11/98	16.84	N/A	N/A	N/A	99.29	82.45	N/A	Ditch empty
R-3	02/19/98	17.16	N/A	N/A	N/A	99.29	82.13	N/A	Ditch empty
R-3	02/25/98	17.26	N/A	N/A	N/A	99.29	82.03	N/A	Ditch empty

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-3	03/04/98	17.46	N/A	N/A	N/A	99.29	81.83	N/A	Ditch empty
R-3	03/11/98	17.38	N/A	N/A	N/A	99.29	81.91	N/A	Ditch empty
R-3	03/18/98	17.06	N/A	N/A	N/A	99.29	82.23	N/A	Ditch empty
R-3	03/25/98	17.02	N/A	N/A	N/A	99.29	82.27	N/A	Ditch empty
R-3	04/02/98	15.06	N/A	N/A	N/A	99.29	84.23	N/A	Ditch running
R-3	04/08/98	14.42	N/A	N/A	N/A	99.29	84.87	N/A	Ditch running
R-3	04/15/98	14.19	N/A	N/A	N/A	99.29	85.10	N/A	Ditch running
R-3	04/23/98	13.66	N/A	N/A	N/A	99.29	85.63	N/A	Ditch running
R-3	04/29/98	13.81	N/A	N/A	N/A	99.29	85.48	N/A	Ditch running
R-3	05/08/98	13.00	N/A	N/A	N/A	99.29	86.29	N/A	Ditch running
R-4	02/19/97	15.81	N/A	N/A	N/A	98.29	82.48	N/A	
R-4	02/26/97	15.75	N/A	N/A	N/A	98.29	82.54	N/A	
R-4	03/05/97	15.90	N/A	N/A	N/A	98.29	82.39	N/A	
R-4	03/12/97	15.89	N/A	N/A	N/A	98.29	82.40	N/A	
R-4	03/17/97	16.03	N/A	N/A	N/A	98.29	82.26	N/A	
R-4	04/09/97	16.24	N/A	N/A	N/A	98.29	82.05	N/A	
R-4	04/16/97	16.69	N/A	N/A	N/A	98.29	81.60	N/A	
R-4	04/23/97	16.56	N/A	N/A	N/A	98.29	81.73	N/A	
R-4	05/01/97	15.04	N/A	N/A	N/A	98.29	83.25	N/A	
R-4	05/13/97	13.63	N/A	N/A	N/A	98.29	84.66	N/A	
R-4	05/21/97	13.89	N/A	N/A	N/A	98.29	84.40	N/A	
R-4	05/28/97	14.09	N/A	N/A	N/A	98.29	84.20	N/A	
R-4	06/04/97	13.99	N/A	N/A	N/A	98.29	84.30	N/A	
R-4	06/11/97	13.73	N/A	N/A	N/A	98.29	84.56	N/A	
R-4	06/18/97	13.95	N/A	N/A	N/A	98.29	84.34	N/A	
R-4	06/27/97	13.85	N/A	N/A	N/A	98.29	84.44	N/A	
R-4	07/02/97	13.68	N/A	N/A	N/A	98.29	84.61	N/A	
R-4	07/09/97	13.16	N/A	N/A	N/A	98.29	85.13	N/A	
R-4	08/21/97	13.12	N/A	N/A	N/A	98.29	85.17	N/A	

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-4	11/10/97	14.55	N/A	N/A	N/A	98.29	83.74	N/A	
R-4	01/21/98	15.84	N/A	N/A	N/A	98.29	82.45	N/A	
R-4	01/28/98	15.83	N/A	N/A	N/A	98.29	82.46	N/A	
R-4	02/05/98	16.24	N/A	N/A	N/A	98.29	82.05	N/A	
R-4	02/11/98	16.28	N/A	N/A	N/A	98.29	82.01	N/A	Ditch empty
R-4	02/19/98	16.58	N/A	N/A	N/A	98.29	81.71	N/A	Ditch empty
R-4	02/25/98	16.68	N/A	N/A	N/A	98.29	81.61	N/A	Ditch empty
R-4	03/04/98	16.88	N/A	N/A	N/A	98.29	81.41	N/A	Ditch empty
R-4	03/11/98	16.86	N/A	N/A	N/A	98.29	81.43	N/A	Ditch empty
R-4	03/18/98	16.59	N/A	N/A	N/A	98.29	81.70	N/A	Ditch empty
R-4	03/25/98	16.52	N/A	N/A	N/A	98.29	81.77	N/A	Ditch empty
R-4	04/02/98	14.80	N/A	N/A	N/A	98.29	83.49	N/A	Ditch running
R-4	04/08/98	14.19	N/A	N/A	N/A	98.29	84.10	N/A	Ditch running
R-4	04/15/98	13.94	N/A	N/A	N/A	98.29	84.35	N/A	Ditch running
R-4	04/23/98	13.45	N/A	N/A	N/A	98.29	84.84	N/A	Ditch running
R-4	04/29/98	13.53	N/A	N/A	N/A	98.29	84.76	N/A	Ditch running
R-4	05/08/98	13.00	N/A	N/A	N/A	98.29	85.29	N/A	Ditch running
R-5	02/19/97	18.48	N/A	N/A	N/A	101.50	83.02	N/A	
R-5	02/26/97	18.33	N/A	N/A	N/A	101.50	83.17	N/A	
R-5	03/05/97	18.71	N/A	N/A	N/A	101.50	82.79	N/A	
R-5	03/12/97	18.50	N/A	N/A	N/A	101.50	83.00	N/A	
R-5	03/17/97	19.02	N/A	N/A	N/A	101.50	82.48	N/A	
R-5	04/09/97	18.92	N/A	N/A	N/A	101.50	82.58	N/A	
R-5	04/16/97	19.40	N/A	N/A	N/A	101.50	82.10	N/A	
R-5	04/23/97	19.20	N/A	N/A	N/A	101.50	82.30	N/A	
R-5	05/01/97	18.28	N/A	N/A	N/A	101.50	83.22	N/A	
R-5	05/07/97	17.46	N/A	N/A	N/A	101.50	84.04	N/A	
R-5	05/13/97	17.18	N/A	N/A	N/A	101.50	84.32	N/A	
R-5	05/20/97	17.25	N/A	N/A	N/A	101.50	84.25	N/A	

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
R-5	05/28/97	17.35	N/A	N/A	N/A	101.50	84.15	N/A	
R-5	06/04/97	17.26	N/A	N/A	N/A	101.50	84.24	N/A	
R-5	06/11/97	17.01	N/A	N/A	N/A	101.50	84.49	N/A	
R-5	06/18/97	17.09	N/A	N/A	N/A	101.50	84.41	N/A	
R-5	06/27/97	17.13	N/A	N/A	N/A	101.50	84.37	N/A	
R-5	07/02/97	16.87	N/A	N/A	N/A	101.50	84.63	N/A	
R-5	07/09/97	16.64	N/A	N/A	N/A	101.50	84.86	N/A	
R-5	08/21/97	16.50	N/A	N/A	N/A	101.50	85.00	N/A	
R-5	11/10/97	17.48	N/A	N/A	N/A	101.50	84.02	N/A	
R-5	01/21/98	18.46	N/A	N/A	N/A	101.50	83.04	N/A	
R-5	01/28/98	18.48	N/A	N/A	N/A	101.50	83.02	N/A	
R-5	02/05/98	18.92	N/A	N/A	N/A	101.50	82.58	N/A	
R-5	02/11/98	18.91	N/A	N/A	N/A	101.50	82.59	N/A	Ditch empty
R-5	02/19/98	19.31	N/A	N/A	N/A	101.50	82.19	N/A	Ditch empty
R-5	02/25/98	19.31	N/A	N/A	N/A	101.50	82.19	N/A	Ditch empty
R-5	03/04/98	19.51	N/A	N/A	N/A	101.50	81.99	N/A	Ditch empty
R-5	03/11/98	19.46	N/A	N/A	N/A	101.50	82.04	N/A	Ditch empty
R-5	03/18/98	19.21	N/A	N/A	N/A	101.50	82.29	N/A	Ditch empty
R-5	03/25/98	19.11	N/A	N/A	N/A	101.50	82.39	N/A	Ditch empty
R-5	04/02/98	18.28	N/A	N/A	N/A	101.50	83.22	N/A	Ditch running
R-5	04/08/98	17.80	N/A	N/A	N/A	101.50	83.70	N/A	Ditch running
R-5	04/15/98	17.42	N/A	N/A	N/A	101.50	84.08	N/A	Ditch running
R-5	04/23/98	16.95	N/A	N/A	N/A	101.50	84.55	N/A	Ditch running
R-5	04/29/98	16.94	N/A	N/A	N/A	101.50	84.56	N/A	Ditch running
R-5	05/08/98	12.87	N/A	N/A	N/A	101.50	88.63	N/A	Ditch running
M-1	02/19/97	6.23	N/A	N/A	N/A	84.84	78.61	N/A	
M-1	02/26/97	6.19	N/A	N/A	N/A	84.84	78.65	N/A	
M-1	03/05/97	6.12	N/A	N/A	N/A	84.84	78.72	N/A	
M-1	03/12/97	6.37	N/A	N/A	N/A	84.84	78.47	N/A	

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-1	03/17/97	6.59	N/A	N/A	N/A	84.84	78.25	N/A	
M-1	04/09/97	6.47	N/A	N/A	N/A	84.84	78.37	N/A	
M-1	04/16/97	6.83	N/A	N/A	N/A	84.84	78.01	N/A	
M-1	04/23/97	7.61	N/A	N/A	N/A	84.84	77.23	N/A	
M-1	05/01/97	5.79	N/A	N/A	N/A	84.84	79.05	N/A	
M-1	05/07/97	5.10	N/A	N/A	N/A	84.84	79.74	N/A	
M-1	05/13/97	4.59	N/A	N/A	N/A	84.84	80.25	N/A	
M-1	05/23/97	4.80	N/A	N/A	N/A	84.84	80.04	N/A	
M-1	05/28/97	5.05	N/A	N/A	N/A	84.84	79.79	N/A	
M-1	06/04/97	4.90	N/A	N/A	N/A	84.84	79.94	N/A	
M-1	06/11/97	4.47	N/A	N/A	N/A	84.84	80.37	N/A	
M-1	06/18/97	4.93	N/A	N/A	N/A	84.84	79.91	N/A	
M-1	06/27/97	5.01	N/A	N/A	N/A	84.84	79.83	N/A	
M-1	07/02/97	4.86	N/A	N/A	N/A	84.84	79.98	N/A	
M-1	07/09/97	4.29	N/A	N/A	N/A	84.84	80.55	N/A	
M-1	08/21/97	3.54	N/A	N/A	N/A	84.84	81.30	N/A	
M-1	11/10/97	5.41	N/A	N/A	N/A	84.84	79.43	N/A	
M-1	01/21/98	6.40	N/A	N/A	N/A	84.84	78.44	N/A	
M-1	01/28/98	6.48	N/A	N/A	N/A	84.84	78.36	N/A	
M-1	02/05/98	6.66	N/A	N/A	N/A	84.84	78.18	N/A	
M-1	02/11/98	6.50	N/A	N/A	N/A	84.84	78.34	N/A	Ditch empty
M-1	02/19/98	6.75	N/A	N/A	N/A	84.84	78.09	N/A	Ditch empty
M-1	02/25/98	6.83	N/A	N/A	N/A	84.84	78.01	N/A	Ditch empty
M-1	03/04/98	7.01	N/A	N/A	N/A	84.84	77.83	N/A	Ditch empty
M-1	03/11/98	7.15	N/A	N/A	N/A	84.84	77.69	N/A	Ditch empty
M-1	03/18/98	7.03	N/A	N/A	N/A	84.84	77.81	N/A	Ditch empty
M-1	03/25/98	6.97	N/A	N/A	N/A	84.84	77.87	N/A	Ditch empty
M-1	04/02/98	6.16	N/A	N/A	N/A	84.84	78.68	N/A	Ditch running
M-1	04/08/98	5.70	N/A	N/A	N/A	84.84	79.14	N/A	Ditch running
M-1	04/15/98	5.26	N/A	N/A	N/A	84.84	79.58	N/A	Ditch running

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-1	04/23/98	4.96	N/A	N/A	N/A	84.84	79.88	N/A	Ditch running
M-1	04/29/98	4.97	N/A	N/A	N/A	84.84	79.87	N/A	Ditch running
M-1	05/08/98	4.85	N/A	N/A	N/A	84.84	79.99	N/A	Ditch running
M-2	02/19/97	6.00	N/A	N/A	N/A	85.89	79.89	N/A	
M-2	02/26/97	6.02	N/A	N/A	N/A	85.89	79.87	N/A	
M-2	03/05/97	6.12	N/A	N/A	N/A	85.89	79.77	N/A	
M-2	03/12/97	6.19	N/A	N/A	N/A	85.89	79.70	N/A	
M-2	03/17/97	6.32	N/A	N/A	N/A	85.89	79.57	N/A	
M-2	04/09/97	6.31	N/A	N/A	N/A	85.89	79.58	N/A	
M-2	04/16/97	6.62	N/A	N/A	N/A	85.89	79.27	N/A	
M-2	04/23/97	6.70	N/A	N/A	N/A	85.89	79.19	N/A	
M-2	05/01/97	4.23	N/A	N/A	N/A	85.89	81.66	N/A	
M-2	05/07/97	3.25	N/A	N/A	N/A	85.89	82.64	N/A	
M-2	05/13/97	3.67	N/A	N/A	N/A	85.89	82.22	N/A	
M-2	05/21/97	4.24	N/A	N/A	N/A	85.89	81.65	N/A	
M-2	05/28/97	4.79	N/A	N/A	N/A	85.89	81.10	N/A	
M-2	06/04/97	3.89	N/A	N/A	N/A	85.89	82.00	N/A	
M-2	06/11/97	3.86	N/A	N/A	N/A	85.89	82.03	N/A	
M-2	06/18/97	4.61	N/A	N/A	N/A	85.89	81.28	N/A	
M-2	06/27/97	4.27	N/A	N/A	N/A	85.89	81.62	N/A	
M-2	07/02/97	4.34	N/A	N/A	N/A	85.89	81.55	N/A	
M-2	07/09/97	3.43	N/A	N/A	N/A	85.89	82.46	N/A	
M-2	08/21/97	2.91	N/A	N/A	N/A	85.89	82.98	N/A	
M-2	11/10/97	4.76	N/A	N/A	N/A	85.89	81.13	N/A	
M-2	01/21/98	6.36	N/A	N/A	N/A	85.89	79.53	N/A	
M-2	01/28/98	6.48	N/A	N/A	N/A	85.89	79.41	N/A	
M-2	02/05/98	6.62	N/A	N/A	N/A	85.89	79.27	N/A	
M-2	02/11/98	6.50	N/A	N/A	N/A	85.89	79.39	N/A	Ditch empty
M-2	02/19/98	6.70	N/A	N/A	N/A	85.89	79.19	N/A	Ditch empty

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-2	02/25/98	6.78	N/A	N/A	N/A	85.89	79.11	N/A	Ditch empty
M-2	03/04/98	6.92	N/A	N/A	N/A	85.89	78.97	N/A	Ditch empty
M-2	03/11/98	7.05	N/A	N/A	N/A	85.89	78.84	N/A	Ditch empty
M-2	03/18/98	6.95	N/A	N/A	N/A	85.89	78.94	N/A	Ditch empty
M-2	03/25/98	6.90	N/A	N/A	N/A	85.89	78.99	N/A	Ditch empty
M-2	04/02/98	4.94	N/A	N/A	N/A	85.89	80.95	N/A	Ditch running
M-2	04/08/98	3.90	N/A	N/A	N/A	85.89	81.99	N/A	Ditch running
M-2	04/15/98	3.72	N/A	N/A	N/A	85.89	82.17	N/A	Ditch running
M-2	04/23/98	3.91	N/A	N/A	N/A	85.89	81.98	N/A	Ditch running
M-2	04/29/98	4.27	N/A	N/A	N/A	85.89	81.62	N/A	Ditch running
M-2	05/08/98	4.52	N/A	N/A	N/A	85.89	81.37	N/A	Ditch running
M-3	02/19/97	6.90	N/A	N/A	N/A	87.79	80.89	N/A	
M-3	02/26/97	6.86	N/A	N/A	N/A	87.79	80.93	N/A	
M-3	03/05/97	6.94	N/A	N/A	N/A	87.79	80.85	N/A	
M-3	03/12/97	6.99	N/A	N/A	N/A	87.79	80.80	N/A	
M-3	03/17/97	8.41	N/A	N/A	N/A	87.79	79.38	N/A	
M-3	04/09/97	7.41	N/A	N/A	N/A	87.79	80.38	N/A	
M-3	04/16/97	5.78	N/A	N/A	N/A	87.79	82.01	N/A	
M-3	04/23/97	7.61	N/A	N/A	N/A	87.79	80.18	N/A	
M-3	05/01/97	6.51	N/A	N/A	N/A	87.79	81.28	N/A	
M-3	05/07/97	5.62	N/A	N/A	N/A	87.79	82.17	N/A	
M-3	05/13/97	5.04	N/A	N/A	N/A	87.79	82.75	N/A	
M-3	05/21/97	5.18	N/A	N/A	N/A	87.79	82.61	N/A	
M-3	05/28/97	5.41	N/A	N/A	N/A	87.79	82.38	N/A	
M-3	06/04/97	5.50	N/A	N/A	N/A	87.79	82.29	N/A	
M-3	06/11/97	5.08	N/A	N/A	N/A	87.79	82.71	N/A	
M-3	06/18/97	5.35	N/A	N/A	N/A	87.79	82.44	N/A	
M-3	06/27/97	5.50	N/A	N/A	N/A	87.79	82.29	N/A	
M-3	07/02/97	5.28	N/A	N/A	N/A	87.79	82.51	N/A	

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-3	07/09/97	4.96	N/A	N/A	N/A	87.79	82.83	N/A	
M-3	08/21/97	4.81	N/A	N/A	N/A	87.79	82.98	N/A	
M-3	11/10/97	6.07	N/A	N/A	N/A	87.79	81.72	N/A	
M-3	01/21/98	6.92	N/A	N/A	N/A	87.79	80.87	N/A	
M-3	01/28/98	6.86	N/A	N/A	N/A	87.79	80.93	N/A	
M-3	02/05/98	7.26	N/A	N/A	N/A	87.79	80.53	N/A	
M-3	02/11/98	7.30	N/A	N/A	N/A	87.79	80.49	N/A	Ditch empty
M-3	02/19/98	7.56	N/A	N/A	N/A	87.79	80.23	N/A	Ditch empty
M-3	02/25/98	7.69	N/A	N/A	N/A	87.79	80.10	N/A	Ditch empty
M-3	03/04/98	7.95	N/A	N/A	N/A	87.79	79.84	N/A	Ditch empty
M-3	03/11/98	8.09	N/A	N/A	N/A	87.79	79.70	N/A	Ditch empty
M-3	03/18/98	7.85	N/A	N/A	N/A	87.79	79.94	N/A	Ditch empty
M-3	03/25/98	7.74	N/A	N/A	N/A	87.79	80.05	N/A	Ditch empty
M-3	04/02/98	6.77	N/A	N/A	N/A	87.79	81.02	N/A	Ditch running
M-3	04/08/98	6.20	N/A	N/A	N/A	87.79	81.59	N/A	Ditch running
M-3	04/15/98	5.80	N/A	N/A	N/A	87.79	81.99	N/A	Ditch running
M-3	04/23/98	5.25	N/A	N/A	N/A	87.79	82.54	N/A	Ditch running
M-3	04/29/98	5.07	N/A	N/A	N/A	87.79	82.72	N/A	Ditch running
M-3	05/08/98	4.67	N/A	N/A	N/A	87.79	83.12	N/A	Ditch running
M-4	02/19/98	5.36	N/A	N/A	N/A	88.01	82.65	N/A	
M-4	02/26/97	6.96	N/A	N/A	N/A	88.01	81.05	N/A	
M-4	03/05/97	6.87	N/A	N/A	N/A	88.01	81.14	N/A	
M-4	03/12/97	4.79	N/A	N/A	N/A	88.01	83.22	N/A	
M-4	03/17/97	7.43	N/A	N/A	N/A	88.01	80.58	N/A	
M-4	04/09/97	6.65	N/A	N/A	N/A	88.01	81.36	N/A	
M-4	04/16/97	5.78	N/A	N/A	N/A	88.01	82.23	N/A	
M-4	04/23/97	6.10	N/A	N/A	N/A	88.01	81.91	N/A	
M-4	05/01/97	4.65	N/A	N/A	N/A	88.01	83.36	N/A	
M-4	05/07/97	3.45	N/A	N/A	N/A	88.01	84.56	N/A	

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-4	05/13/97	3.33	N/A	N/A	N/A	88.01	84.68	N/A	
M-4	05/21/97	3.64	N/A	N/A	N/A	88.01	84.37	N/A	
M-4	05/28/97	3.92	N/A	N/A	N/A	88.01	84.09	N/A	
M-4	06/04/97	3.78	N/A	N/A	N/A	88.01	84.23	N/A	
M-4	06/11/97	3.45	N/A	N/A	N/A	88.01	84.56	N/A	
M-4	06/18/97	3.79	N/A	N/A	N/A	88.01	84.22	N/A	
M-4	06/27/97	3.79	N/A	N/A	N/A	88.01	84.22	N/A	
M-4	07/02/97	3.69	N/A	N/A	N/A	88.01	84.32	N/A	
M-4	07/09/97	3.07	N/A	N/A	N/A	88.01	84.94	N/A	
M-4	08/21/97	2.86	N/A	N/A	N/A	88.01	85.15	N/A	
M-4	11/10/97	4.41	N/A	N/A	N/A	88.01	83.60	N/A	
M-4	01/21/98	5.48	N/A	N/A	N/A	88.01	82.53	N/A	
M-4	01/28/98	5.59	N/A	N/A	N/A	88.01	82.42	N/A	
M-4	02/05/98	5.76	N/A	N/A	N/A	88.01	82.25	N/A	
M-4	02/11/98	5.86	N/A	N/A	N/A	88.01	82.15	N/A	Ditch empty
M-4	02/19/98	6.08	N/A	N/A	N/A	88.01	81.93	N/A	Ditch empty
M-4	02/25/98	6.17	N/A	N/A	N/A	88.01	81.84	N/A	Ditch empty
M-4	03/04/98	6.37	N/A	N/A	N/A	88.01	81.64	N/A	Ditch empty
M-4	03/11/98	6.42	N/A	N/A	N/A	88.01	81.59	N/A	Ditch empty
M-4	03/18/98	6.21	N/A	N/A	N/A	88.01	81.80	N/A	Ditch empty
M-4	03/25/98	6.12	N/A	N/A	N/A	88.01	81.89	N/A	Ditch empty
M-4	04/02/98	4.54	N/A	N/A	N/A	88.01	83.47	N/A	Ditch running
M-4	04/08/98	3.97	N/A	N/A	N/A	88.01	84.04	N/A	Ditch running
M-4	04/15/98	3.73	N/A	N/A	N/A	88.01	84.28	N/A	Ditch running
M-4	04/23/98	3.34	N/A	N/A	N/A	88.01	84.67	N/A	Ditch running
M-4	04/29/98	3.42	N/A	N/A	N/A	88.01	84.59	N/A	Ditch running
M-4	05/08/98	2.98	N/A	N/A	N/A	88.01	85.03	N/A	Ditch running
M-5	02/19/98	8.49	N/A	N/A	N/A	86.82	78.33	N/A	
M-5	02/26/97	6.59	N/A	N/A	N/A	86.82	80.23	N/A	

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-5	03/05/97	6.69	N/A	N/A	N/A	86.82	80.13	N/A	
M-5	03/12/97	6.74	N/A	N/A	N/A	86.82	80.08	N/A	
M-5	03/17/97	6.99	N/A	N/A	N/A	86.82	79.83	N/A	
M-5	04/09/97	6.92	N/A	N/A	N/A	86.82	79.90	N/A	
M-5	04/16/97	7.32	N/A	N/A	N/A	86.82	79.50	N/A	
M-5	04/23/97	7.32	N/A	N/A	N/A	86.82	79.50	N/A	
M-5	05/01/97	5.50	N/A	N/A	N/A	86.82	81.32	N/A	
M-5	05/07/97	3.88	N/A	N/A	N/A	86.82	82.94	N/A	
M-5	05/13/97	4.30	N/A	N/A	N/A	86.82	82.52	N/A	
M-5	05/21/97	4.76	N/A	N/A	N/A	86.82	82.06	N/A	
M-5	05/28/97	5.10	N/A	N/A	N/A	86.82	81.72	N/A	
M-5	06/04/97	4.79	N/A	N/A	N/A	86.82	82.03	N/A	
M-5	06/11/97	4.55	N/A	N/A	N/A	86.82	82.27	N/A	
M-5	06/18/97	5.00	N/A	N/A	N/A	86.82	81.82	N/A	
M-5	06/27/97	4.89	N/A	N/A	N/A	86.82	81.93	N/A	
M-5	07/02/97	4.81	N/A	N/A	N/A	86.82	82.01	N/A	
M-5	07/09/97	4.06	N/A	N/A	N/A	86.82	82.76	N/A	
M-5	08/21/97	3.40	N/A	N/A	N/A	86.82	83.42	N/A	
M-5	11/10/97	5.32	N/A	N/A	N/A	86.82	81.50	N/A	
M-5	01/21/98	6.75	N/A	N/A	N/A	86.82	80.07	N/A	
M-5	01/28/98	6.81	N/A	N/A	N/A	86.82	80.01	N/A	
M-5	02/05/98	7.60	N/A	N/A	N/A	86.82	79.22	N/A	
M-5	02/11/98	7.12	N/A	N/A	N/A	86.82	79.70	N/A	Ditch empty
M-5	02/19/98	7.28	N/A	N/A	N/A	86.82	79.54	N/A	Ditch empty
M-5	02/25/98	7.37	N/A	N/A	N/A	86.82	79.45	N/A	Ditch empty
M-5	03/04/98	7.55	N/A	N/A	N/A	86.82	79.27	N/A	Ditch empty
M-5	03/11/98	7.62	N/A	N/A	N/A	86.82	79.20	N/A	Ditch empty
M-5	03/18/98	7.43	N/A	N/A	N/A	86.82	79.39	N/A	Ditch empty
M-5	03/25/98	7.36	N/A	N/A	N/A	86.82	79.46	N/A	Ditch empty
M-5	04/02/98	5.00	N/A	N/A	N/A	86.82	81.82	N/A	Ditch running

TABLE 1
PRODUCT RECOVERY AND ELEVATION DATA
JAQUEZ COM C#1 AND E#1

WELL NUMBER	DATE	WATER LEVEL (feet)	PRODUCT LEVEL (feet)	PRODUCT THICKNESS (feet)	PRODUCT RECOVERED (Total gallons)	TOR REF. ELEV.	WATER ELEV. (feet)	PRODUCT ELEV. (feet)	COMMENTS
M-5	04/08/98	4.43	N/A	N/A	N/A	86.82	82.39	N/A	Ditch running
M-5	04/15/98	4.43	N/A	N/A	N/A	86.82	82.39	N/A	Ditch running
M-5	04/23/98	4.21	N/A	N/A	N/A	86.82	82.61	N/A	Ditch running
M-5	04/29/98	4.39	N/A	N/A	N/A	86.82	82.43	N/A	Ditch running
M-5	05/08/98	4.15	N/A	N/A	N/A	86.82	82.67	N/A	Ditch running

Table 2 - Summary of BTEX Results

TABLE 2
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	Nitrates PPM
R-1	N30969	9/7/93	991	164	113	1111	2379	No	ND	NA
R-1	N31056	10/4/93	1280	1328	74	799	3481	No	1"	NA
R-1	N31240	11/10/93	242	322	15.0	93.9	673	No	ND	NA
R-1	N31384	12/15/93	328	411	26.6	196	962	No	ND	NA
R-1	940026	1/12/94	1830	1965	90.3	1053	4938	No	17"	NA
R-1	940233	2/9/94	1255	1504	42.3	730	3531	No	32"	NA
R-1	940491	3/7/94	7600	8500	280	2700	19080	Yes	4"	NA
R-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	10"	NA
R-1	941003	6/13/94	1450	1930	70.0	944	4394	No	11"	NA
R-1	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	2"	NA
R-1	941619	12/15/94	1890	2130	105.0	990	5115	No	TR	NA
R-1	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-1	951178	11/2/95	2330	2400	108	946	5784	No	ND	NA
R-1	N/A	2/5/96	No Test	No Test	No Test	No Test	No Test	Yes	0.24"	NA
R-1	N/A	5/28/96	No Test	No Test	No Test	No Test	No Test	No	4.8"	NA
R-1	960684	8/6/96	2970	3080	130	1200	7380	No	TR	NA
R-1	960900	10/28/96	1690	1970	60.8	800	4520	No	ND	NA
R-1	961007	11/20/96	1240	1540	61.9	600	3450	No	ND	NA
R-1	N/A	2/19/97	No Test	No Test	No Test	No Test	No Test	No	29.76"	NA
R-2	N30970	9/7/93	278	651	59.0	538	1526	No	ND	NA
R-2	N31057	10/4/93	509	789	73.0	741	2112	No	ND	NA
R-2	N31241	11/10/93	284	470	38.0	401	1193	No	ND	NA
R-2	N31385	12/15/93	529	864	65.3	709	2167	No	1"	NA
R-2	940027	1/12/94	1722	2501	150	1702	6075	No	24"	NA
R-2	940234	2/9/94	2806	3667	89.5	1520	8083	No	26"	NA

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	Nitrates PPM
R-2	940492	3/7/94	5600	6800	290	2700	15390	Yes	4"	NA
R-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	7"	NA
R-2	941004	6/13/94	3210	3790	139	1670	8809	No	7"	NA
R-2	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-2	941620	12/15/94	1140	2200	148	1520	5008	No	0.6"	NA
R-2	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR	NA
R-2	951179	11/2/95	1250	2030	116	1010	4406	No	TR	NA
R-2	N/A	2/5/96	No Test	No Test	No Test	No Test	No Test	Yes	2.52	NA
R-2	N/A	5/28/96	No Test	No Test	No Test	No Test	No Test	No	2.04"	NA
R-2	960685	8/6/96	2610	3960	165	1540	8275	No	0.72"	NA
R-2	960901	10/28/96	1100	2300	85.4	1100	4585	No	0.96"	NA
R-2	961009	11/20/96	428	1340	87.3	821	2680	No	0.48"	NA
R-2	N/A	2/19/97	No Test	No Test	No Test	No Test	No Test	No	NA	NA
R-3	N30971	9/7/93	<2.0	61.4	22.0	207	290	No	ND	NA
R-3	N31058	10/4/93	21	179	32.0	310	542	No	ND	NA
R-3	N31242	11/10/93	6.19	27.7	10.4	89.2	134	No	ND	NA
R-3	N31386	12/15/93	26	88.4	19.4	178	312	No	ND	NA
R-3	940028	1/12/94	4.4	2.9	2.7	18	28	No	ND	NA
R-3	940235	2/9/94	<2.0	10.9	8.3	59.6	79	No	ND	NA
R-3	940493	3/7/94	7.7	43	24	220	295	Yes	ND	NA
R-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-3	941005	6/13/94	3.03	41.4	18.4	188	251	No	ND	NA
R-3	941259	9/7/94	<2.5	18	6.9	67.9	93	No	ND	NA
R-3	941621	12/15/94	11.7	12.2	12.4	114	150	No	ND	NA
R-3	950099	2/9/95	7.36	2.7	2.68	20.8	34	Yes	ND	NA
R-3	950562	5/8/95	16.6	11.7	13.9	126	168	No	ND	NA
R-3	950896	8/25/95	<2.5	15.2	13.6	101	130	No	ND	NA
R-3	951180	11/2/95	<2.5	14.0	9.3	82	105	No	ND	NA
R-3	960095	2/5/96	5.34	14.0	12.8	108	140	Yes	ND	NA
R-3	960479	5/28/96	1.05	18.7	22.9	203	246	No	ND	NA
R-3	960686	8/6/96	1.24	24.7	25.9	236	288	No	ND	NA

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	Nitrates PPM
R-3	960902	10/28/96	<1.0	10.7	12.6	109	132	No	ND	NA
R-3	961010	11/20/96	<1.0	12.5	12.4	114	139	No	ND	NA
R-3	970124	2/19/97	2.12	1.9	2.29	12.6	19	Yes	ND	NA
R-3	970501	5/28/97	<1.0	15.3	13.5	130	159	No	ND	<1.2
R-3	970917	8/21/97	<1.0	20.8	18.6	176	215	No	ND	<1.2
R-3	971196	11/10/97	<1.0	13.6	17.2	149	180	No	ND	<1.2
R-3	980164	2/18/98	<1.0	<1	<1	<3	<6	Yes	ND	<1.2
R-4	N30972	9/7/93	104	267	39.9	370	781	No	ND	NA
R-4	N31060	10/4/93	118	266	41	364	789	No	ND	NA
R-4	N31243	11/10/93	93.6	132	40.4	347	613	No	ND	NA
R-4	N31387	12/15/93	102	161	48.4	418	729	No	ND	NA
R-4	940030	1/12/94	124	101	38.5	353	617	No	ND	NA
R-4	940237	2/9/94	120	51.4	20.8	150	342	No	ND	NA
R-4	940494	3/7/94	150	63	20	190	423	Yes	ND	NA
R-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-4	941007	6/13/94	179	60.6	17.2	176	433	No	ND	NA
R-4	941260	9/7/94	238	102	26	218	584	No	ND	NA
R-4	941622	12/15/94	222	63.3	26.9	213	525	No	ND	NA
R-4	950100	2/9/95	273	61	20.4	165	519	Yes	ND	NA
R-4	950564	5/8/95	278	251	23.1	220	772	No	ND	NA
R-4	950897	8/25/95	646	278	50.8	544	1519	No	ND	NA
R-4	951181	11/2/95	343	60.4	35.1	284	723	No	ND	NA
R-4	960097	2/5/96	218	43.3	23.1	200	484	Yes	ND	NA
R-4	960481	5/28/96	716	199.0	36.6	394	1346	No	ND	NA
R-4	960687	8/6/96	384	156.0	24	275	839	No	ND	NA
R-4	960904	10/28/96	320	53.4	20.1	237	631	No	ND	NA
R-4	9601011	11/20/96	289	31.2	19.3	220	560	No	ND	NA
R-4	970125	2/19/97	162	65.9	34.4	337	599	Yes	ND	NA
R-4	970503	5/28/97	189	92.5	13.3	144	439	No	ND	<1.2
R-4	970918	8/21/97	343	377.0	45.5	408	1174	No	ND	<1.2
R-4	971197	11/10/97	542	129.0	31.1	267	969	No	ND	<1.2

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	Nitrates PPM
R-4	980166	2/18/98	98.0	15.9	10.0	79.3	203	Yes	ND	<1.2
R-5	N30973	9/7/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31061	10/4/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31244	11/10/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	N31388	12/15/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940031	1/12/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940238	2/9/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	940496	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
R-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
R-5	941008	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
R-5	941261	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	941623	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	950102	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
R-5	950565	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	950898	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	951182	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
R-5	960098	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
R-5	960482	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
R-5	960689	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
R-5	960905	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
R-5	961012	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
R-5	970127	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
R-5	970504	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	970919	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	971199	11/10/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
R-5	980167	2/18/98	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-1	N30974	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31062	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31245	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	N31389	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA

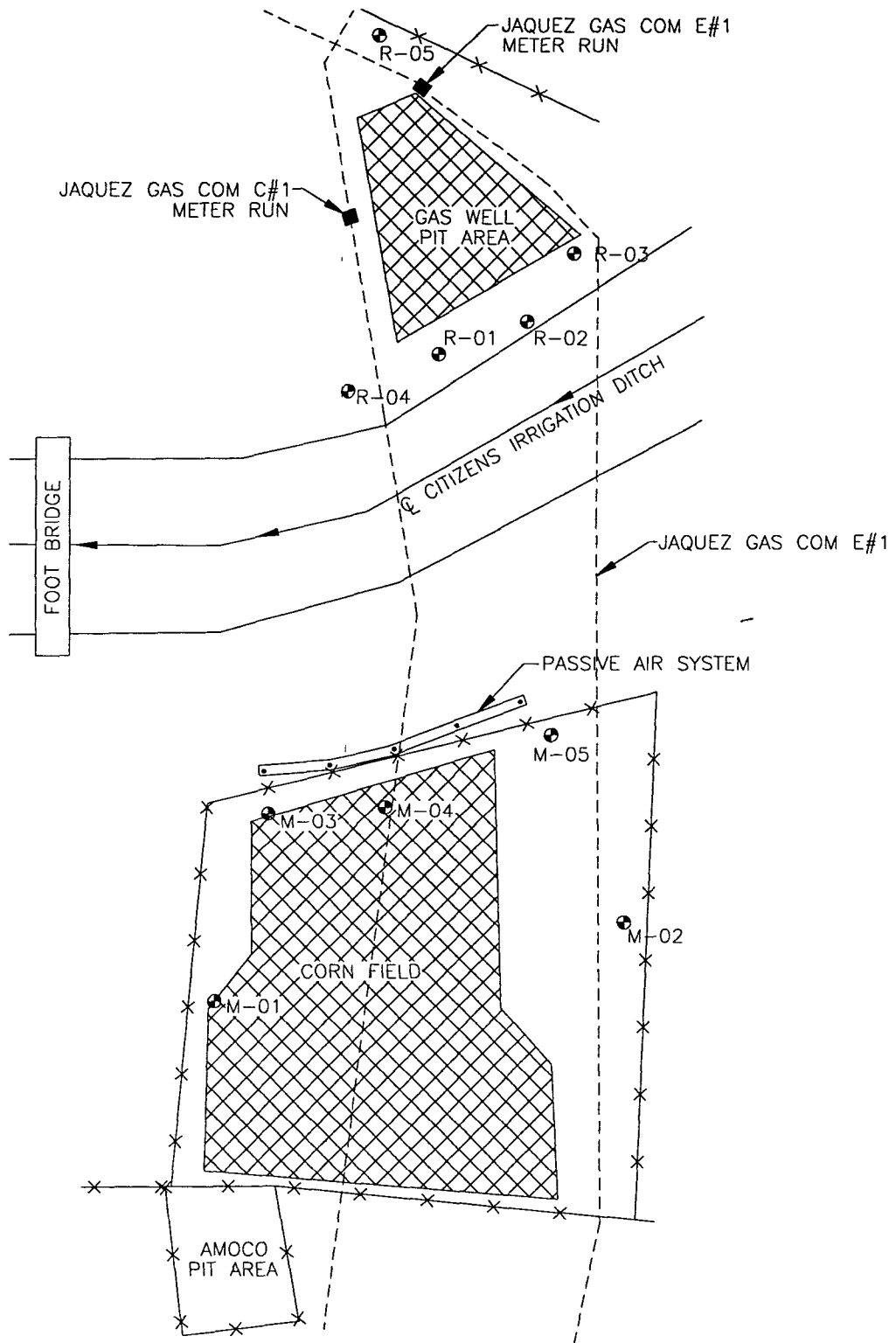
Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches	Nitrates PPM
M-1	940032	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940239	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	940497	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-1	941009	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-1	941262	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	941624	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	950103	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-1	950566	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	950899	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	951183	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-1	960099	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-1	960483	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-1	960690	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-1	960906	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-1	961013	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-1	970128	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-1	970505	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	970920	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	971200	11/10/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-1	980168	2/18/98	5.08	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-2	N30975	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	N31063	10/5/93	2.0	2.0	<2.0	<2.0	4.0	No	ND	NA
M-2	N31246	11/11/93	2.3	2.0	<2.0	<2.0	4.3	No	ND	NA
M-2	N31390	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940033	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940240	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	940498	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-2	941010	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-2	941263	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA

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	Nitrates PPM
M-2	941625	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	950104	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-2	950567	5/5/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	950900	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	951184	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-2	960100	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-2	960484	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-2	960691	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-2	960907	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-2	961014	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-2	970129	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-2	970506	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	970921	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	971201	11/10/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-2	980169	2/18/98	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2
M-3	N30976	9/8/93	116	<2.0	3.0	37.6	157	No	ND	NA
M-3	N31064	10/5/93	306	<2.0	4.0	19	329	No	ND	NA
M-3	N31247	11/11/93	8.4	5.3	<2.0	2.6	16	No	ND	NA
M-3	N31391	12/16/93	42	<2.0	<2.0	<2.0	42	No	ND	NA
M-3	940034	1/13/94	19	2.1	<2.0	<2.0	21	No	ND	NA
M-3	940241	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-3	940499	3/7/94	<0.5	<0.5	<0.5	2.5	3	Yes	ND	NA
M-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-3	941011	6/13/94	3.65	<2.0	<2.0	<2.0	4	No	ND	NA
M-3	941264	9/7/94	2.87	<2.5	<2.5	2.5	5	No	ND	NA
M-3	941626	12/15/94	<2.5	<2.5	<2.5	5.61	6	No	ND	NA
M-3	950105	2/9/95	11.4	<2.5	<2.5	<2.5	11	Yes	ND	NA
M-3	950568	5/8/95	180	67.2	<2.5	53.9	301	No	ND	NA
M-3	950901	8/25/95	11.8	<2.5	<2.5	16.8	29	No	ND	NA
M-3	951185	11/2/95	<2.5	<2.5	<2.5	5.03	5	No	ND	NA
M-3	960101	2/5/96	236	<2.5	5.77	22.2	264	Yes	ND	NA

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	Nitrates PPM
M-3	960485	5/28/96	88.4	<1.0	5.93	20.3	115	No	ND	NA
M-3	960692	8/6/96	96.4	<1.0	2.5	3.27	102	No	ND	NA
M-3	960908	10/29/96	17.4	<1.0	1.55	2.23	21	No	ND	NA
M-3	961015	11/20/96	70.2	<1.0	1.89	<3	72	No	ND	NA
M-3	970130	2/19/97	2.44	<1.0	2.61	7.43	12	Yes	ND	NA
M-3	970507	5/28/97	38	6.1	<1	13.5	58	No	ND	20.1
M-3	970922	8/21/97	<1	<1	<1	7.68	8	No	ND	<1.2
M-3	971202	11/10/97	<1	<1	<1	7.68	8	No	ND	<1.2
M-3	980170	2/18/98	<1	<1	<1	<3	<6	Yes	ND	<1.2
M-4	N30977	9/8/93	213	13.3	58	519	803	No	ND	NA
M-4	N31065	10/5/93	302	2.0	55	395	754	No	ND	NA
M-4	N31248	11/11/93	234	2.0	56	383	675	No	ND	NA
M-4	N31392	12/16/93	171	<2.0	34.3	244	449	No	ND	NA
M-4	940035	1/13/94	175	2.5	38	288	504	No	ND	NA
M-4	940242	2/10/94	137	<2.0	29.8	192	359	No	ND	NA
M-4	940500	3/7/94	120	<2.5	27	220	367	Yes	ND	NA
M-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-4	941012	6/13/94	151	<2.0	28.4	246	425	No	ND	NA
M-4	941265	9/7/94	145	<2.5	24.1	231	400	No	ND	NA
M-4	941628	12/15/94	184	<2.5	22.3	215	421	No	ND	NA
M-4	950106	2/9/95	160	<2.5	19.6	186	366	Yes	ND	NA
M-4	950569	5/8/95	108	<2.5	11.7	119	239	No	ND	NA
M-4	950902	8/25/95	29.3	<2.5	13	116	158	No	ND	NA
M-4	951187	11/2/95	15.1	<2.5	12.9	136	164	No	ND	NA
M-4	960102	2/5/96	33.5	<2.5	19.3	209	262	Yes	ND	NA
M-4	960486	5/28/96	17	<1.0	8.93	93.6	120	No	ND	NA
M-4	960693	8/6/96	2.77	<1.0	3.5	38.5	45	No	ND	NA
M-4	960909	10/29/96	1.03	<1.0	3.66	55.5	60	No	ND	NA
M-4	961016	11/22/96	3.28	<1.0	7.77	90.3	101	No	ND	NA
M-4	970131	2/19/97	17.7	1.5	8.3	54	82	Yes	ND	NA
M-4	970508	5/28/97	53.6	11.6	43.4	366	475	No	ND	225

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	Nitrates PPM
M-4	970923	8/21/97	39.7	3.2	1.51	100	145	No	ND	20.8
M-4	971203	11/10/97	44.8	<1.0	<1.0	71	116	No	ND	1.31
M-4	980171	2/18/98	91.0	<1.0	1.1	74.9	167	Yes	ND	<1.2
M-5	N30979	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31066	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31250	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	N31393	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940036	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940243	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	940501	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND	NA
M-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND	NA
M-5	941013	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND	NA
M-5	941267	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	941629	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	950107	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-5	950570	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	950904	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	951188	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND	NA
M-5	960103	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND	NA
M-5	960487	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND	NA
M-5	960694	8/6/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	960910	10/29/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	961017	11/21/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	NA
M-5	970132	2/19/97	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	NA
M-5	970509	5/28/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	970925	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	971204	8/21/97	<1.0	<1.0	<1.0	<3.0	N/A	No	ND	<1.2
M-5	980172	2/18/98	<1.0	<1.0	<1.0	<3.0	N/A	Yes	ND	<1.2

Figure 1 - Site Map



LEGEND

-x-x- FENCE LINE

----- PIPE LINE

● M-01 MONITORING WELL LOCATION AND NUMBER

0 50
FEET



TITLE:

JAQUEZ GAS COM C#1 AND E#1
SITE MAP

DWN:

TMM

DES.:

SP

CHKD:

SP

APPD:

DATE:

3/19/98

REV.:

0

PROJECT NO.:

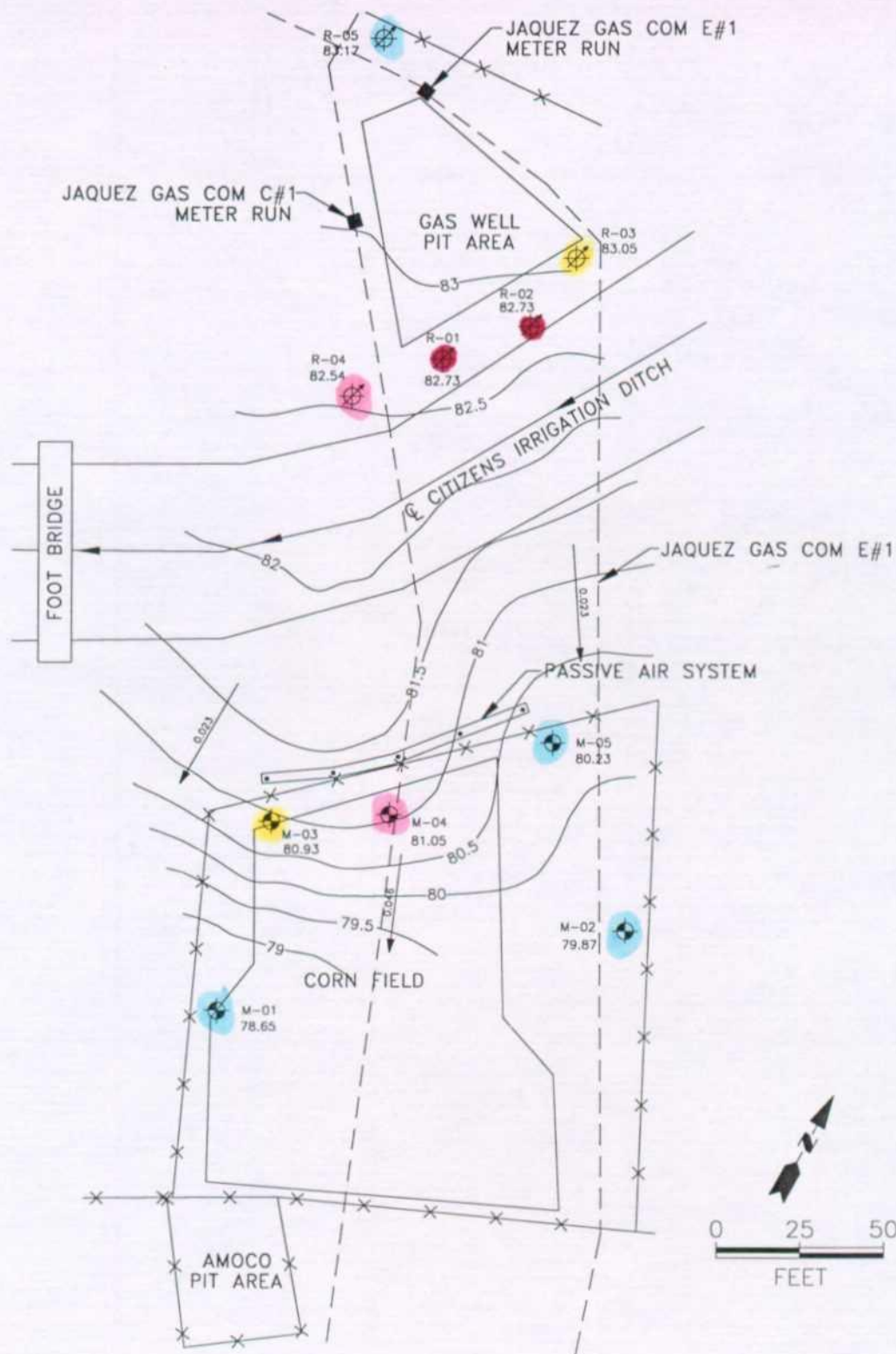
17444

EL PASO FIELD
SERVICE COMPANY

FIGURE 1

COL. 17444B-001

Figure 2 - 1997 1st Quarter Groundwater Elevation Map



COL 1 G:\PENG-NM\HYDRO\MAPS\970206.DWG



TITLE:

JAQUEZ GAS COM E#1 & C#1
GROUNDWATER ELEVATION CONTOURS
FEBRUARY 26, 1997

DWN:

MRC

CHKD:

DATE:

03/18/98

DES:

SP

APPD:

REV:

B

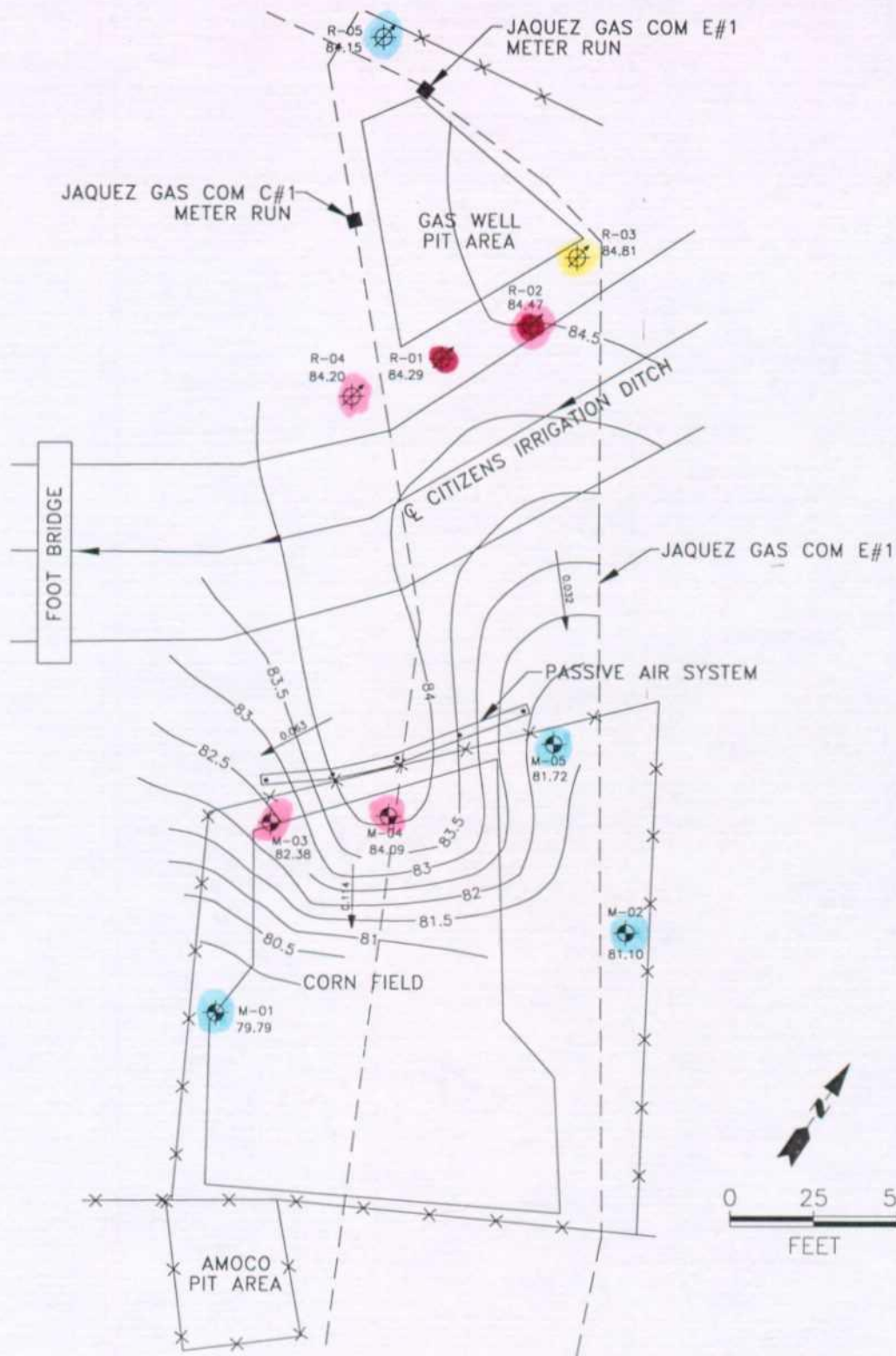
PROJECT NO.:

17444

EL PASO FIELD
SERVICES COMPANY

FIGURE 2

Figure 3 - 1997 2nd Quarter Groundwater Elevation Map



COL 1 G:\PENG-NA\HYDRO\MAPS\05970W.DWG



TITLE:
JAQUEZ GAS COM E#1 & C#1
GROUNDWATER ELEVATION CONTOURS
MAY 28, 1997

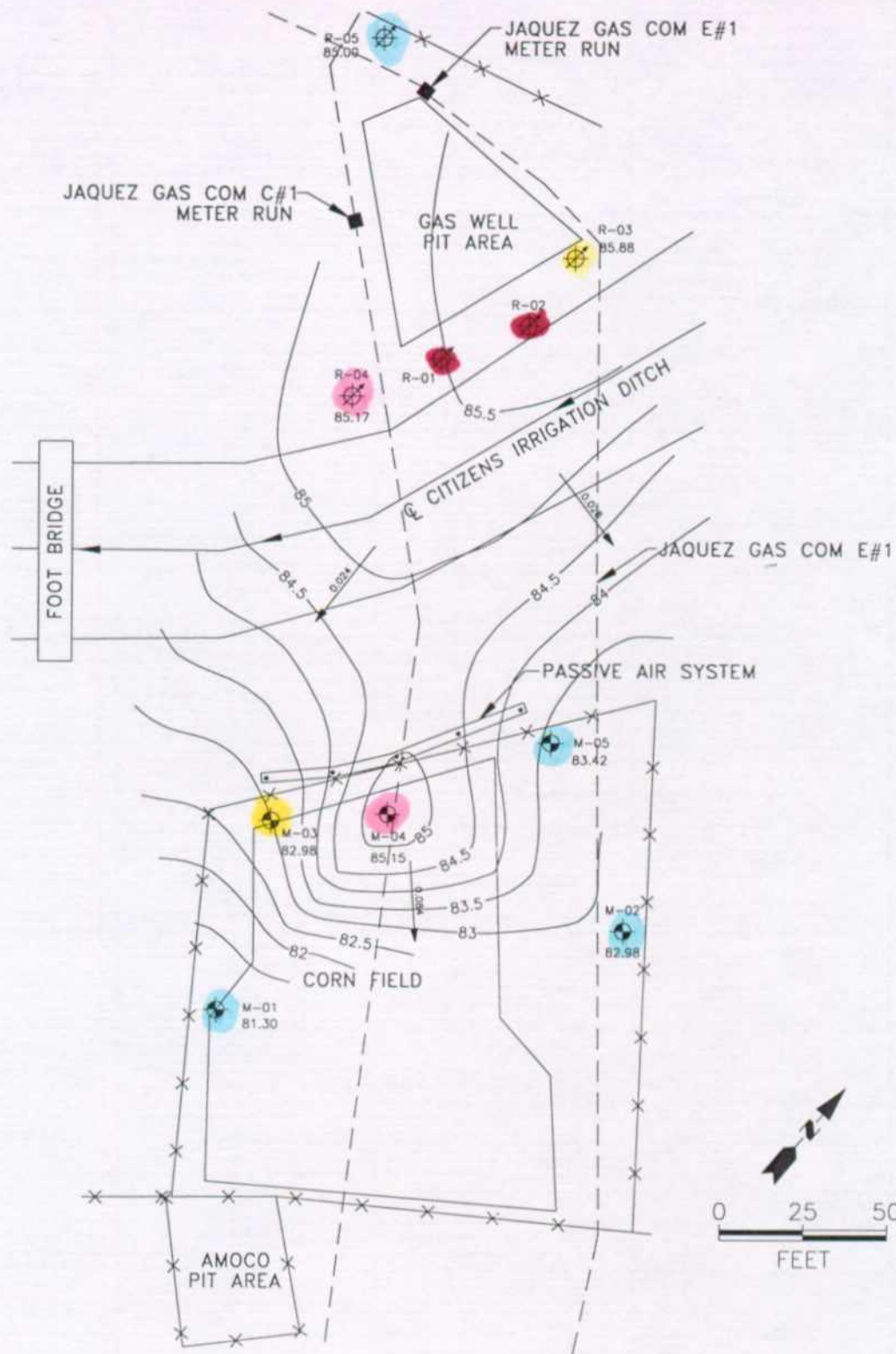
DWN:
MRC
CHKD:
DATE:
03/18/98

DES.:
SP
APPD:
REV.:
B

PROJECT NO.: 17444
EL PASO FIELD
SERVICES COMPANY

FIGURE 3

Figure 4 - 1997 3rd Quarter Groundwater Elevation Map



COL1 G:\PENG-NA\HYDRO\MAPS\9708CW.DWG



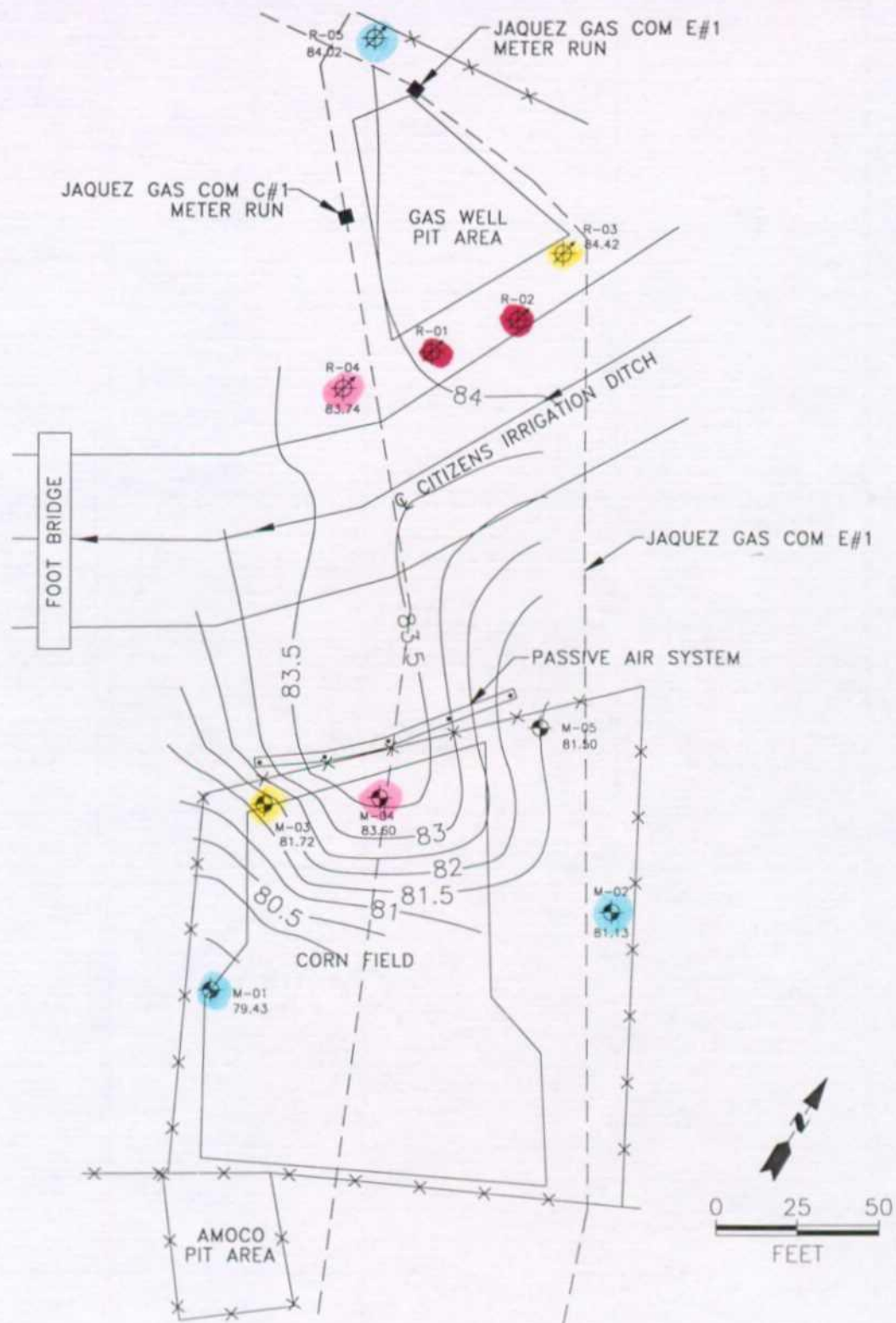
TITLE:
 JAQUEZ GAS COM E#1 & C#1
 GROUNDWATER ELEVATION CONTOURS
 AUGUST 21, 1997

DWN: MRC
 DES: SP
 CHKD: APPD:
 DATE: 03/18/98
 REV: B

PROJECT NO.: 17444
 EL PASO FIELD
 SERVICES COMPANY

FIGURE 4

Figure 5 - 1997 4th Quarter Groundwater Elevation Map



COL 1 G:\PENG-NM\HYDRO\MAPS\9711CW.DWG



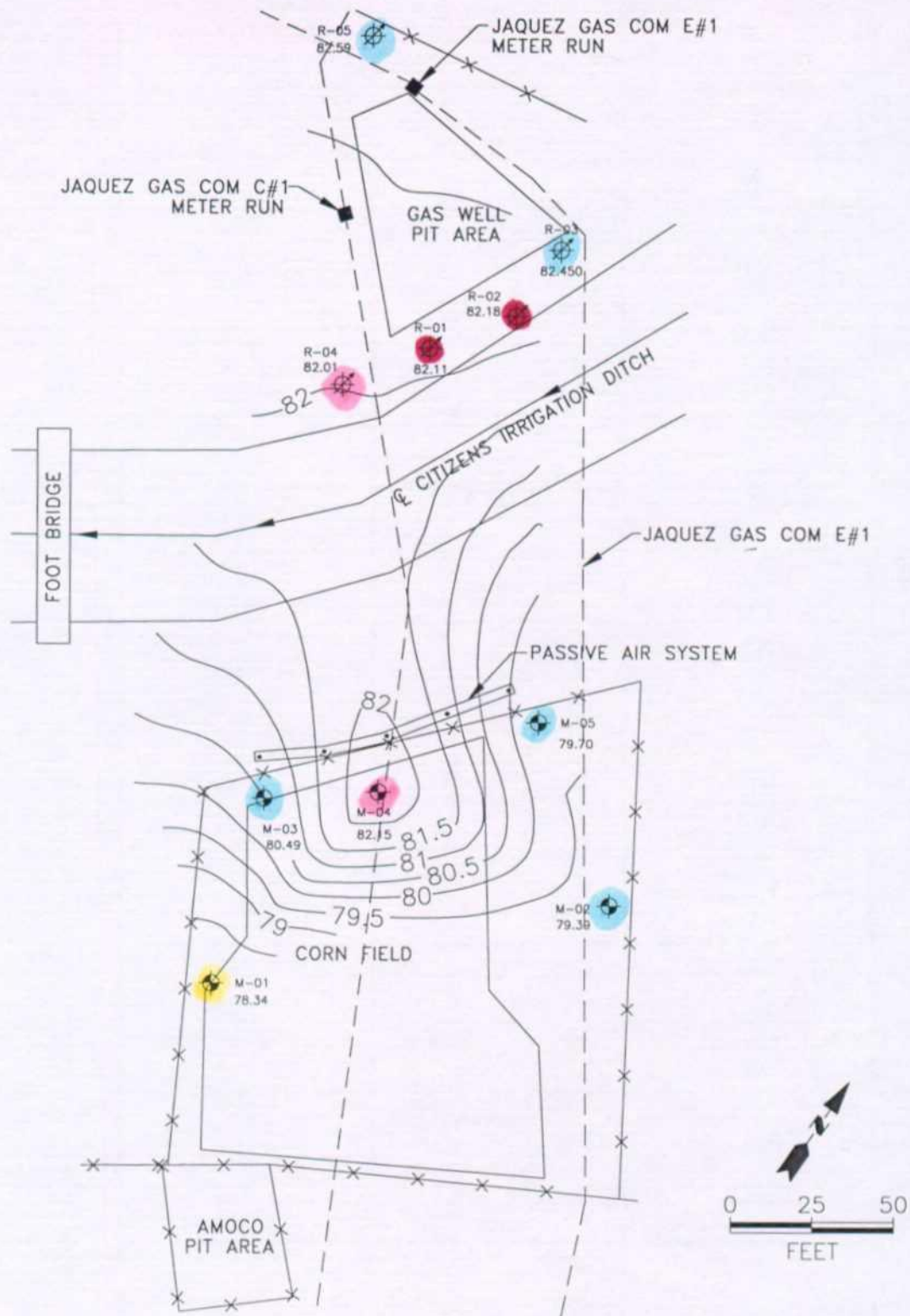
TITLE:
 JAQUEZ GAS COM E#1 & C#1
 GROUNDWATER ELEVATION CONTOURS
 NOVEMBER 28, 1997

DWN: MRC
 DES: SP
 CHKD: APPD:
 DATE: 03/18/98
 REV: B

PROJECT NO.: 17444
 EL PASO FIELD
 SERVICES COMPANY

FIGURE 5

Figure 6 - 1998 1st Quarter Groundwater Elevation Map



COL1 G:\PENG-NM\HYDRO\MAPS\98020W.DWG



TITLE:
JAQUEZ GAS COM E#1 & C#1
GROUNDWATER ELEVATION CONTOURS
FEBRUARY 11, 1998

DWN:
MRC
CHKD:
DATE:
03/18/98

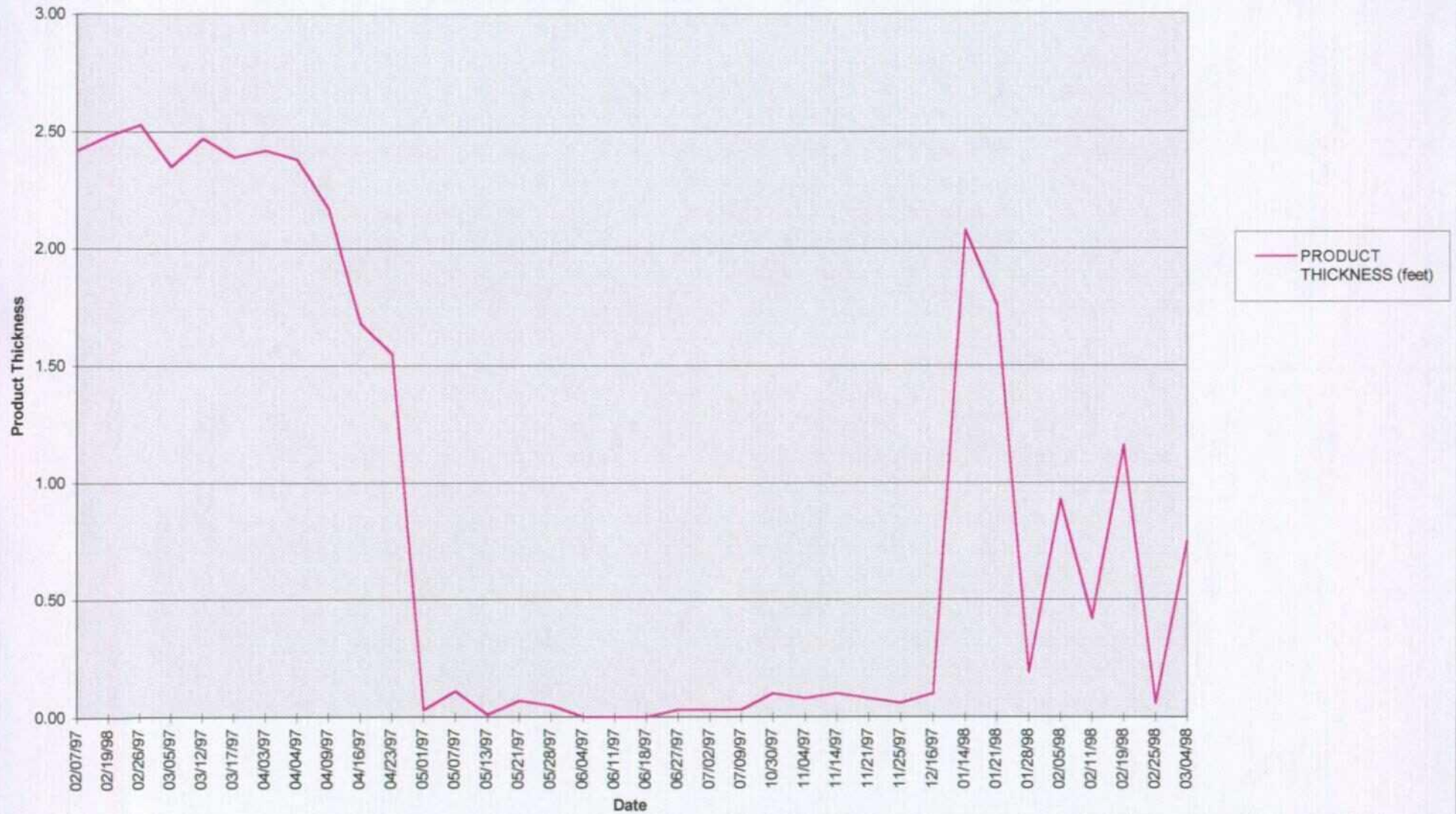
DES.:
SP
APPD:
REV.:
B

PROJECT NO.: 17444
EL PASO FIELD
SERVICES COMPANY
FIGURE 6

Appendix A - Product Thickness vs. Time for R-1 and R-2

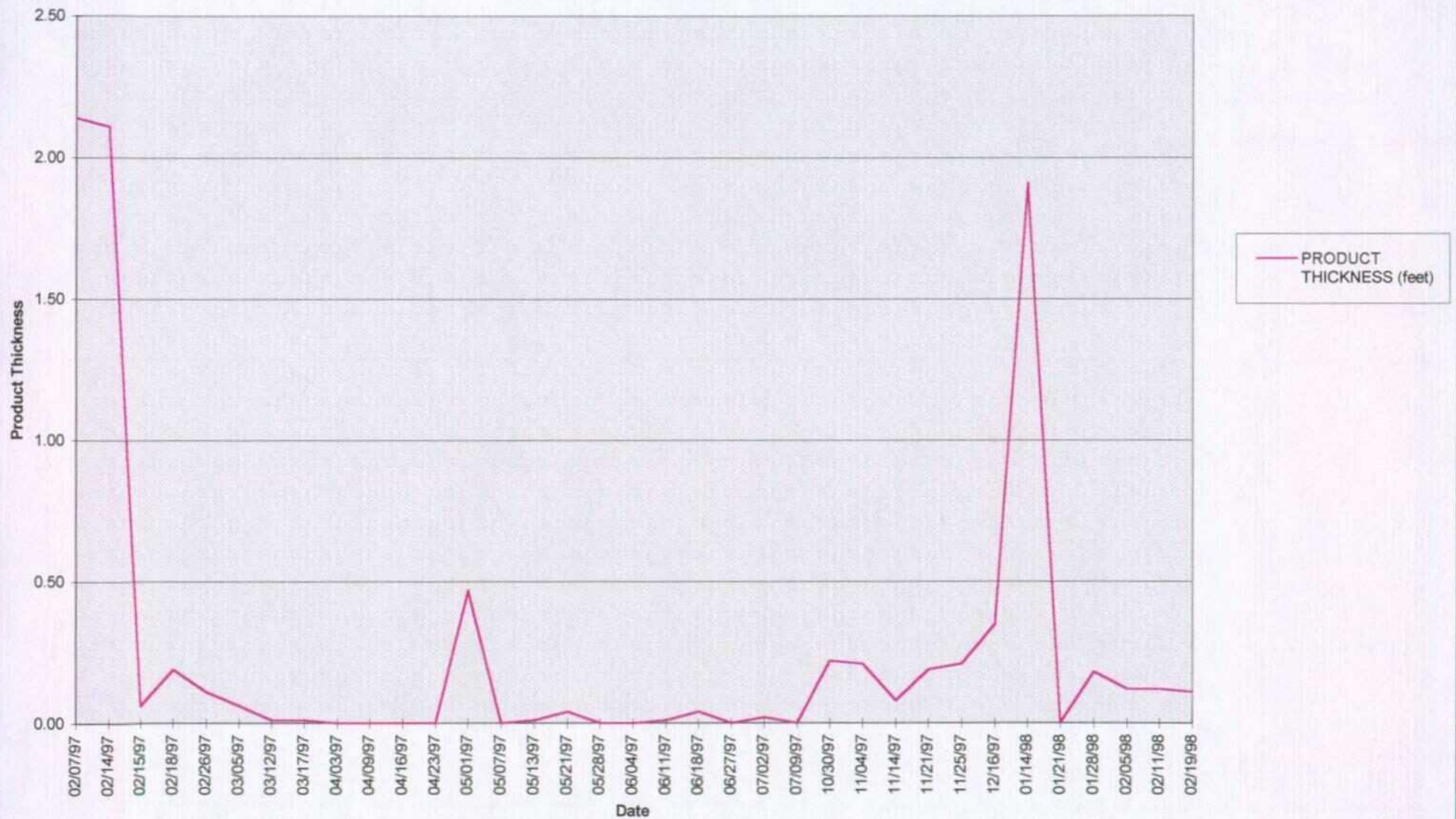
R-1 Product Thickness vs. Time

Product Thickness vs. Time
R-1



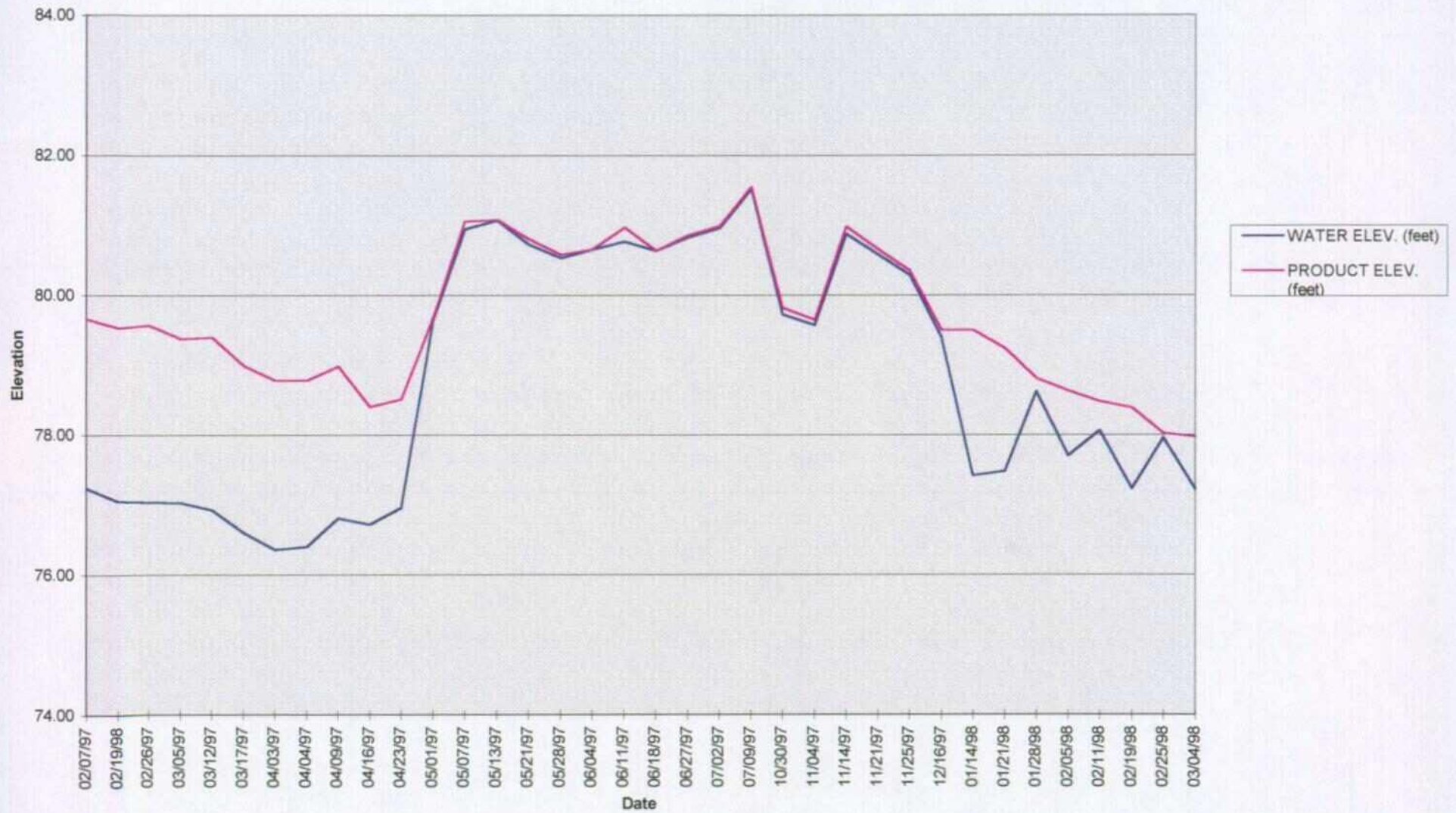
R-2 Product Thickness vs. Time

Product Thickness vs. Time
R-2



Appendix B - Groundwater Elevations vs. Time

Water Level Elevations and Product Level Elevations vs. Time
R-1



Water Level Elevations and Product Level Elevations vs. Time
R-2



Water Level Elevations vs. Time
R-3

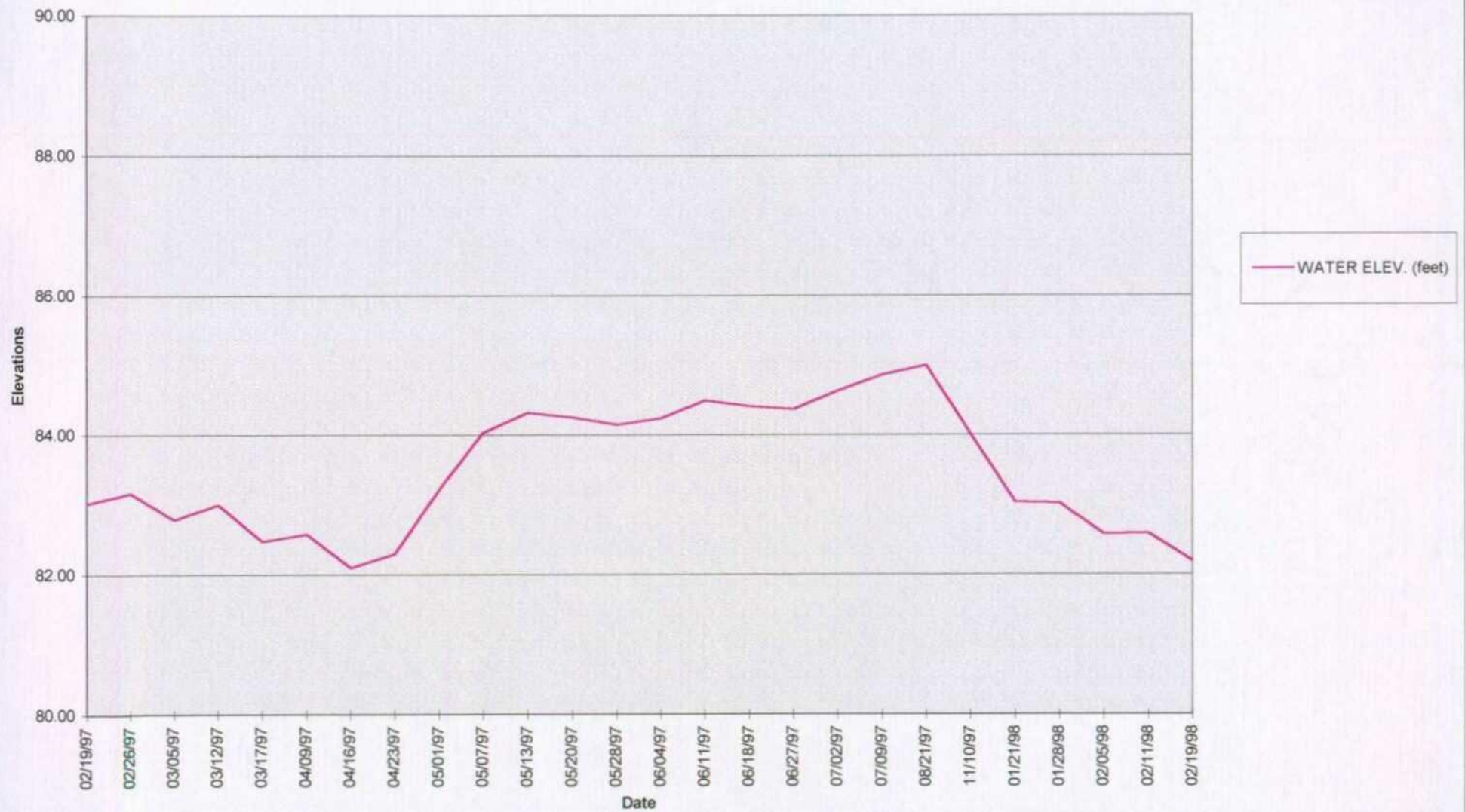


R-4

Water Level Elevations vs. Time
R-4



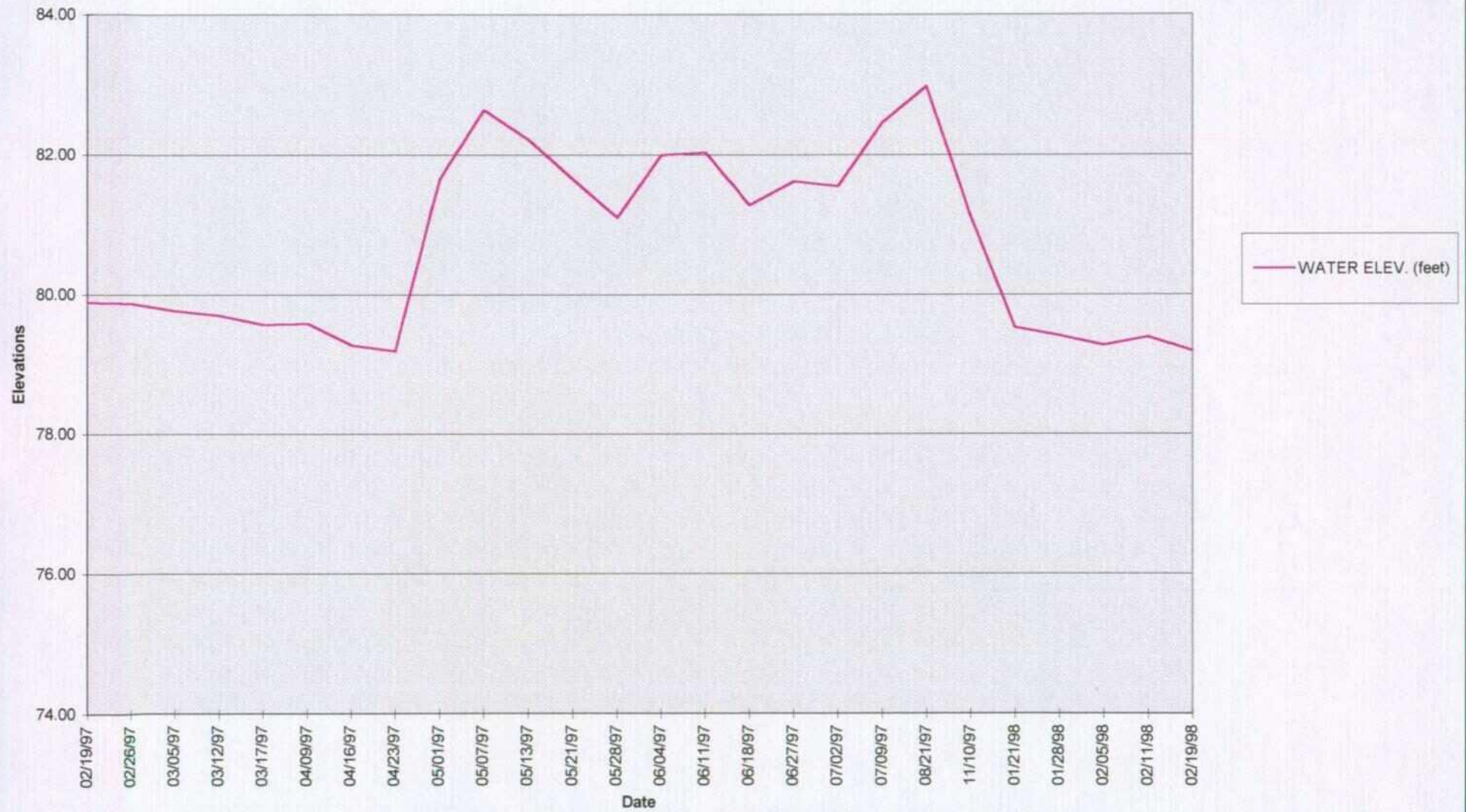
Water Level Elevations vs. Time
R-5



Water Level Elevations vs. Time
M-1



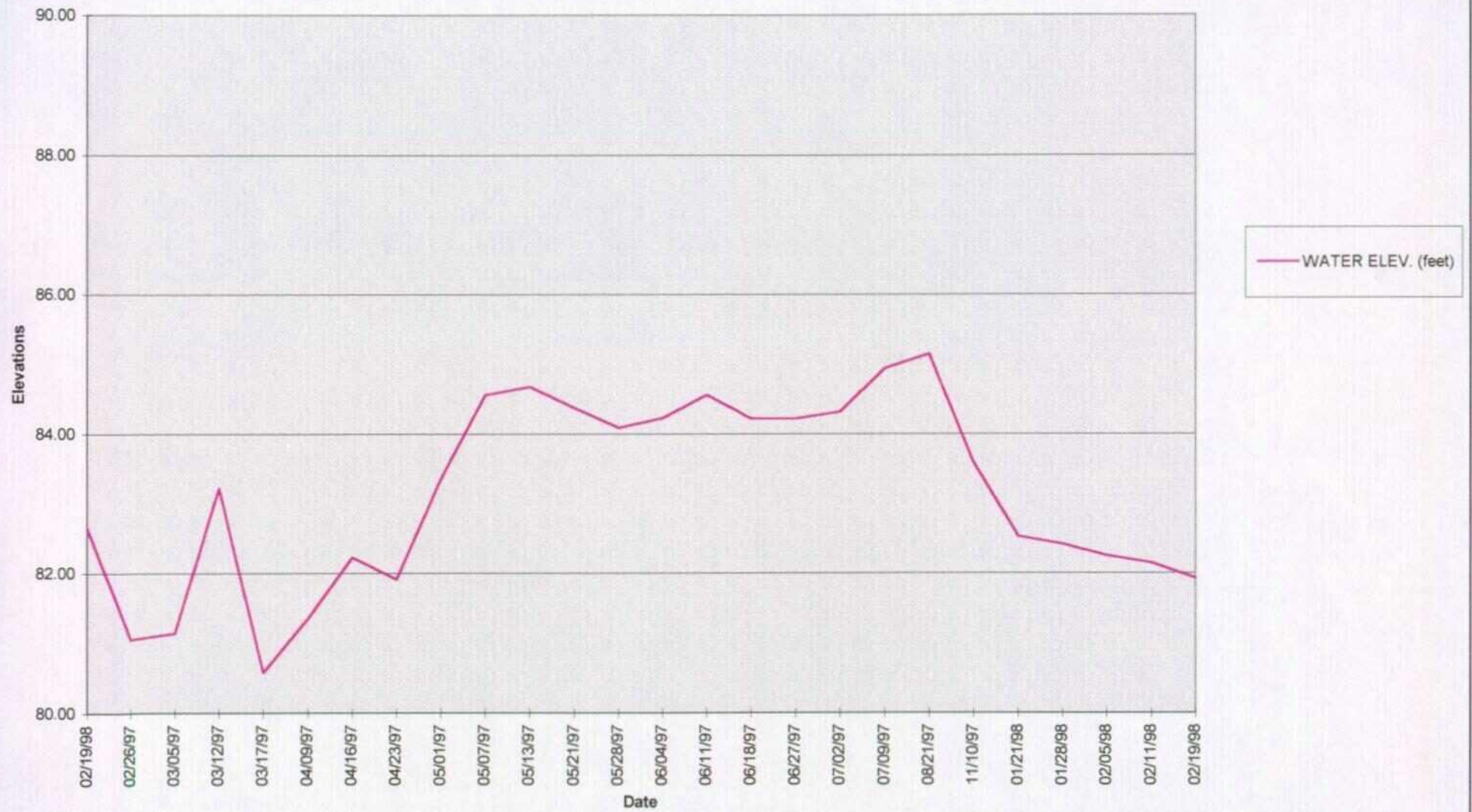
Water Level Elevations vs. Time
M-2



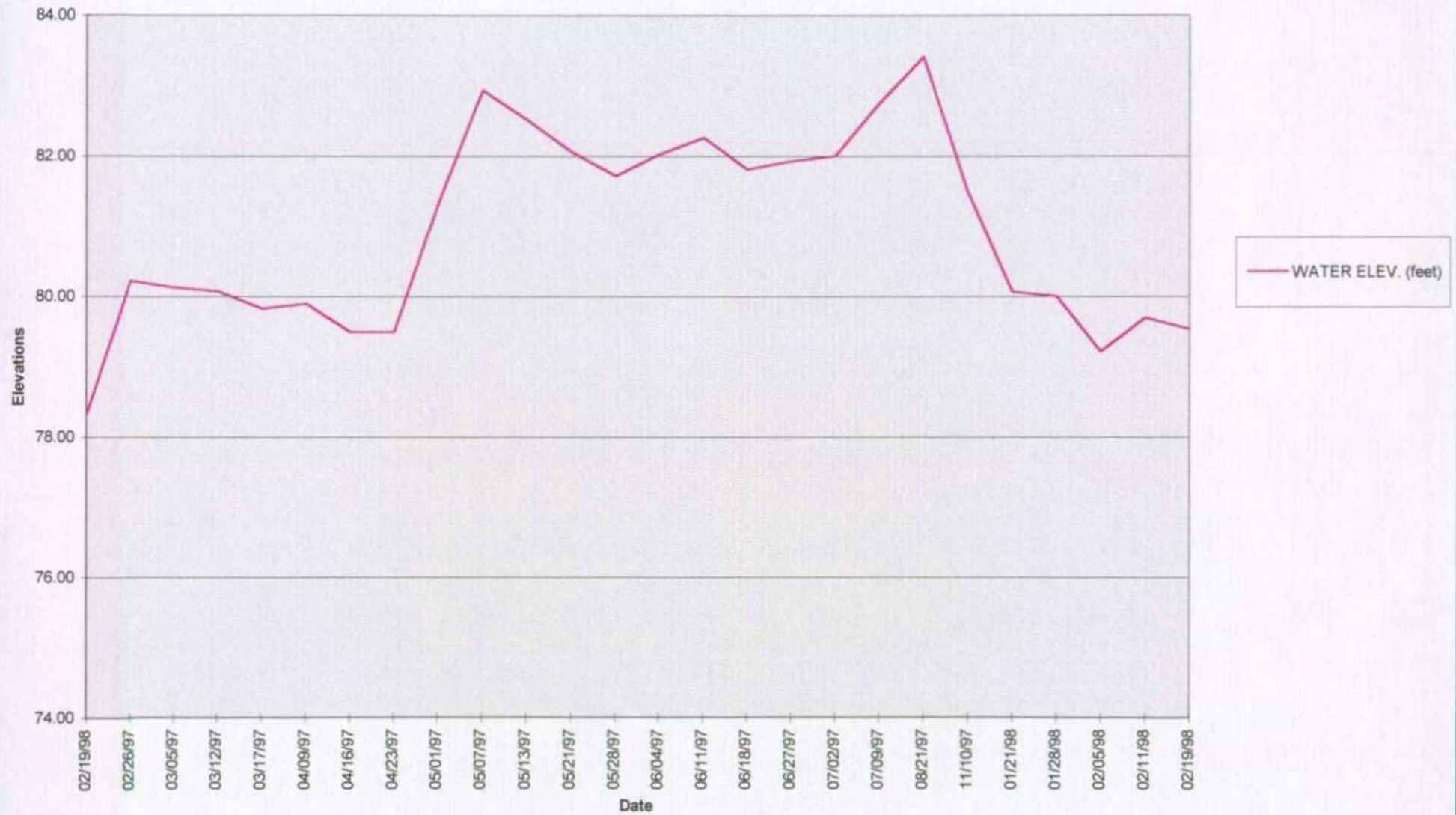
Water Level Elevations vs. Time
M-3



Water Level Elevations vs. Time
M-4



Water Level Elevations vs. Time
M-5



**Appendix C - Record of Subsurface Exploration Forms and
Temporary Monitoring Well Installation**

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # TWR1
Well # TWR-1-1
Page of

Project Name Jaquez Additional Drilling
Project Number 18171 Phase 6001
Project Location BLANCO, NM

Elevation _____
Borehole Location ~10' N. OF R-1
GWL Depth 13.5
Logged By S. POPE
Drilled By K. PADILLA
Date/Time Started 11/4/97 1000
Date/Time Completed 11/4/97 1100

Well Logged By S. POPE
Personnel On-Site D. Chaskey
Contractors On-Site _____
Client Personnel On-Site _____
Drilling Method HSA 4 1/4 ID
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDH PPM BZ BH S			Drilling Conditions & Blow Counts
0										
5	1	5 7	24	Brown Silty SAND, Fine-Med grained loose Moist. Trace Clay		6	0	0	948	Gray, discolored soils @ 6' w/ strong odor
10	2	10 11.5	18	Gray SANDY Clay med fine sand, med stiff wet in sand zones			0	0	10	
15	3	13 15	24	SAME AS ABOVE Saturated in sandy zones	13.5		0	100	1636	Sheen ON sampler
	4	15 16.5	18			16	0	103	1077	
	5	16.5 18.0	18	Gray SAND Med Co grained, some clay saturated			0	0	745	
20										
25										
30										
35										
40										

Comments:

Geologist Signature

[Signature]

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services Corp.
4000 Morroc Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # _____
Well # TWR-1-1
Page _____ of _____

Project Name Jaquez Additional Drilling

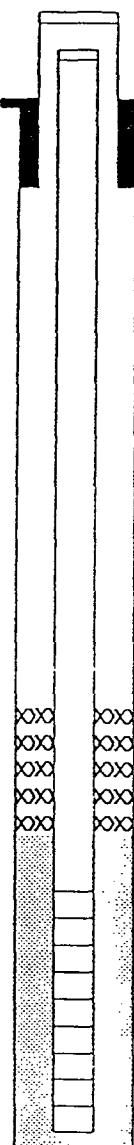
Project Number 18171 Phase 6001
Project Location BLANCO, NM

Elevation _____
Well Location ~ 10' N. of R-1
GWL Depth 14.0
Installed By S. Pope

On-Site Geologist S. Pope
Personnel On-Site D. Charley
Contractors On-Site _____
Client Personnel On-Site _____

Date/Time Started 1100 11/4/97
Date/Time Completed 1130 11/4/97

Depths in Reference to Ground Surface		
Item	Material	Depth
Top of Protective Casing		—
Bottom of Protective Casing		—
Top of Permanent Borehole Casing		—
Bottom of Permanent Borehole Casing		—
Top of Concrete		—
Bottom of Concrete		—
Top of Grout		—
Bottom of Grout		—
Top of Well Riser	2" PVC Sch 40	2.84
Bottom of Well Riser		5.0
Top of Well Screen	2" Sch 40 PVC	5.0
Bottom of Well Screen	.010 SLOT	20.4
Top of Peltonite Seal		—
Bottom of Peltonite Seal		—
Top of Gravel Pack		—
Bottom of Gravel Pack		—
Top of Natural Cave-In		—
Bottom of Natural Cave-In		—
Top of Groundwater		14
Total Depth of Borehole		20.4



Top of Protective Casing 4.0
Top of Riser 2.84
Ground Surface —

Top of Seal —
Top of Gravel Pack —
Top of Screen 5
Bottom of Screen 20.4
Bottom of Borehole 20.4

Comments: _____

Geologist Signature

S. T. Pope

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

Well #

Page

TURK-1-2

of

Project Name

Project Number

Project Location

EPFS, Teague Additional Drilling
18171 Phase 6001
BLANCO, NM

Well Logged By

Personnel On-Site

Contractors On-Site

Client Personnel On-Site

S. Pope
D. Chenley

Drilling Method

Air Monitoring Method

HSA 4 1/4 ID
PID

Elevation

Borehole Location

GWL Depth

Logged By

Drilled By

Date/Time Started

Date/Time Completed

S. Pope

K. PADILLA

11/4/97 1130

11/4/97 1230

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDPPM			Drilling Conditions & Blow Counts
							BZ	BH	S	
0										
5	1	5 7	24	Brown Clayey SAND, Fine-Med grained, med dense, moist			0	0	0	
10	2	10 12	24	SAA wet @ 11.5		12	0	0	0	
	3	12 14		Gray-DK Gray, Sandy Silty Clay Soft, w/variable amount of fine- Med Sand. Saturated OBS	BS	14	0	38	1444	Fill stops @ 12 discolored soil begin STRONG ODOR
15	4	14 16	24	Gray-Dark Gray, SAND, trace clay and silt. M-Coarse Sand loose Saturated		15	0	0	3	
				Change back to Clay same as 12-14' sample w/ abundant Sand		17				
20	5	18 20	24	Gray-DK Gray Med-Coarse Sand, Loose, SATURATED		19				
				TOB 20						
25										
30										
35										
40										

Comments:

Geologist Signature

S. T. Pope

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

Well #

Page of

TWR-1-2

Project Name

EPFS Jaguar Additional Drilling

Project Number

18171

Phase

6001

Project Location

BLANCO, NM

On-Site Geologist

S. Pope

Personnel On-Site

D. Chaskey

Contractors On-Site

Client Personnel On-Site

Elevation

Well Location

Inside excavation N. of R-1

GWL Depth

13.5

Installed By

K. Padilla

Date/Time Started

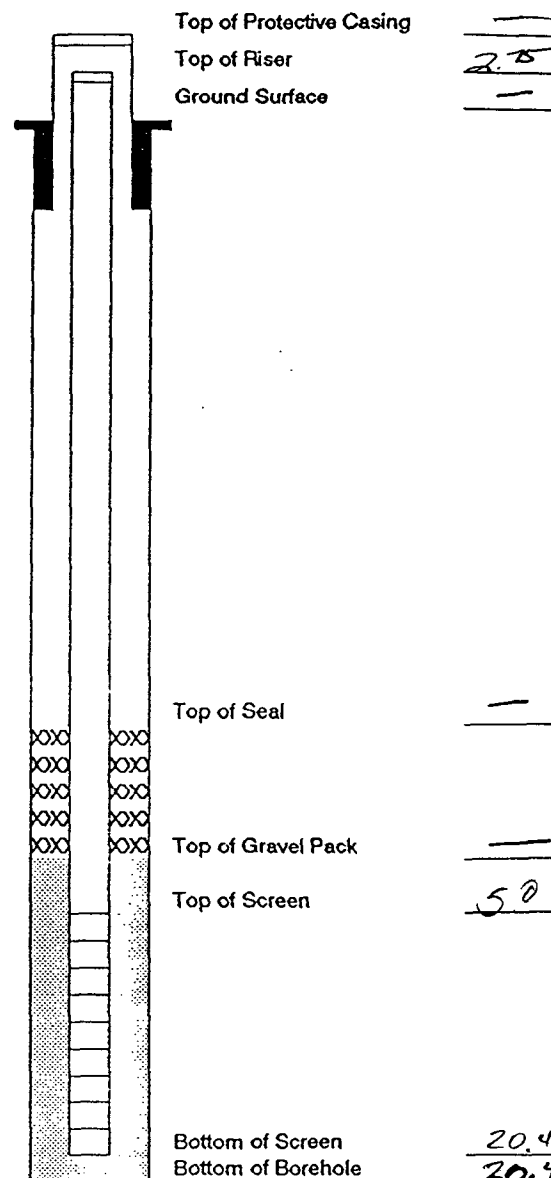
11/4/97 1230

Date/Time Completed

11/4/97 1300

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		—
Bottom of Protective Casing		—
Top of Permanent Borehole Casing		—
Bottom of Permanent Borehole Casing		—
Top of Concrete		—
Bottom of Concrete		—
Top of Grout		—
Bottom of Grout		—
Top of Well Riser	2" Sch 40 PVC	2.5
Bottom of Well Riser		20.0
Top of Well Screen	2" Sch 40 PVC	5.0
Bottom of Well Screen	.010 SLOT	20.0
Top of Peltonite Seal		—
Bottom of Peltonite Seal		—
Top of Gravel Pack		—
Bottom of Gravel Pack		—
Top of Natural Cave-In		—
Bottom of Natural Cave-In		—
Top of Groundwater		13.5
Total Depth of Borehole		20.0



Comments:

Geologist Signature

S. T. Pope

**Appendix D - BTEX Forms and PAH Analytical Lab Reports
for the Current Period**

February 10, 1997

1st Quarter 1997 REPORT
(Includes Annual PAH Results)

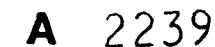
Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 970124 to 970132
Sampled February 19, 1997
Sampled by D. Bird

REMARKS: Please find enclosed the February 1997 monitor well results for this location. These samples were collected for BTEX and PAH's. Monitor wells R-4 and M-4 continue to exceed New Mexico WQCC standards for Benzene. Monitor well M-4 exceeded the New Mexico WQCC standard for Total Naphthalenes. Monitor Wells R-1 and R-2 were not sampled due to the presence of free floating product.

Report Distribution:

Scott Pope, Philip Environmental
Sandra Miller W/O Attachments
Results Log Book

Attachments

[illegible]



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970124
MTR CODE SITE NAME:	N/A	Jaquez R-3
SAMPLE DATE TIME (Hrs):	2/19/97	1100
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	2.12	PPB				
TOLUENE	1.85	PPB				
ETHYL BENZENE	2.29	PPB				
TOTAL XYLENES	12.6	PPB				
TOTAL BTEX	18.9	PPB				

—BTEX is by EPA Method 8020 —

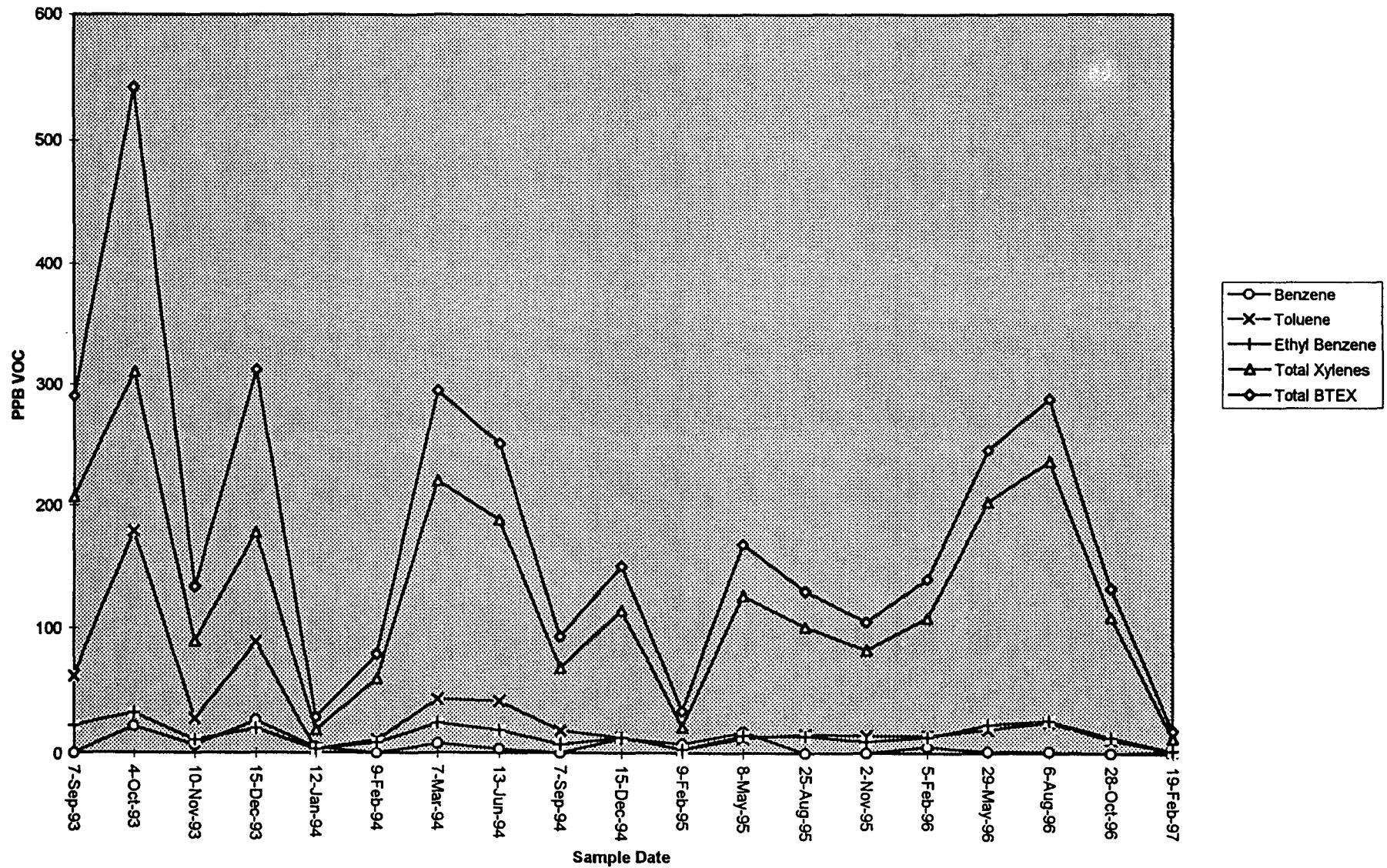
The Surrogate Recovery was at 93.2 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: 2-28-97

Jaquez Monitor Well R-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970125
MTR CODE SITE NAME:	N/A	Jaquez R-4
SAMPLE DATE TIME (Hrs):	2/19/97	1201
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	162	PPB	2	D		
TOLUENE	65.9	PPB	2	D		
ETHYL BENZENE	34.4	PPB	2	D		
TOTAL XYLENES	337	PPB	2	D		
TOTAL BTEX	599	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 91.5 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative: _____

Approved By: _____

John Loecher

Date: _____

2-28-97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970126
MTR CODE SITE NAME:	N/A	Jaquez R-4
SAMPLE DATE TIME (Hrs):	2/19/97	1201
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/21/97	2/21/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: Field Duplicate

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	157	PPB	2	D		
TOLUENE	51.2	PPB	2	D		
ETHYL BENZENE	20.9	PPB	2	D		
TOTAL XYLENES	224	PPB	2	D		
TOTAL BTEX	453	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 92.5 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

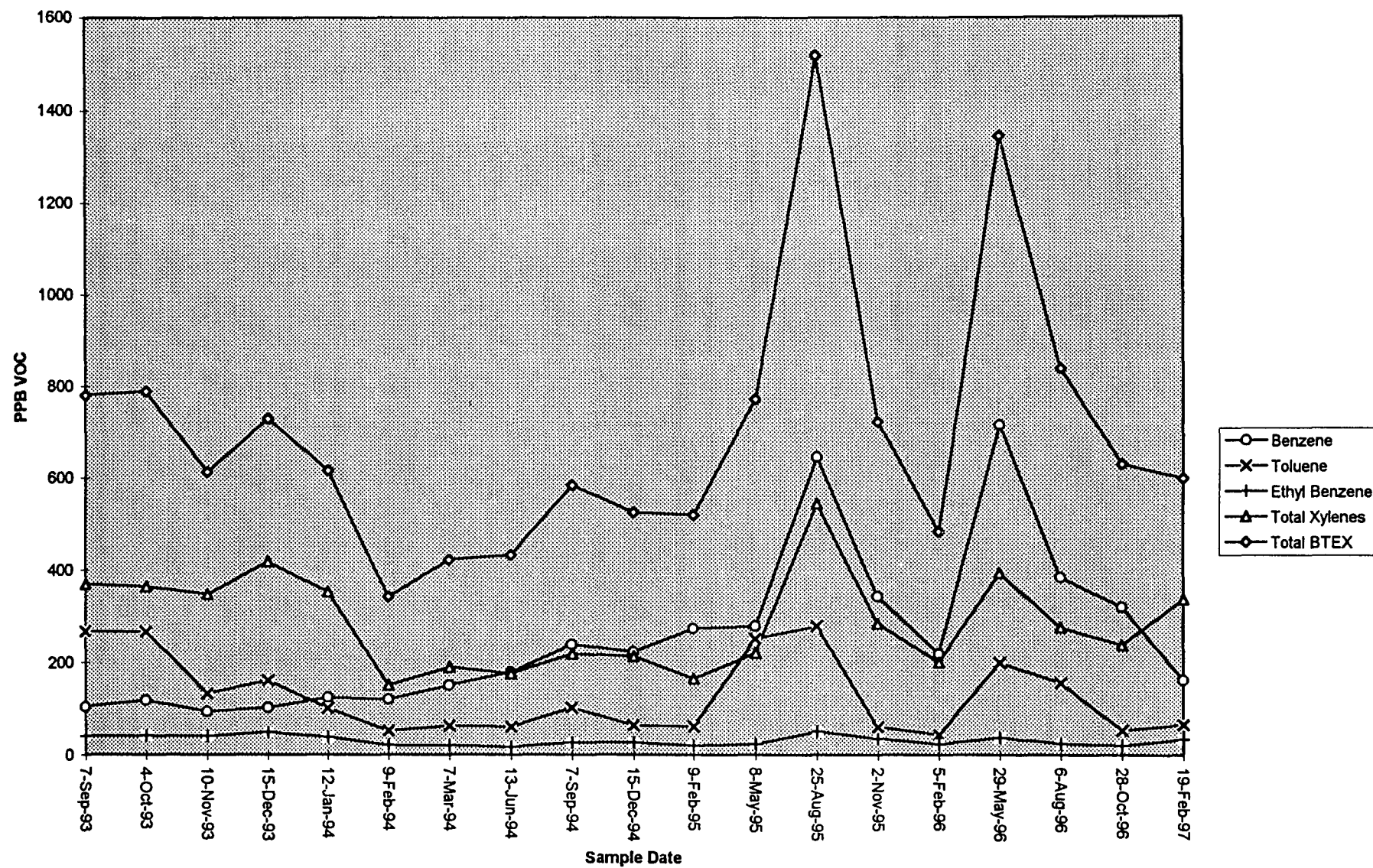
The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By: John L. Smith

Date: 2-28-97

Jaquez Monitor Well R-4





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970127
MTR CODE SITE NAME:	N/A	Jaquez R-5
SAMPLE DATE TIME (Hrs):	2/19/97	1259
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

—BTEX is by EPA Method 8020 —

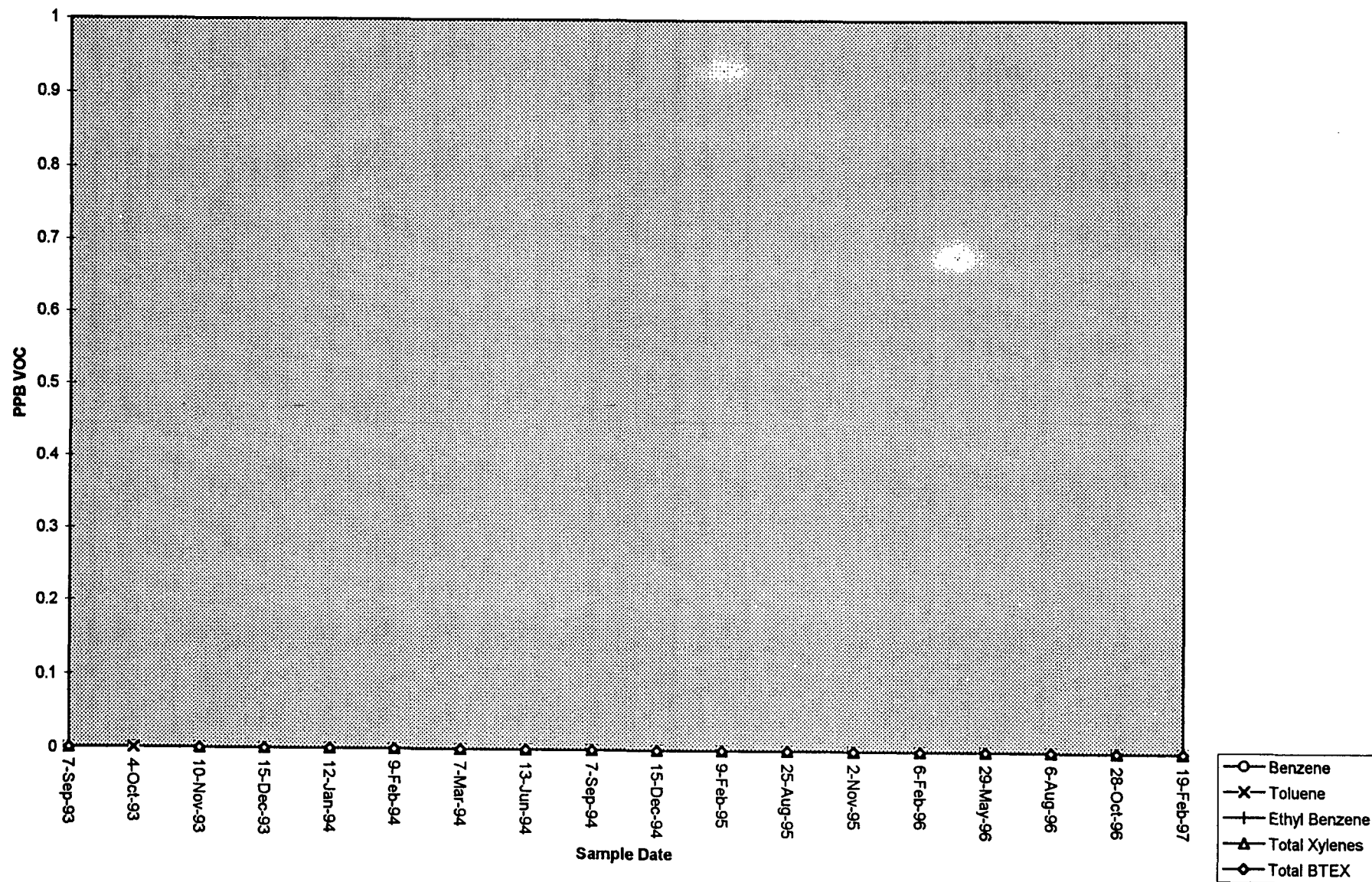
The Surrogate Recovery was at 86.2 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: 2-28-97

Jaquez Monitor Well R-5





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970128
MTR CODE SITE NAME:	N/A	Jaquez M-1
SAMPLE DATE TIME (Hrs):	2/19/97	1441
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	< 1	PPB				
TOTAL XYLENES	< 3	PPB				
TOTAL BTEX	< 6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at
DF = Dilution Factor Used

88.0

% for this sample All QA/QC was acceptable.

Narrative: _____

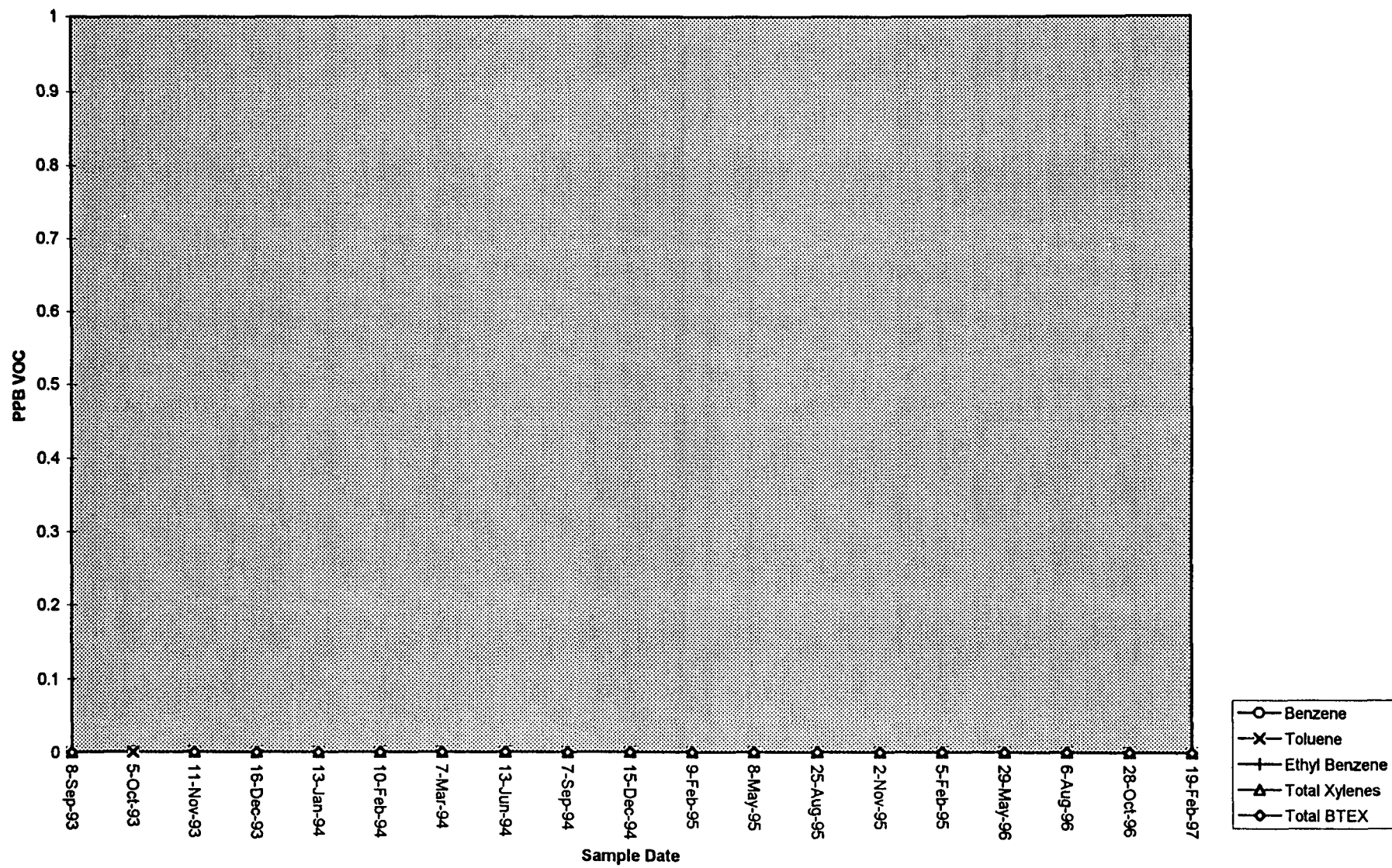
Approved By: _____

John L. Linder

Date: _____

2-28-97

Jaquez Monitor Well M-1





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970129
MTR CODE SITE NAME:	N/A	Jaquez M-2
SAMPLE DATE TIME (Hrs):	2/19/97	1459
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	< 1	PPB				
TOTAL XYLENES	< 3	PPB				
TOTAL BTEX	< 6	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 91.4 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

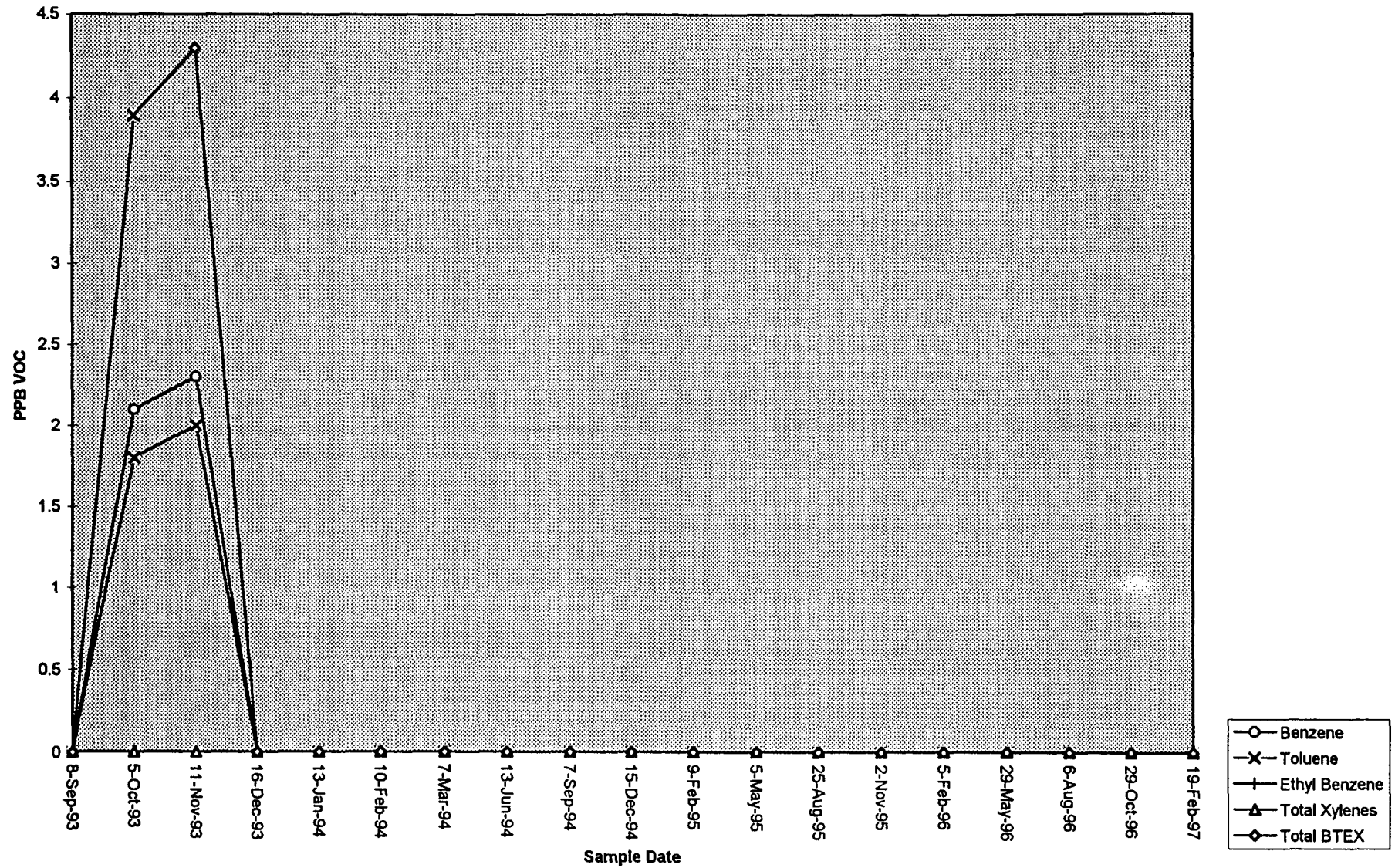
John Latch

Date: _____

2-28-97

970129.XLS,2/26/97

Jaquez Monitor Well M-2





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970130
MTR CODE SITE NAME:	N/A	Jaquez M-3
SAMPLE DATE TIME (Hrs):	2/19/97	1553
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	2.44	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	2.61	PPB				
TOTAL XYLENES	7.43	PPB				
TOTAL BTEX	12.5	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at
DF = Dilution Factor Used

89.0

% for this sample All QA/QC was acceptable.

Narrative: _____

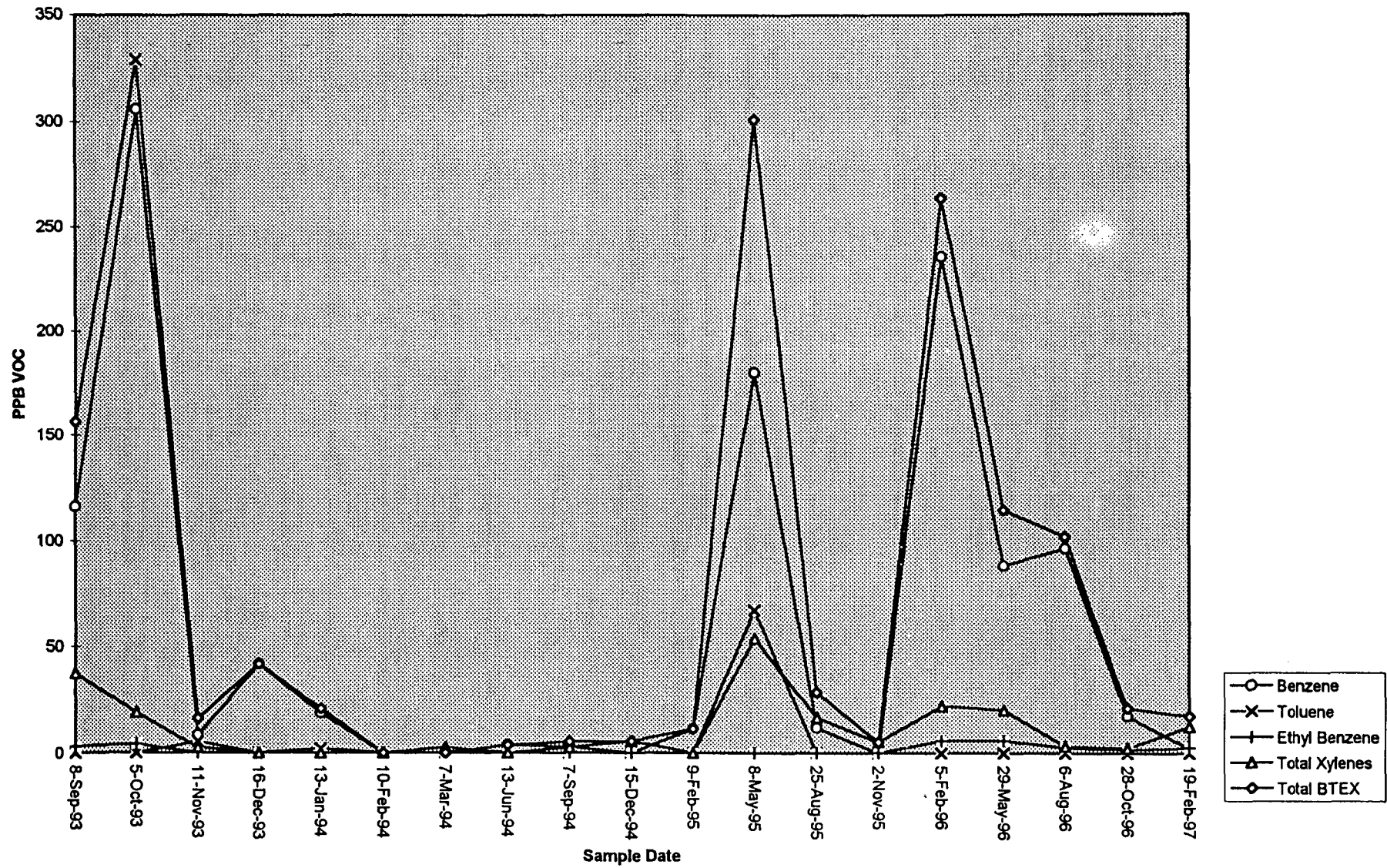
Approved By: _____

John Larch

Date: _____

2-28-97

Jaquez Monitor Well M-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970131
MTR CODE SITE NAME:	N/A	Jaquez M-4
SAMPLE DATE TIME (Hrs):	2/19/97	1710
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	17.7	PPB				
TOLUENE	1.52	PPB				
ETHYL BENZENE	8.30	PPB				
TOTAL XYLENES	54.0	PPB				
TOTAL BTEX	81.5	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at
DF = Dilution Factor Used

91.2

% for this sample All QA/QC was acceptable.

Narrative: _____

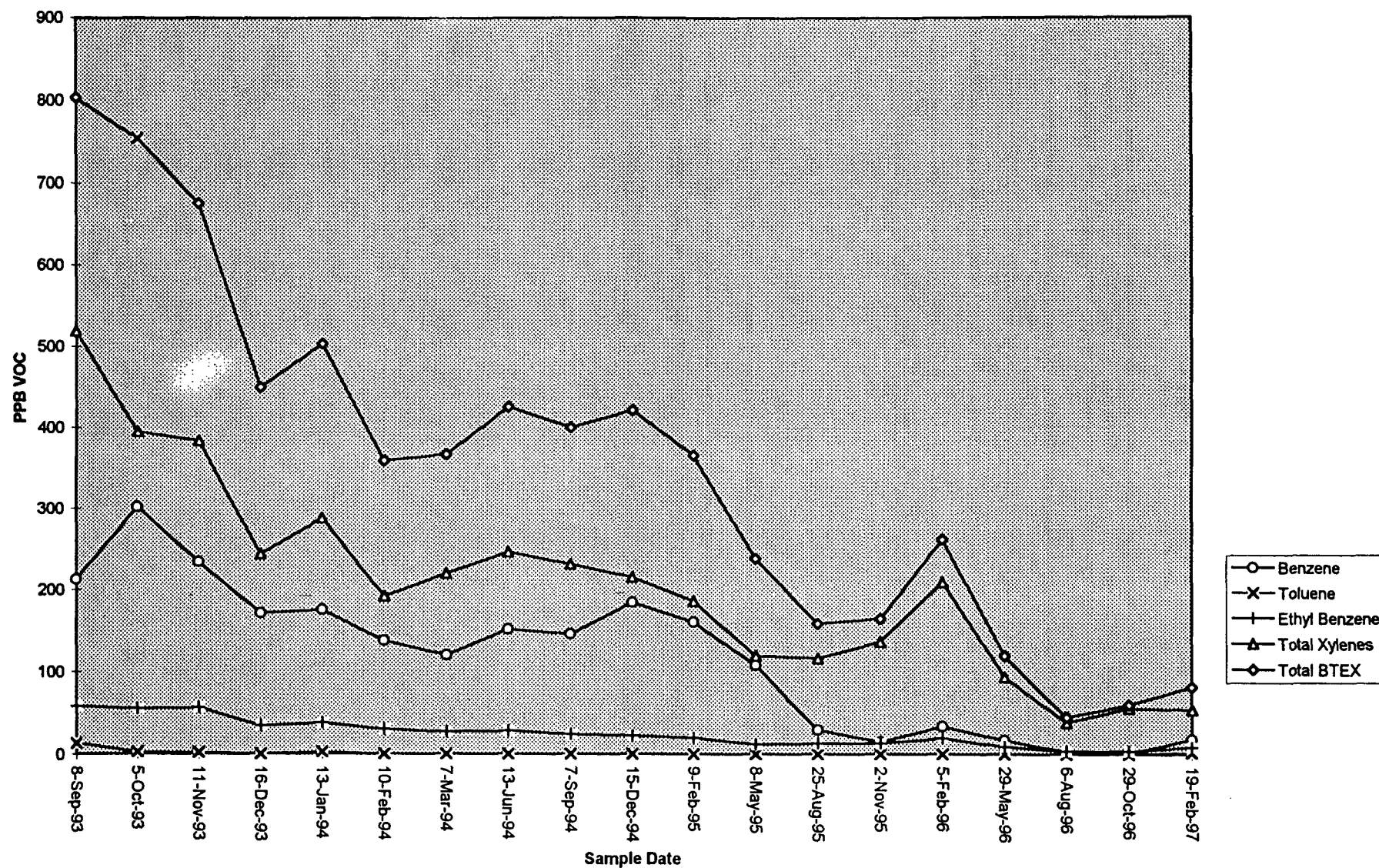
Approved By: _____

John L. Luebke

Date: _____

2-28-97

Jaquez Monitor Well M-4





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID N/A	Lab ID 970132
MTR CODE SITE NAME:	N/A	Jaquez M-5
SAMPLE DATE TIME (Hrs):	2/19/97	1746
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	2/20/97	2/20/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	< 1	PPB				
TOTAL XYLENES	< 3	PPB				
TOTAL BTEX	< 6	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 92.7 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

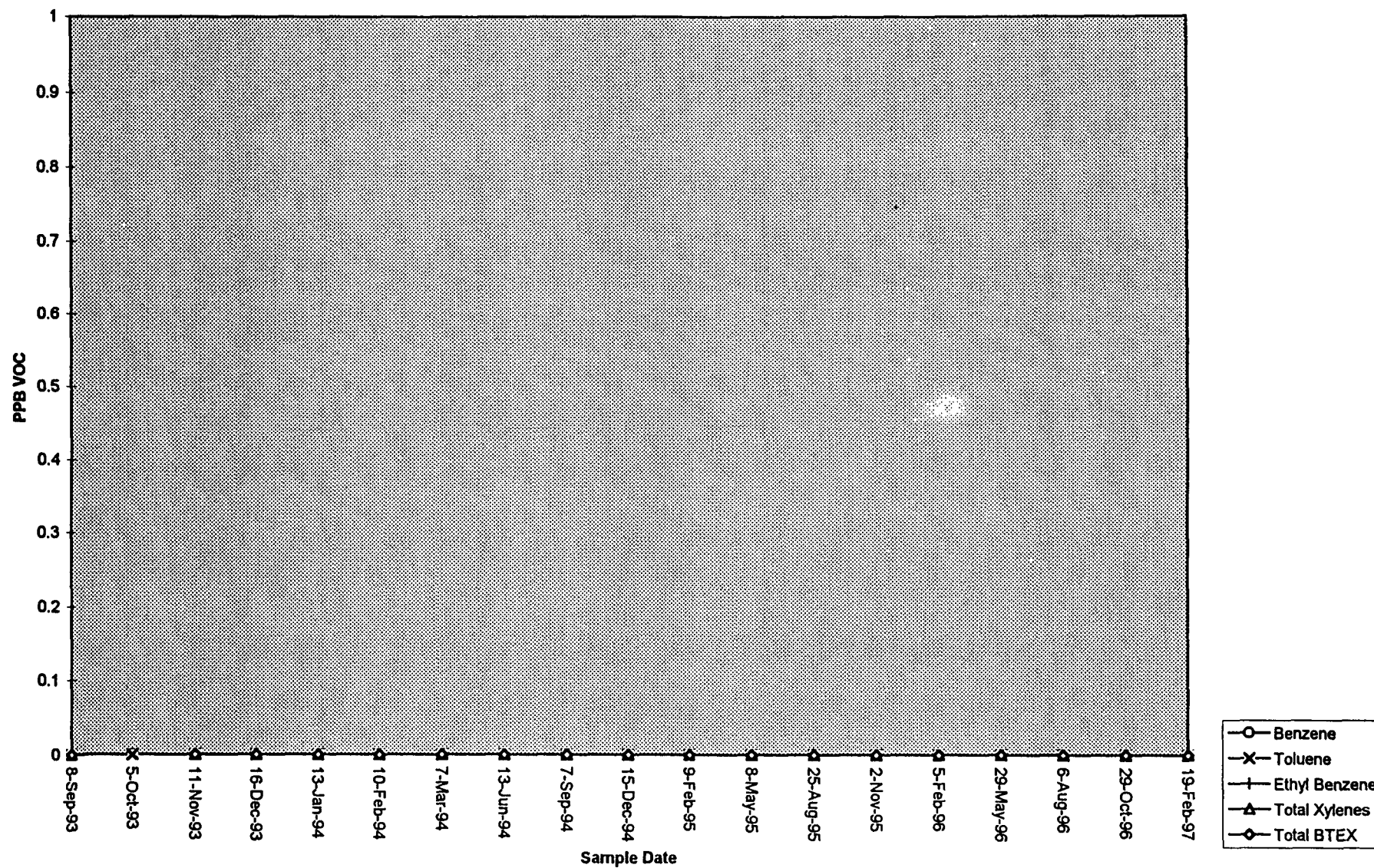
Narrative: _____

Approved By: _____

Date: _____

2-28-97

Jaquez Monitor Well M-5



EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 970124-970133

JARQUEZ + Geyprobe

QA/QC for 02/20/97 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	46.0	92.0	75 - 125 %	X
Toluene	Standard	50.0	47.4	94.8	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.6	95.2	75 - 125 %	X
m & p - Xylene	Standard	100	98.8	98.8	75 - 125 %	X
o - Xylene	Standard	50.0	47.4	94.8	75 - 125 %	X
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	22.0	88.0	39 - 150	X
Toluene	Standard	25.0	23.0	92.0	46 - 148	X
Ethylbenzene	Standard	25.0	23.0	92.0	32 - 160	X
m & p - Xylene	Standard	50.0	47.9	95.8	Not Given	X
o - Xylene	Standard	25.0	23.0	92.0	Not Given	X
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	42.2	84.4	75 - 125 %	X
Toluene	Standard	50.0	45.4	90.8	75 - 125 %	X
Ethylbenzene	Standard	50.0	45.4	90.8	75 - 125 %	X
m & p - Xylene	Standard	100	94.3	94.3	75 - 125 %	X
o - Xylene	Standard	50.0	45.2	90.4	75 - 125 %	X
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	42.4	84.8	75 - 125 %	X
Toluene	Standard	50.0	45.5	91.0	75 - 125 %	X
Ethylbenzene	Standard	50.0	45.3	90.6	75 - 125 %	X
m & p - Xylene	Standard	100	93.8	93.8	75 - 125 %	X
o - Xylene	Standard	50.0	45.1	90.2	75 - 125 %	X

narrative: Acceptable.

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 970124-970133

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE		
					RANGE	YES	NO
970124							
Benzene	Matrix Duplicate	2.12	2.12	0.00	+/- 20 %	X	
Toluene	Matrix Duplicate	1.85	1.72	7.28	+/- 20 %	X	
Ethylbenzene	Matrix Duplicate	2.29	2.30	0.44	+/- 20 %	X	
m & p - Xylene	Matrix Duplicate	9.17	9.38	2.26	+/- 20 %	X	
o - Xylene	Matrix Duplicate	3.43	3.41	0.58	+/- 20 %	X	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE		
					RANGE	YES	NO
2nd Analysis 970124							
Benzene	50	2.12	41.3	78.4	75 - 125 %	X	
Toluene	50	1.85	45.7	87.7	75 - 125 %	X	
Ethylbenzene	50	2.29	46.2	87.8	75 - 125 %	X	
m & p - Xylene	100	9.17	104	94.8	75 - 125 %	X	
o - Xylene	50	3.43	47.4	87.9	75 - 125 %	X	

Narrative: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (Analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (One analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: mdv

Approved By: John Tardak

Date: 2-27-97

Well Development and Purging Data

Site Name JAQUEZ

☐ Development

☐ Purging

Well Number R-1

Meter Code_____

Development Criteria

- ☐ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Methods of Development

- | | |
|---|--|
| <input type="checkbox"/> Pump | <input type="checkbox"/> Bailer |
| <input type="checkbox"/> Centrifugal | <input type="checkbox"/> Bottom Valve |
| <input type="checkbox"/> Submersible | <input type="checkbox"/> Double Check Valve |
| <input type="checkbox"/> Peristaltic | <input type="checkbox"/> Stainless-steel Kemmerer |
| <input type="checkbox"/> Other | |

Water Volume Calculation

Initial Depth of Well (feet) 22.1
Initial Depth to Water (feet) 18.30
Height of Water Column in Well (feet)

Diameter (inches): Well _____ Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☐ pH Meter
☐ DO Monitor
☐ Conductivity Meter
☐ Temperature Meter
☐ Other _____

Water Disposal

on Site Barrels 8/28/91

Water Removal Data

40,200 mls Product Removed / Ditch low (1/4 FULL) 8 3/3/97

[illegible]

Comments 2.48' OF FREE FLOATING HYDROCARBON. DID NOT SAMPLE DUE TO FREE FLOATING PRODUCT

Developer's Signature Dennis Bird Date 2-19-97 Reviewer J. L. Lutz Date 2-28-97



Well Development and Purging Data

Site Name JAQUEZ

☐ Development
☒ Purging

Well Number R-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 22.1
 Initial Depth to Water (feet) 16.29
 Height of Water Column in Well (feet) 5.81
 Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>3.8</u>	<u>11.5</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	0952										12.8	6.65	795		
2-19-97	0959						5.0	5.0			12.8	6.72	419		
2-19-97	1036						5.0	10.0			14.0	6.94	388		
2-19-97	1042						3.0	13.0			13.8	6.95	361	1.5	

Comments BAILED DRX P 5.0 GALLONS.

Developer's Signature Lennie Bird

Date 2-19-97

Reviewer John Lardi

Date 2-28-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAUQUEZ

- ☐ Development
☒ Purging

Well Number R-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 221
Initial Depth to Water (feet) 15.81
Height of Water Column in Well (feet) 6.29
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>4.2</u>	<u>12.5</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	1012										15.0	6.67	530		
2-19-97	1018						5.0	5.0			14.7	6.75	519		
2-19-97	1025						3.0	8.0			15.0	7.01	764		
2-19-97	1051						5.0	13.0			14.4	7.16	840	1.0	

Comments BAILED DRY @ 7.0 GALLONS.

Developer's Signature

Lennie Bird

Date 2-19-97

Reviewer

John Fuchs

Date

2-28-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAGUEZ

- ☐ Development
☒ Purging

Well Number R-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 24.4
Initial Depth to Water (feet) 18.48
Height of Water Column in Well (feet) 5.92
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>3.9</u>	<u>11.7</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	1226										15.7	7.11	4110		
2-19-97	1231						3.0	3.0			15.1	7.21	4230		
2-19-97	1239						2.0	5.0			15.2	7.47	4220	2.0	

Comments BAILED OUT @ 5.0 GALLONS.

Developer's Signature Dennis Bird

Date 2-19-97

Reviewer John Laid

Date 2-28-97

Well Development and Purging Data

Site Name JAGUEZ

☐ Development
☒ Purging

Well Number M-1

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 6.23
Height of Water Column in Well (feet) 9.07
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.0</u>	<u>18.0</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DO CHEMISTS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
<u>2-19-97</u>	<u>1339</u>										<u>12.7</u>	<u>7.24</u>	<u>274</u>		
<u>2-19-97</u>	<u>1343</u>						<u>3.0</u>	<u>3.0</u>			<u>12.0</u>	<u>7.29</u>	<u>270</u>		
<u>2-19-97</u>	<u>1400</u>						<u>4.0</u>	<u>7.0</u>			<u>14.0</u>	<u>7.51</u>	<u>269</u>	<u>3.0</u>	

Comments BAILED DRY @ 7.0 GALLONS.

Developer's Signature Dennis Bird

Date 2-19-97

Reviewer [Signature]

Date 2-28-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAGUEZ

☐ Development
☒ Purging

Well Number M-2

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.1
Initial Depth to Water (feet) 6.00
Height of Water Column in Well (feet) 9.1
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.0</u>	<u>18.0</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	1408										11.8	6.91	552		
2-19-97	1413						5.0	5.0			10.0	7.00	573		
2-19-97	1418						5.0	10.0			9.0	7.09	575		
2-19-97	1424						5.0	15.0			9.0	7.15	501		
2-19-97	1429						5.0	20.0			9.0	7.16	480	2.5	

Comments _____

Developer's Signature

Dennis Bied

Date

2-19-97

Reviewer

John Smith

Date

2-28-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JARQUEZ

☐ Development
☒ Purging

Well Number M-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.2
Initial Depth to Water (feet) 8.90
Height of Water Column in Well (feet) 8.3
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.5</u>	<u>16.5</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHROMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	1518										11.9	7.89	546		
2-19-97	1522						5.0	5.0			10.4	7.96	584		
2-19-97	1527						5.0	10.0			10.2	7.97	541		
2-19-97	1535						5.0	15.0			10.0	7.98	495		
2-19-97	1541						5.0	20.0			10.0	7.97	475	3.5	

Comments PLACED THE OXYGEN RELEASE COMPOUND SOCKS BACK INTO THE WELL.

Developer's Signature Kennia Bird

Date 2-19-97

Reviewer John Jull

Date 2-28-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAVEZ

☐ Development
☒ Purging

Well Number M-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.3
Initial Depth to Water (feet) 5.36
Height of Water Column in Well (feet) 9.94
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.6	19.7
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	1615										9.2	9.38	830		
2-19-97	1618						3.0	3.0			8.8	9.26	834		
2-19-97	1621						2.0	5.0			8.9	9.24	828		
2-19-97	1638						3.0	8.0			9.2	9.81	804	4.0	

Comments PLACED THE OXYGEN RELEASE COMPOUND SOCKS BACK INTO THE WELL. BAILED ONLY 50 GAL.

Developer's Signature Dennis Bird

Date 2-19-97 Reviewer John Lull Date 2-28-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name Jaquez

☐ Development
☒ Purging

Well Number M-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.1
Initial Depth to Water (feet) 8.61
Height of Water Column in Well (feet) 8.49
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.6</u>	<u>16.8</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-19-97	1645										8.8	7.37	349		
2-19-97	1649						5.0	5.0			8.5	7.14	360		
2-19-97	1656						5.0	10.0			8.4	7.42	352		
2-19-97	1727						5.0	15.0			7.8	7.48	370		
2-19-97	1732						3.0	18.0			7.7	7.56	365	3.0	

Comments BAILED DRY P 10.0 GALLONS.

Developer's Signature Dennis Bied Date 2-19-97 Reviewer [Signature] Date 2-28-97

American Environmental Network, Inc.

AEN I.D. 702353



March 7, 1997

El Paso Field Service
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: JAQUEZ (NONE)

Attention: John Lambdin

On 02/21/97, American Environmental Network (NM), 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 American Environmental Network (FL) Inc., 11 East Olive Road, Pensacola, FL.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
General Manager

MR:ft

Enclosure

American Environmental Network, Inc.

CLIENT : EL PASO FIELD SERVICES DATE RECEIVED : 02/21/97
PROJECT # : (NONE)
PROJECT NAME : JAQUEZ REPORT DATE : 03/07/97

AEN ID: 702353

	AEN ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	702353-01	970124 - R-3	AQUEOUS	02/19/97
02	702353-02	970125 - R-4	AQUEOUS	02/19/97
03	702353-03	970127 - R-5	AQUEOUS	02/19/97
04	702353-04	970128 - m-1	AQUEOUS	02/19/97
05	702353-05	970129 - m-2	AQUEOUS	02/19/97
06	702353-06	970130 - m-3	AQUEOUS	02/19/97
07	702353-07	970131 - m-4	AQUEOUS	02/19/97
08	702353-08	970132 - m-5	AQUEOUS	02/19/97

---TOTALS---

<u>MATRIX</u>	<u>#SAMPLES</u>
AQUEOUS	8

AEN 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.

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id: 001
 Client Sample Id: 702353-01
 Sample Date/Time: 19-FEB-97 1100
 Received Date: 22-FEB-97

Batch: PAW028
 Blank: A
 Dry Weight %: N/A
 Extraction Date: 24-FEB-97
 Analysis Date: 01-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO (a) ANTHRACENE	UG/L	ND	1	
BENZO (a) PYRENE	UG/L	ND	0.3	
BENZO (b) FLUORANTHENE	UG/L	ND	1	
BENZO (g, h, i) PERYLENE	UG/L	ND	1	
BENZO (k) FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO (a, h) ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	1	1	
INDENO (1, 2, 3-cd) PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	96	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo (a) Pyrene = 20.3 PPB
 Total naphthalenes = 3 PPB

PASS

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 702353
Project Name: EL PASO FIELD SERVICES
Project Location: N/S
Test: POLYNUCLEAR AROMATICS BY 8310
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Matrix: WATER
QC Level: II

Lab Id: 002
Client Sample Id: 702353-02
Sample Date/Time: 19-FEB-97 1201
Received Date: 22-FEB-97
Batch: PAW028
Blank: A
Dry Weight %: N/A
Extraction Date: 24-FEB-97
Analysis Date: 01-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a) ANTHRACENE	UG/L	ND	1	
BENZO(a) PYRENE	UG/L	ND	0.3	
BENZO(b) FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i) PERYLENE	UG/L	ND	1	
BENZO(k) FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h) ANTHRACENE	UG/L	1	1	
FLUORANTHENE	UG/L	1	1	
FLUORENE	UG/L	2	1	
INDENO(1,2,3-cd) PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	3	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	3	1	
2-METHYLNAPHTHALENE	UG/L	3	1	
2-CHLOROANTHRACENE	%REC/SURR	90	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo (a) Pyrene = < 0.3 PPB
Total Naphthalenes = 4.9 PPB

PASS

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id: 003
 Client Sample Id: 702353-03
 Sample Date/Time: 19-FEB-97 1259
 Received Date: 22-FEB-97

Batch: PAW028
 Blank: A
 Dry Weight %: N/A
 Extraction Date: 24-FEB-97
 Analysis Date: 01-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a) ANTHRACENE	UG/L	ND	1	
BENZO(a) PYRENE	UG/L	ND	0.3	
BENZO(b) FLUORANTHENE	UG/L	ND	1	
BENZO(g, h, i) PERYLENE	UG/L	ND	1	
BENZO(k) FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a, h) ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	1	1	
INDENO(1, 2, 3-cd) PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	110	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo(g) Pyrene = < 0.3 PPB
 Total Naphthalenes = < 3.0 PPB

PASS

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id: 004
 Client Sample Id: 702353-04
 Sample Date/Time: 19-FEB-97 1441
 Received Date: 22-FEB-97

Batch: PAW028
 Blank: A
 Dry Weight %: N/A
 Extraction Date: 24-FEB-97
 Analysis Date: 01-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	0.3	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	ND	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	87	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo (a) Pyrene = < 0.3 PPS
 Total Naphthalenes = < 3.0 PPS

PASS

JAQUEZ MW m-2

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id: 005
 Client Sample Id: 702353-05
 Sample Date/Time: 19-FEB-97 1459
 Received Date: 22-FEB-97
 Batch: PAW028
 Blank: A
 Dry Weight %: N/A
 Extraction Date: 24-FEB-97
 Analysis Date: 03-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO (a) ANTHRACENE	UG/L	ND	1	
BENZO (a) PYRENE	UG/L	ND	0.3	
BENZO (b) FLUORANTHENE	UG/L	ND	1	
BENZO (g, h, i) PERYLENE	UG/L	ND	1	
BENZO (k) FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO (a, h) ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	ND	1	
INDENO (1, 2, 3-cd) PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	97	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo (a) Pyrene = 20.3 PPB
 Total Naphthalenes = 23.0 PPB PASS

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id:	006	Sample Date/Time:	19-FEB-97 1553
Client Sample Id:	702353-06	Received Date:	22-FEB-97
Batch: PAW028		Extraction Date:	24-FEB-97
Blank: A	Dry Weight %: N/A	Analysis Date:	03-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a) ANTHRACENE	UG/L	ND	1	
BENZO(a) PYRENE	UG/L	ND	0.3	
BENZO(b) FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i) PERYLENE	UG/L	ND	1	
BENZO(k) FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h) ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	ND	1	
INDENO(1,2,3-cd) PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	112	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo (a) Pyrene = < 0.3 PPB
 Total Naphthalenes = < 3.0 PPB
 PASS

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id: 007
 Client Sample Id: 702353-07
 Sample Date/Time: 19-FEB-97 1710
 Received Date: 22-FEB-97
 Batch: PAW028
 Blank: A
 Dry Weight %: N/A
 Extraction Date: 24-FEB-97
 Analysis Date: 03-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	1	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a) ANTHRACENE	UG/L	ND	1	
BENZO(a) PYRENE	UG/L	ND	0.3	
BENZO(b) FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i) PERYLENE	UG/L	ND	1	
BENZO(k) FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	3	1	
DIBENZO(a,h) ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	3	1	
INDENO(1,2,3-cd) PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	22	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	8	1	
2-METHYLNAPHTHALENE	UG/L	8	1	
2-CHLOROANTHRACENE	%REC/SURR	126	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo(a) Pyrene = < 0.3 PPB PASS
 Total Naphthalenes = 38 PPB FAIL
 Limit = 30 PPB

"FINAL REPORT FORMAT - SINGLE"

Accession: 702410
 Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
 Project Number: 702353
 Project Name: EL PASO FIELD SERVICES
 Project Location: N/S
 Test: POLYNUCLEAR AROMATICS BY 8310
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Matrix: WATER
 QC Level: II

Lab Id: 008
 Client Sample Id: 702353-08
 Sample Date/Time: 19-FEB-97 1746
 Received Date: 22-FEB-97

Batch: PAW028
 Blank: A
 Dry Weight %: N/A
 Extraction Date: 24-FEB-97
 Analysis Date: 03-MAR-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	0.3	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	1	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	133	28-138	
ANALYST	INITIALS	JBT		

Comments:

Benzo(a) Pyrene = < 0.3 PPB

Total naphthalene's = < 3.0 PPB

PASS

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 702410
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 702353
Project Name: EL PASO FIELD SERVICES
Project Location: N/S
Test: POLYNUCLEAR AROMATICS BY 8310

Client Sample Id:	Parameter:	Unit:	Result:
702353-01	FLUORENE	UG/L	1
702353-02	DIBENZO (a, h) ANTHRACENE	UG/L	1
	FLUORANTHENE	UG/L	1
	FLUORENE	UG/L	2
	NAPHTHALENE	UG/L	3
	1-METHYLNAPHTHALENE	UG/L	3
	2-METHYLNAPHTHALENE	UG/L	3
702353-03	FLUORENE	UG/L	1
702353-07	ACENAPHTHYLENE	UG/L	1
	CHRYSENE	UG/L	3
	FLUORENE	UG/L	3
	NAPHTHALENE	UG/L	22
	1-METHYLNAPHTHALENE	UG/L	8
	2-METHYLNAPHTHALENE	UG/L	8
702353-08	FLUORENE	UG/L	1

American Environmental Network, Inc.

"QC Report"

Title: Water Blank
Batch: PAW028
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Blank Id: A. Date Analyzed: 27-FEB-97 Date Extracted: 24-FEB-97

Parameters:	Units:	Results:	Reporting Limits:
ACENAPHTHENE	UG/L	ND	1
ACENAPHTHYLENE	UG/L	ND	1
ANTHRACENE	UG/L	ND	1
BENZO (a) ANTHRACENE	UG/L	ND	1
BENZO (a) PYRENE	UG/L	ND	1
BENZO (b) FLUORANTHENE	UG/L	ND	1
BENZO (g, h, i) PERYLENE	UG/L	ND	1
BENZO (k) FLUORANTHENE	UG/L	ND	1
CHRYSENE	UG/L	ND	1
DIBENZO (a, h) ANTHRACENE	UG/L	ND	1
FLUORANTHENE	UG/L	ND	1
FLUORENE	UG/L	ND	1
INDENO (1, 2, 3-cd) PYRENE	UG/L	ND	1
NAPHTHALENE	UG/L	ND	1
PHENANTHRENE	UG/L	ND	1
PYRENE	UG/L	ND	1
1-METHYLNAPHTHALENE	UG/L	ND	1
2-METHYLNAPHTHALENE	UG/L	ND	1
2-CHLOROANTHRACENE	%REC/SURR	103	28-138
ANALYST	INITIALS	JBT	

Comments:

American Environmental Network, Inc.

"QC Report"

Title: Water Reagent
Batch: PAW028
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

RS Date Analyzed: 28-FEB-97
RSD Date Analyzed: 28-FEB-97

RS Date Extracted: 24-FEB-97
RSD Date Extracted: 24-FEB-97

Parameters:	Spike Added	Sample Conc	RS Conc	RS %Rec	RSD Conc	RSD %Rec	RPD	Rec Lmts
ACENAPHTHYLENE	10.0	<1	12.0	120	11.9	119	1	45-127
BENZO(k) FLUORANTHENE	10.0	<1	10.9	109	11.1	111	2	68-131
CHRYSENE	10.0	<1	10.6	106	10.9	109	3	69-131
PHENANTHRENE	10.0	<1	10.9	109	11.0	110	1	63-124
PYRENE	10.0	<1	10.4	104	10.5	105	1	61-126

Surrogates:
2-CHLOROANTHRACENE 100 100 28-138

Comments:

Notes:

N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

American Environmental Network, Inc.

"QC Report"

Title: Water Matrix
Batch: PAW028
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Dry Weight %: N/A MS Date Analyzed: 01-MAR-97 MS Date Extracted: 24-FEB-97
Sample Spiked: 702410-1 MSD Date Analyzed: 01-MAR-97 MSD Date Extracted: 24-FEB-97

Parameters:	Spike Added	Sample Conc	MS Conc	MS %Rec	MSD Conc	MSD %Rec	RPD	Rec
ACENAPHTHYLENE	10.0	<1	8.2	82	12.5	125	42	51
BENZO(k) FLUORANTHENE	10.0	<1	7.1	71	12.0	120	51*	40
CHRYSENE	10.0	<1	10.3	103	16.3	163*	45	69
PHENANTHRENE	10.0	<1	7.1	71	12.2	122	53*	36
PYRENE	10.0	<1	7.7	77	12.6	126	48*	41

Surrogates:
2-CHLOROANTHRACENE 82 281* 28-138

Comments:
MATRIX SPIKE/MATRIX SPIKE DUPLICATE HAD RECOVERY(S) AND/OR
RPD(S) OUTSIDE ACCEPTANCE LIMITS DUE TO MATRIX INTERFERENCE.
REFER TO REAGENT SPIKE/REAGENT SPIKE DUPLICATE DATA.

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE
PROGRAM AND REFERENCED METHOD.

Accepted QA/QC
John Laiden
3/10/97

American Environmental Network, Inc.

Common notation for Organic reporting

N/S = NOT SUBMITTED

N/A = NOT APPLICABLE

D = DILUTED OUT

UG = MICROGRAMS

UG/L = PARTS PER BILLION.

UG/KG = PARTS PER BILLION.

MG/M3 = MILLIGRAM PER CUBIC METER.

PPMV = PART PER MILLION BY VOLUME.

MG/KG = PARTS PER MILLION.

MG/L = PARTS PER MILLION.

< = LESS THAN DETECTION LIMIT.

* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS

Y = IMPROPER PRESERVATION, NO PRESERVATIVE PRESENT IN SAMPLE UPON RECEIPT.

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRYWEIGHT BASIS.

ND = NOT DETECTED ABOVE REPORTING LIMIT.

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

AEN/GC/FID

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME IONIZATION DETECTOR (FID).

AEN/GC/FIX

AEN GAS CHROMATOGRAPHIC METHOD FOR ANALYSIS OF FIXED GASES EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD) AND FLAME IONIZATION DETECTOR (FID).

AEN/GC/FPD

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME PHOTOMETRIC DETECTOR (FPD) IN SULFUR-SPECIFIC MODE.

AEN/GC/PID

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH PHOTOIONIZATION DETECTOR (PID).

AEN/GC/TCD

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD).

SW-846 METHOD 9020

PARTICULATE MATTER IS REMOVED BY ALLOWING PARTICULATES TO SETTLE IN THE SAMPLE CONTAINER AND DECANTING THE SUPERNATANT LIQUID. EXCESSIVE PARTICULATES ARE REMOVED BY FILTRATION OF THE SUPERNATANT LIQUID.

SW = STEVE WILHITE

PL = PAUL LESCHENSKY

RW = ROBERT WOLFE

KS = KENDALL SMITH

KK = KERRY LEMONT

RP = ROB PEREZ

JBT = JENNIFER TORRANCE

LP = LAVERNE PETERSON

PLD = PAULA DOUGHTY

American Environmental Network

11 East Olive Road

Pensacola, Florida 32514

(904)474-1001

PROJECT SAMPLE INSPECTION FORM

Accession #: 702410

Date Received: 22-Feb-97

- | | |
|---|--|
| 1. Was there a Chain of Custody? <input checked="" type="radio"/> Yes No | 7. Are samples preserved? (Check pH of all H ₂ O except 40ml vials)* <input checked="" type="radio"/> Yes No N/A |
| 2. Was Chain of Custody properly relinquished? <input checked="" type="radio"/> Yes No | 8. Is there sufficient volume for analysis requested? <input checked="" type="radio"/> Yes No |
| 3. Were samples received cold? (Check Temperature of Cooler) <input checked="" type="radio"/> Yes No N/A | 9. Were samples received within Holding Time? <input checked="" type="radio"/> Yes No |
| 4. Were all samples properly labeled and identified? <input checked="" type="radio"/> Yes No | 10. Is Headspace visible > 1/4" in diameter in 40ml vials? * If any headspace is evident, comment in out-of-control section. Yes No <input checked="" type="radio"/> N/A |
| 5. Were samples received in proper containers for analysis requested? <input checked="" type="radio"/> Yes No | 11. If sent, were matrix spike bottles returned? Yes No <input checked="" type="radio"/> N/A |
| 6. Were all sample containers received intact? <input checked="" type="radio"/> Yes No | |

Airbill Number: 328 3520 552

Shipped By: Fedex

Cooler Number: N/S

Shipping Charges: N/A

Cooler Weight: N/A

Cooler Temp (°C): 4°C

Out of Control Events and Inspection Comments:

Inspected By: L. Kitt Date: 22-Feb-97 Logged By: L. Kitt Date: 22-Feb-97

+ All preservatives for the State of North Carolina and the State of New York are to be recorded on the sheet provided to record pH results (SOP 938, section 2.2.9).

* According to EPA, 1/4" of headspace is allowed in 40ml vials, however, AEN makes it policy to record any headspace as out-of-control (SOP 938, section 2.2.12).

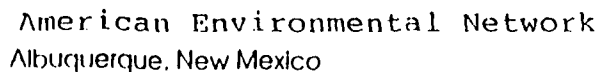
SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: JOHN LAMBORN

COMPANY: EL PASO FIELD SERVICE CO.
ADDRESS: P.O. BOX 4990
FARMINGTON, NM 87499
PHONE: (505) 597-2144
FAX: (505) 597-2281
BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST					SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020) BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTXE/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB □ / DBCP □	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals	NUMBER OF CONTAINERS
					970124	2-19-97	1100	WATER	-01								X												2
					970125	2-19-97	1201	WATER	-02								X												2
					970127	2-19-97	1259	WATER	-03								X												2
					970128	2-19-97	1441	WATER	-04								X												2
					970129	2-19-97	1459	WATER	-05								X												2
					970130	2-19-97	1553	WATER	-06								X												2
					970131	2-19-97	1712	WATER	-07								X												2
					970132	2-19-97	1746	WATER	-08								X												2

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY:		1.	RELINQUISHED BY:	2.	
PROJ NO.		(RUSH) <input type="checkbox"/> 124hr <input type="checkbox"/> 148hr <input type="checkbox"/> 172hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature:	Time:	1925	Signature:	Time:	
PROJ NAME:	JAGUER	CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name:	Date:	2-19-97	Printed Name:	Date:	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Company:		EL PASO FIELD SERVICE	Company:		
SHIPPED VIA:	FEU-X	COMMENTS: FIXED FEE <input type="checkbox"/>		RECEIVED BY:		1.	RECEIVED BY: (LAB)		2.
SAMPLE RECEIPT		LOW LEVEL BENEZ(A) PYRENE < 0.7 PPB		Signature:	Time:		Signature:	Time:	
NO. CONTAINERS	16	CHARGE #		Printed Name:	Date:		Printed Name:	Date:	
CUSTODY SEALS	CONTINUA	6138-8110 - 90010 - 515 - 00622		Company:			Company:		
RECEIVED INTACT	YES						American Environmental Network (NM), Inc.		
BLUE TRACE	YES								



DATE: 2/21 PAGE: 1 OF 1

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJECT NUMBER: 782353		TOTAL NUMBER OF CONTAINERS		SAN DIEGO		Signature: [Signature] Time: 1700		Signature: _____ Time: _____	
PROJECT NAME: El Paso Field Service		CHAIN OF CUSTODY SEALS		Paragon		Printed Name: John Caldwell Date: 11/27/91		Printed Name: _____ Date: _____	
QC LEVEL STD IV		INTACT?		RENTON		Albuquerque		Company: _____	
QC REQUIRED MS MSD BLANK		RECEIVED GOOD COND /COLD		PENSACOLA X		RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
IAI STANDARD RUSH!		LAB NUMBER		PORTLAND		Signature: [Signature] Time: 0930		Signature: _____ Time: _____	
				PHOENIX		Printed Name: Linda Kitt Date: 2/22/91		Printed Name: _____ Date: _____	
DUE DATE: 3/5 Low Level: Benz (A) Pyrene						Company: [Signature]		Company: _____	
RUSH SURCHARGE: _____									
CLIENT DISCOUNT: _____									
SPECIAL CERTIFICATION REQUIRED: [] YES [] NO									

CHAIN OF CUSTODY

DATE: 2-19-97 PAGE: 1 OF 1

AEN LAB I.D.

702353

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: JOHN LAMEDIA					ANALYSIS REQUEST																						
COMPANY: EL PASO FIELD SERVICE CO.					Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504	EDB <input type="checkbox"/> / DBCP <input type="checkbox"/>	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
ADDRESS: P.O. BOX 4990																											
PHONE: (505) 599-2144																											
FAX: (505) 599-3261																											
BILL TO: SAME AS ABOVE																											
COMPANY:																											
ADDRESS:																											
SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.																							
970124	2-19-97	1100	WATER	-01											X											2	
970125	2-19-97	1201	WATER	-02											X											2	
970127	2-19-97	1259	WATER	-03											X											2	
970128	2-19-97	1441	WATER	-04											X											2	
970129	2-19-97	1459	WATER	-05											X											2	
970130	2-19-97	1553	WATER	-06											X											2	
970131	2-19-97	1712	WATER	-07											X											2	
970132	2-19-97	1746	WATER	-08											X											2	

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.:		(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature: Time: 1925		Signature: Time:	
PROJ. NAME: JAQUEZ		CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name: Date: 2-19-97		Printed Name: Date:	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Company: DENNIS BIRD		Company:	
SHIPPED VIA: FEO-X		COMMENTS: FIXED FEE <input type="checkbox"/>		RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
SAMPLE RECEIPT		LOW LEVEL BEVER (H) PYRENE < 0.7 PPB		Signature: Time:		Signature: Time:	
NO. CONTAINERS: 16		CHARGE #		Printed Name: Date:		Printed Name: Date:	
CUSTODY SEALS: CON/NA		6138-8110-90010-515-00622		Company: EL PASO FIELD SERVICES		Company: American Environmental Network (NM), Inc.	
RECEIVED INTACT: YES							
BLURTCHECK: YES							

American Environmental Network (N.M.), Inc.

100 D.P. American Env. NE

Albuquerque, NM 87107

(505) 344-3777

Remit To:

American Environmental Network (N.M.), Inc.

P.O. Box 5676

Boston, MA 02206

American Environmental Network, Inc.

Bill To: El Paso Field Service Co.

P.O. Box 4990

Farmington, NM 87499

Client #: 850-020

Original

BALANCE DUE: 1,435.65

EPTS Sample #15

970124

970125

970127

+0

970132-

Proj. Name: Jaquez

Date	Invoice
3/ 7/97	76126

PO Number	Terms	Project
	Net 30	AEN ALB-810

Quantity	Description	Rate	Amount
8	EPA Method 8310 Jaquez Annual MW Testing (JAH's) J. L. 3/10/97 APPROVED FOR PAYMENT DATE _____ CHECK # _____ SIGNATURE _____ SANDRA MILLER 598-2141	170.00	1,360.00
	NM Gross Receipts Tax	5.5625%	75.65
Accession #:702353 Authorized by:John Lambdin		TOTAL:	1,435.65

A finance charge of 1 1/2% will be charged on balances 30 days past due
DISTRIBUTION: White-Customer, Yellow-File, Pink-Accounting

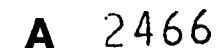
June 4, 1997

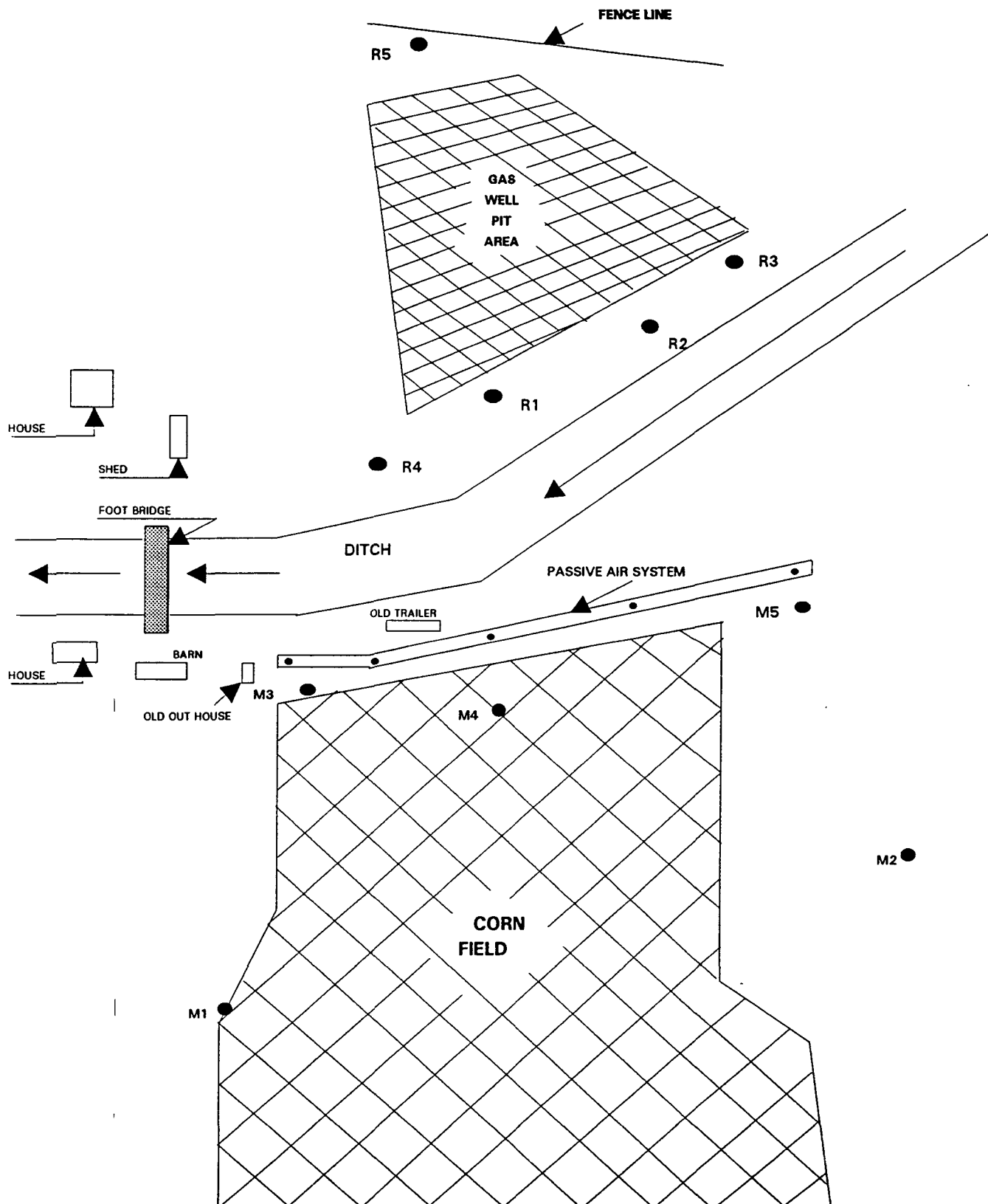
2nd Quarter 1997 REPORT

**Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 970501 to 970509
Sampled May 28, 1997
Sampled by Dennis Bird**

Report Distribution:

Sandra Miller
Scott Pope - Philip Environmental
Results Log Book

[illegible]





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970501
MTR CODE SITE NAME:	N/A	Jaquez R-3
SAMPLE DATE TIME (Hrs):	5/28/97	1025
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/29/97	5/29/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	15.3	PPB				
ETHYL BENZENE	13.5	PPB				
TOTAL XYLENES	130	PPB				
TOTAL BTEX	159	PPB				

The Surrogate Recovery was at 88.2 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

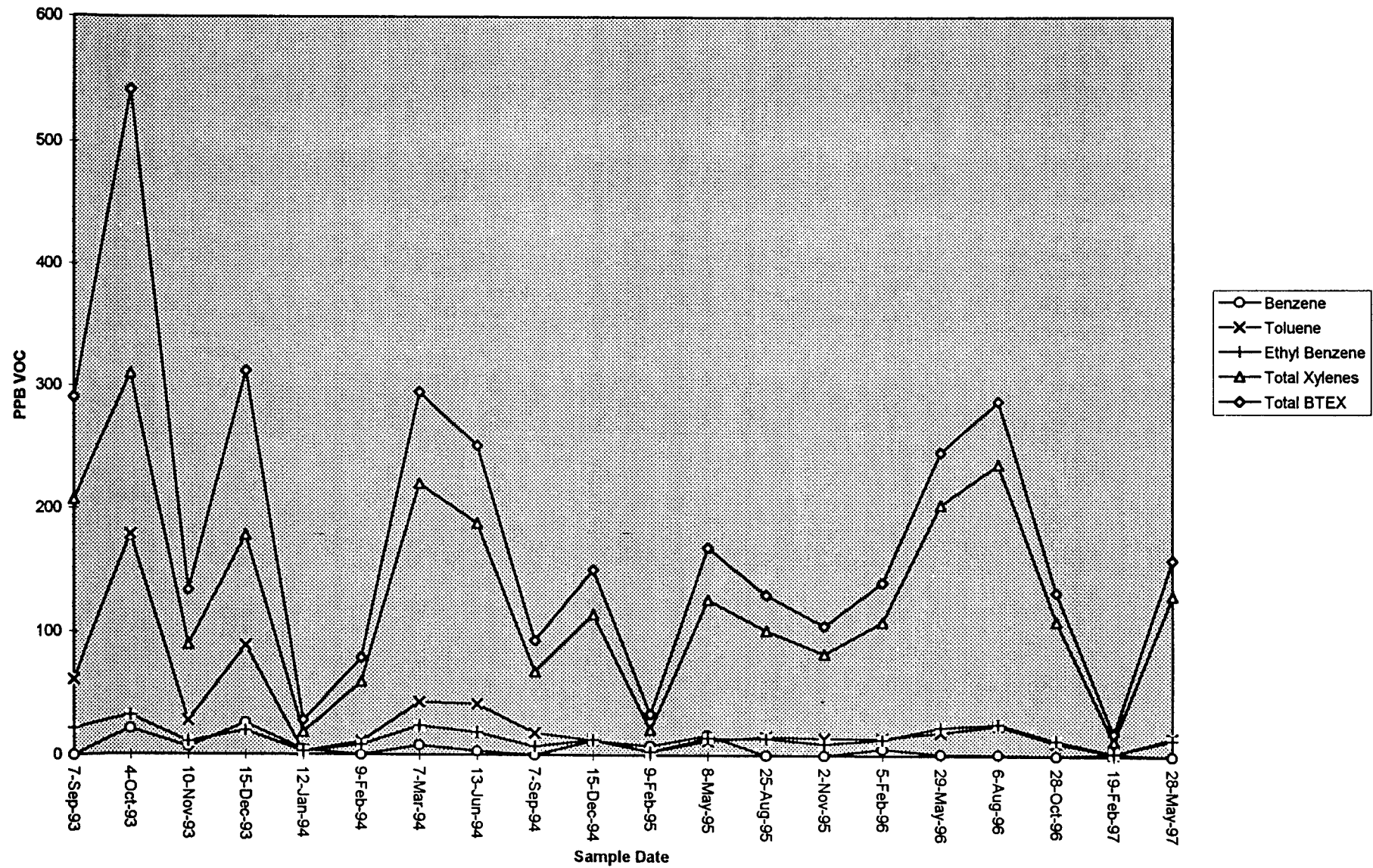
This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

Approved By: _____

Date: 6/4/97

970501,6/4/97

Jaquez Monitor Well R-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970502
MTR CODE SITE NAME:	N/A	Jaquez R-3
SAMPLE DATE TIME (Hrs):	5/28/97	1025
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/29/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: Field Duplicate

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	21.8	PPB				
ETHYL BENZENE	20.2	PPB				
TOTAL XYLENES	191	PPB				
TOTAL BTEX	233	PPB				

The Surrogate Recovery was at 89.7 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

Approved By: John J. Allen

Date: 6/4/97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAUQUEZ

☐ Development
☒ Purging

Well Number R-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 221
Initial Depth to Water (feet) 144.8
Height of Water Column in Well (feet) 7.62
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.0</u>	<u>15.1</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other P.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	0945										14.5	6.07	855		
5-28-97	0952						5.0	5.0			12.0	6.56	881		
5-28-97	0958						5.0	10.0			12.6	6.74	536		
5-28-97	1013						5.0	15.0			13.5	6.95	481	1.5	

Comments BAILED ONLY 10.0 GALLONS.

Developer's Signature Dennis Bird

Date 5-28-97 Reviewer John Tull Date 6/3/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970503
MTR CODE SITE NAME:	N/A	Jaquez R-4
SAMPLE DATE TIME (Hrs):	5/28/97	1148
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	189	PPB	2	D		
TOLUENE	92.5	PPB	2	D		
ETHYL BENZENE	13.3	PPB	2	D		
TOTAL XYLENES	144	PPB	2	D		
TOTAL BTEX	439	PPB				

The Surrogate Recovery was at 89.5 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

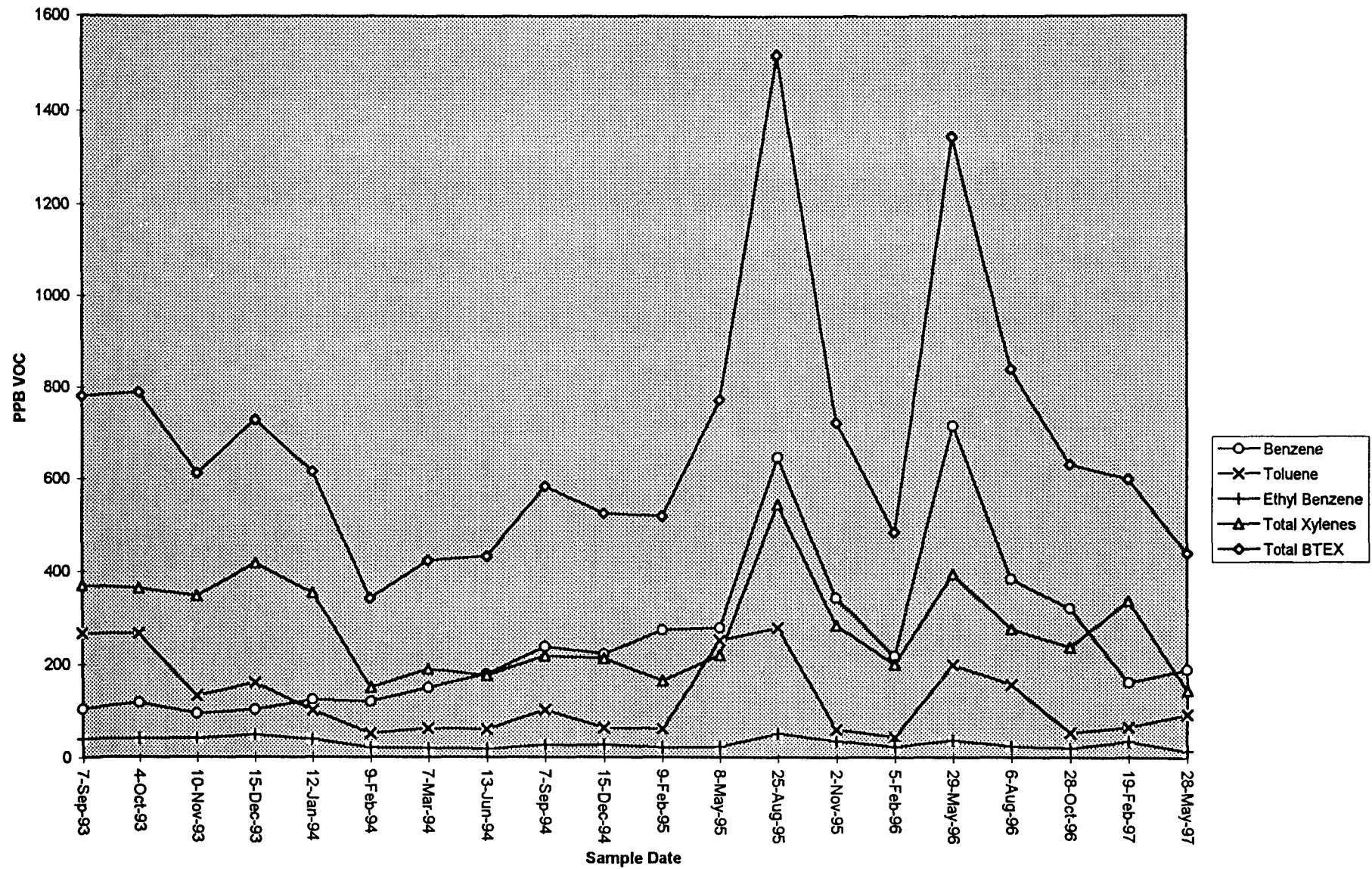
This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

Approved By: _____

Date: _____

6/4/97

Jaquez Monitor Well R-4



Well Development and Purging Data

Site Name JAGUEZ

☐ Development
☒ Purging

Well Number R-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 22.1
Initial Depth to Water (feet) 14.1
Height of Water Column in Well (feet) 8.0
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.3</u>	<u>15.9</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.D. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1049										15.3	7.08	731		
5-28-97	1053						5.0	5.0			14.5	7.04	712		
5-28-97	1102						5.0	10.0			14.6	7.15	914		
5-28-97	1140						5.0	15.0			15.0	7.35	1120	1.5	

Comments BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird

Date 5-28-97

Reviewer John Luth

Date 6/3/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970504
MTR CODE SITE NAME:	N/A	Jaquez R-5
SAMPLE DATE TIME (Hrs):	5/28/97	1202
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

The Surrogate Recovery was at 89.4 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

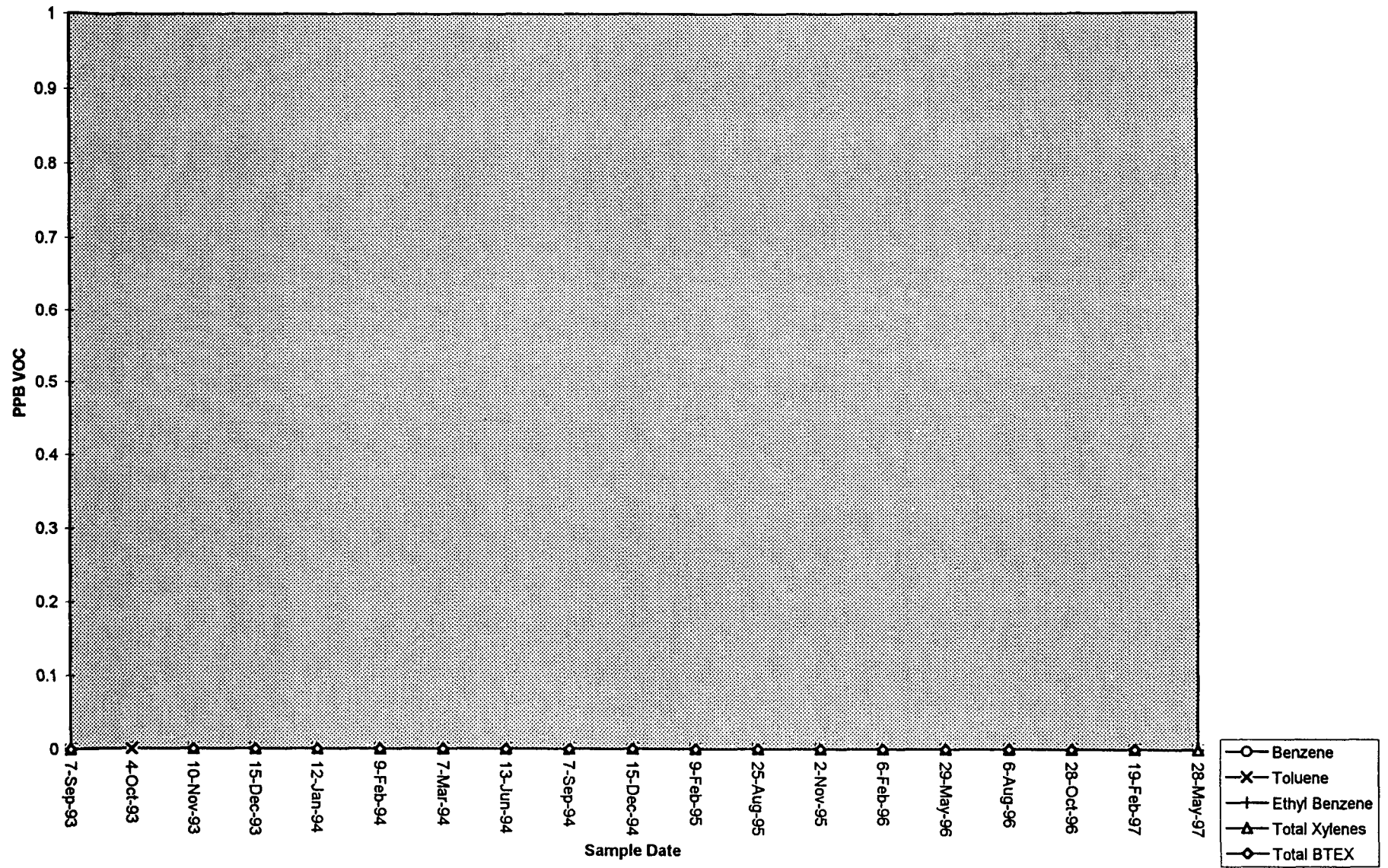
This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

Approved By: _____

Date: 6/4/97

970504,6/4/97

Jaquez Monitor Well R-5





EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAYUEZ

☐ Development
☒ Purging

Well Number R-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 24.4
Initial Depth to Water (feet) 12.34
Height of Water Column in Well (feet) 2.06
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>4.7</u>	<u>14.0</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1114										16.0	7.61	898		
5-28-97	1118						3.0	3.0			15.7	7.58	929		
5-28-97	1122						2.0	5.0			15.8	7.39	2330		
5-28-97	1130						2.0	7.0			16.5	7.54	1459	1.5	

Comments BAILED DRY @ 7.0 GALLONS.

Developer's Signature Dennis Bird

Date 5-28-97 Reviewer John Smith

Date 6/3/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970505
MTR CODE SITE NAME:	N/A	Jaquez M-1
SAMPLE DATE TIME (Hrs):	5/28/97	1402
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

The Surrogate Recovery was at 87.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

Approved By: _____

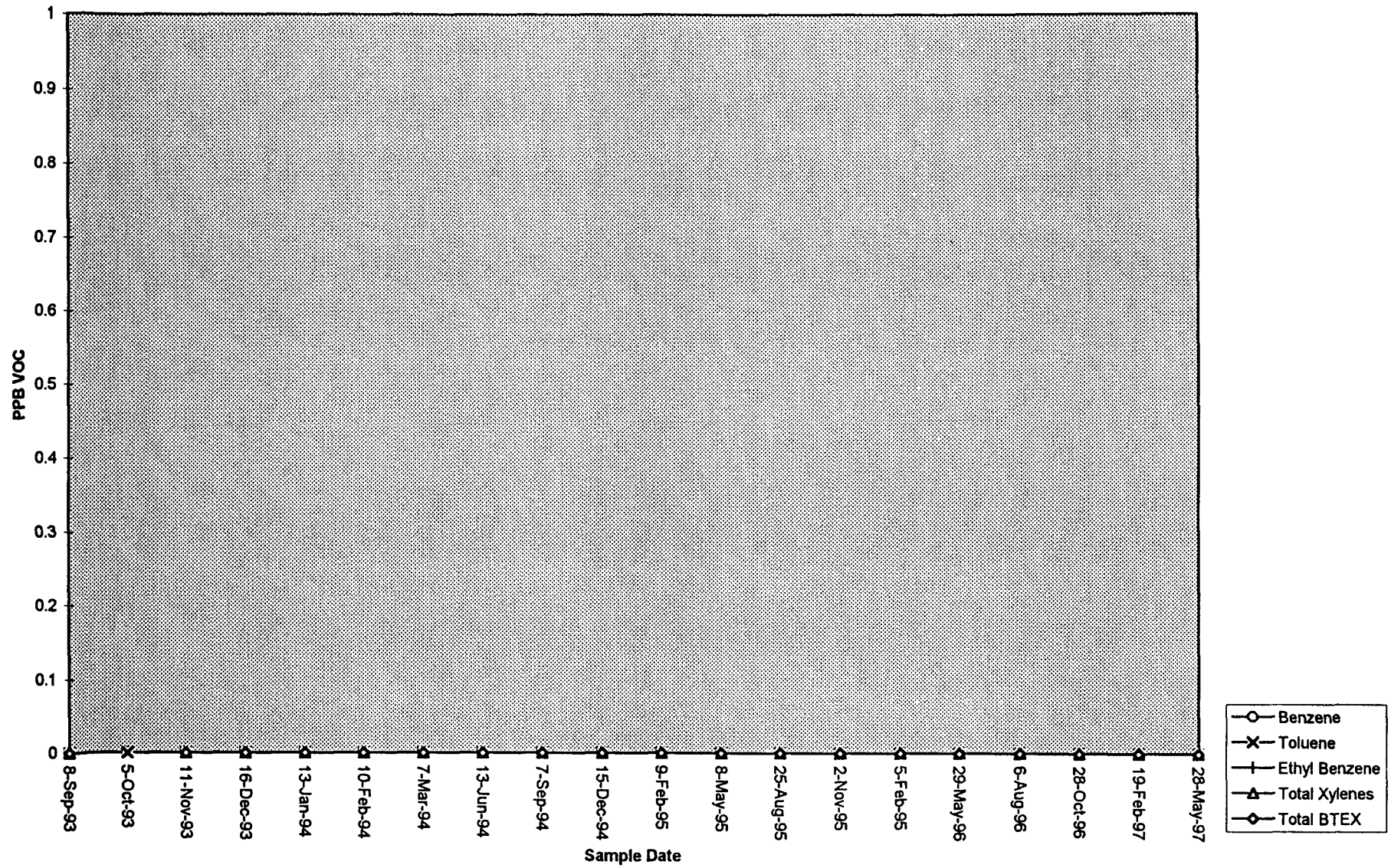
John S. Linder

Date: _____

6/4/97

970505,6/4/97

Jaquez Monitor Well M-1





EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JARQUEZ

☐ Development
☒ Purging

Well Number M-1

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 5.05
Height of Water Column in Well (feet) 10.25
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.8</u>	<u>20.3</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMISTS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1257										19.0	6.66	378		
5-28-97	1300						3.0	3.0			17.0	6.88	359		
5-28-97	1303						2.0	5.0			16.0	6.92	362		
5-28-97	1312						3.0	8.0			15.0	7.08	373	3.5	

Comments BALLED DRY @ 8.0 GALLONS.

Developer's Signature Dennis Bird

Date 5-28-97

Reviewer John Fella

Date 6/3/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970506
MTR CODE SITE NAME:	N/A	Jaquez M-2
SAMPLE DATE TIME (Hrs):	5/28/97	1419
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

The Surrogate Recovery was at 89.3 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

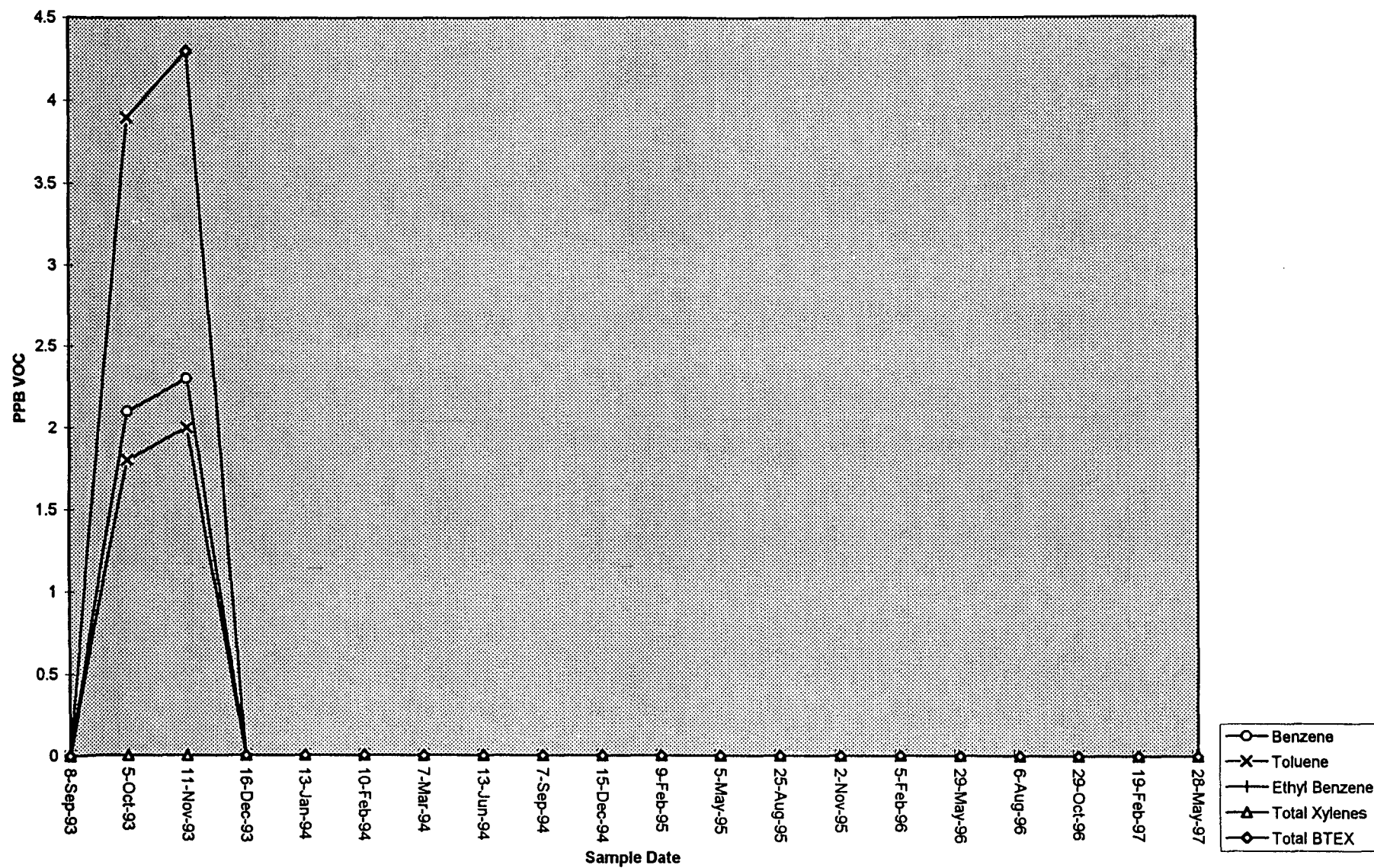
This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

Approved By: _____

Date: _____

6/4/97

Jaquez Monitor Well M-2





EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAQUEZ

☐ Development
☒ Purging

Well Number M-2

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.1
Initial Depth to Water (feet) 4.81
Height of Water Column in Well (feet) 10.29

Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.8	20.4
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1328										16.4	7.16	495		
5-28-97	1335						5.0	5.0			14.2	6.95	533		
5-28-97	1340						5.0	10.0			13.5	6.93	530		
5-28-97	1346						5.0	15.0			13.5	6.93	526		
5-28-97	1352						5.0	20.0			13.5	6.97	504	1.0	

Comments _____

Developer's Signature

Dennis Bird

Date

5-28-97

Reviewer

John L. L...

Date

6/3/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970507
MTR CODE SITE NAME:	N/A	Jaquez M-3
SAMPLE DATE TIME (Hrs):	5/28/97	1523
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	38.0	PPB				
TOLUENE	6.07	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	13.5	PPB				
TOTAL BTEX	57.6	PPB				

The Surrogate Recovery was at 88.3 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain 17.6 PPM

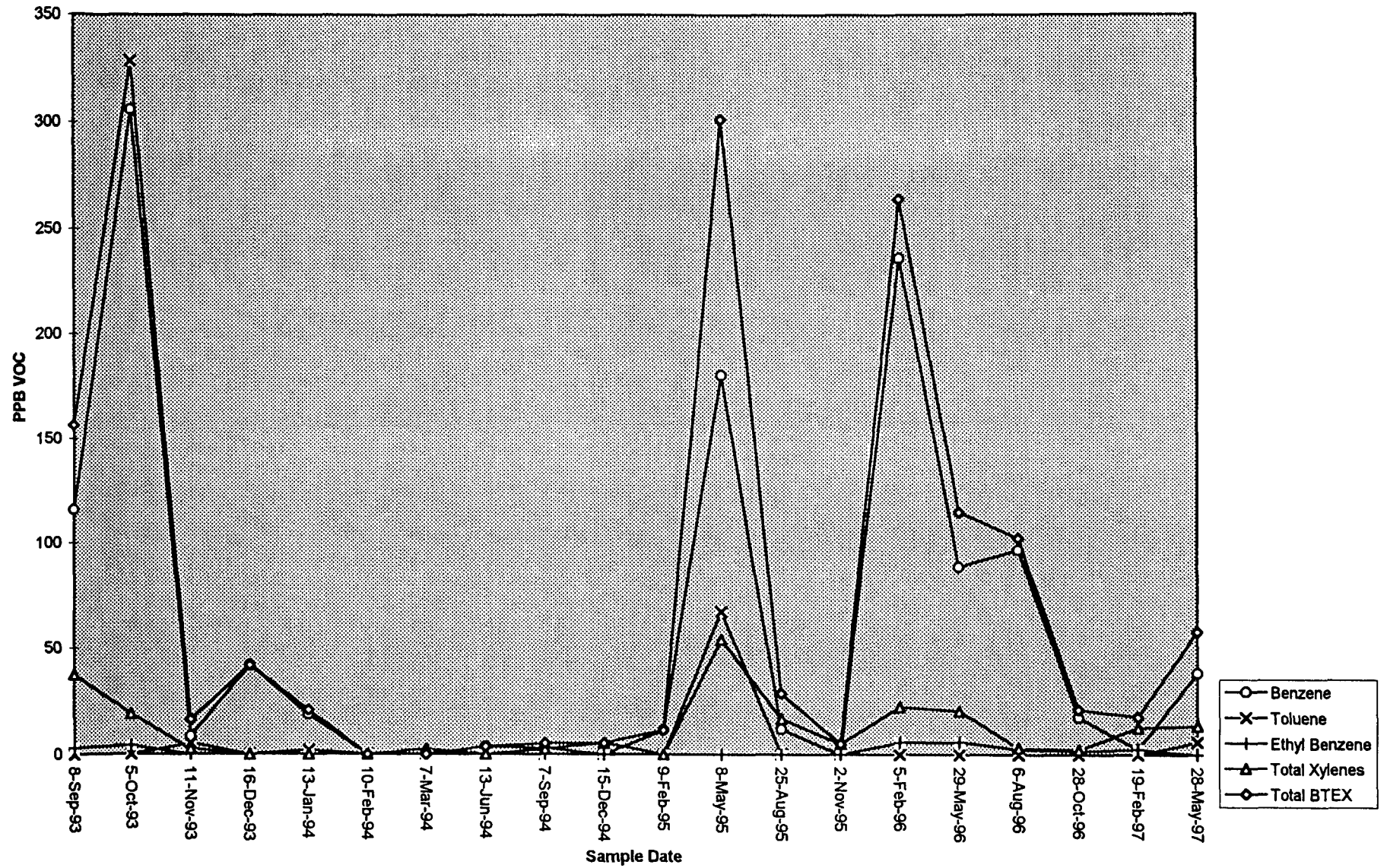
This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain 2.5 PPM

Approved By: _____

Date: _____

6/4/97

Jaquez Monitor Well M-3





EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JARQUEZ

☐ Development
☒ Purging

Well Number M-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.2
Initial Depth to Water (feet) 5.44
Height of Water Column in Well (feet) 9.76

Diameter (inches): Well _____ Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.5</u>	<u>19.4</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1447										17.5	7.05	2720		
5-28-97	1452						5.0	5.0			14.5	7.19	2830		
5-28-97	1457						5.0	10.0			13.5	7.35	1580		
5-28-97	1506						5.0	15.0			14.0	7.42	1275		
5-28-97	1511						5.0	20.0			13.5	7.36	1221	2.5	

Comments Removed oec 34 days prior to Sampling.

Developer's Signature Dennis Bird

Date 5-28-97

Reviewer John L. Lick

Date 4/3/97

oec?



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970508
MTR CODE SITE NAME:	N/A	Jaquez M-4
SAMPLE DATE TIME (Hrs):	5/28/97	1703
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	53.6	PPB				
TOLUENE	11.6	PPB				
ETHYL BENZENE	43.4	PPB				
TOTAL XYLENES	366	PPB				
TOTAL BTEX	475	PPB				

The Surrogate Recovery was at 89.9 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain 225 PPM

This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 5.0 PPM

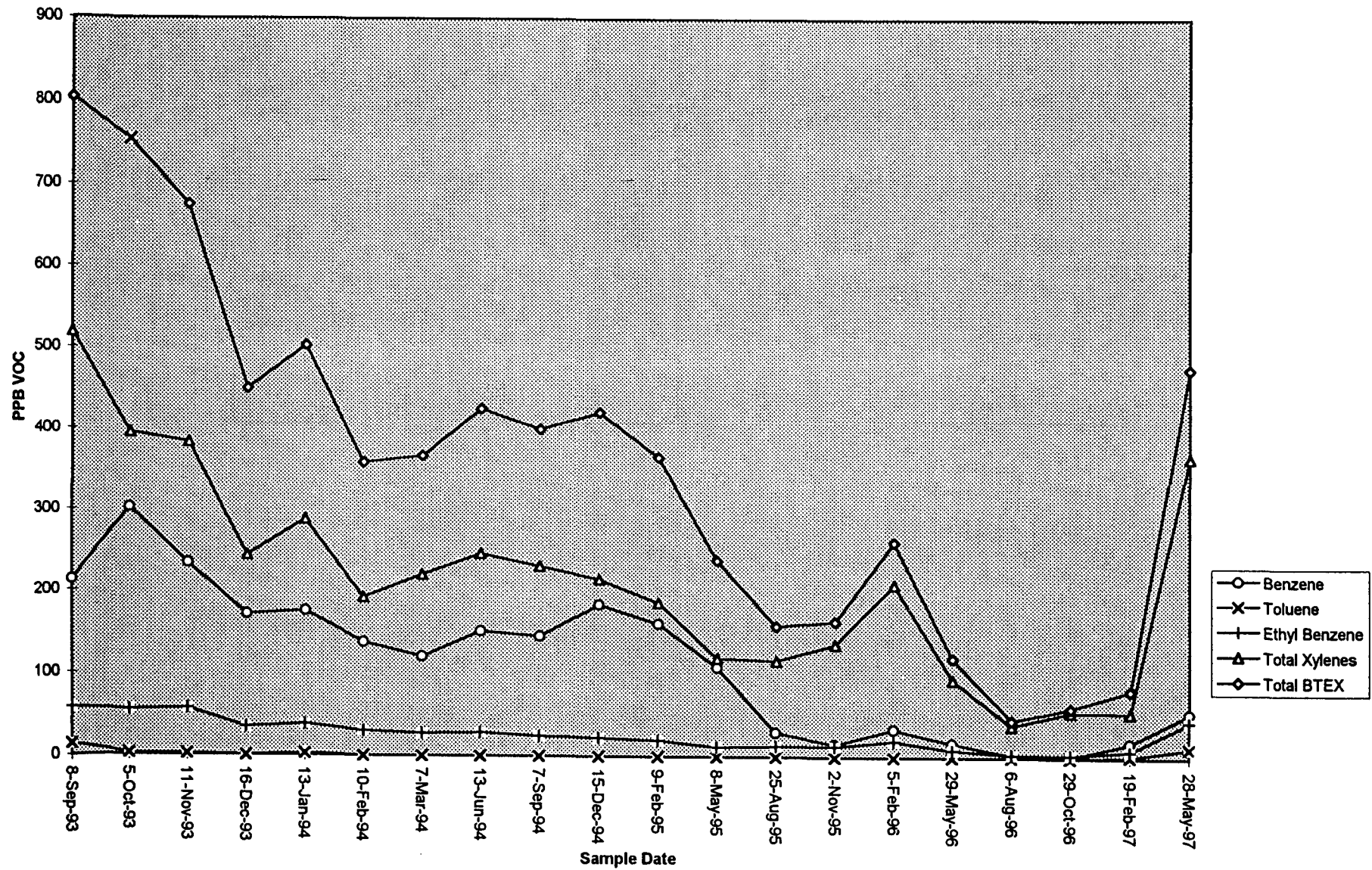
Approved By: _____

Date: _____

6/4/97

970508,6/4/97

Jaquez Monitor Well M-4





EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAUQUEZ

- ☐ Development
☒ Purging

Well Number M-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.3
Initial Depth to Water (feet) 3.89
Height of Water Column in Well (feet) 11.41

Diameter (inches): Well _____ Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>7.5</u>	<u>22.6</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMISTS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1554										18.7	7.92	2020		
5-28-97	1558						3.0	3.0			17.0	7.87	1984		
5-28-97	1601						2.0	5.0			14.8	7.30	2650		
5-28-97	1609						3.5	8.5			15.1	9.18	2370	4.0	
	1650														

Comments BAILED DRY @ 8.5 GALLONS. REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 34 DAYS BEFORE SAMPLING

Developer's Signature Jennie Bird Date 5-28-97 Reviewer John Luller Date 4/3/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970509
MTR CODE SITE NAME:	N/A	Jaquez M-5
SAMPLE DATE TIME (Hrs):	5/28/97	1719
PROJECT:	Jaquez Cornfield	
DATE OF BTEX EXT. ANAL.:	5/30/97	5/30/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

The Surrogate Recovery was at 88.4 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

This sample was tested for Nitrate Nitrogen (NO₃-N) by EPA method 300 and found to contain < 0.6 PPM

This sample was tested for Nitrite Nitrogen (NO₂-N) by EPA method 300 and found to contain < 0.6 PPM

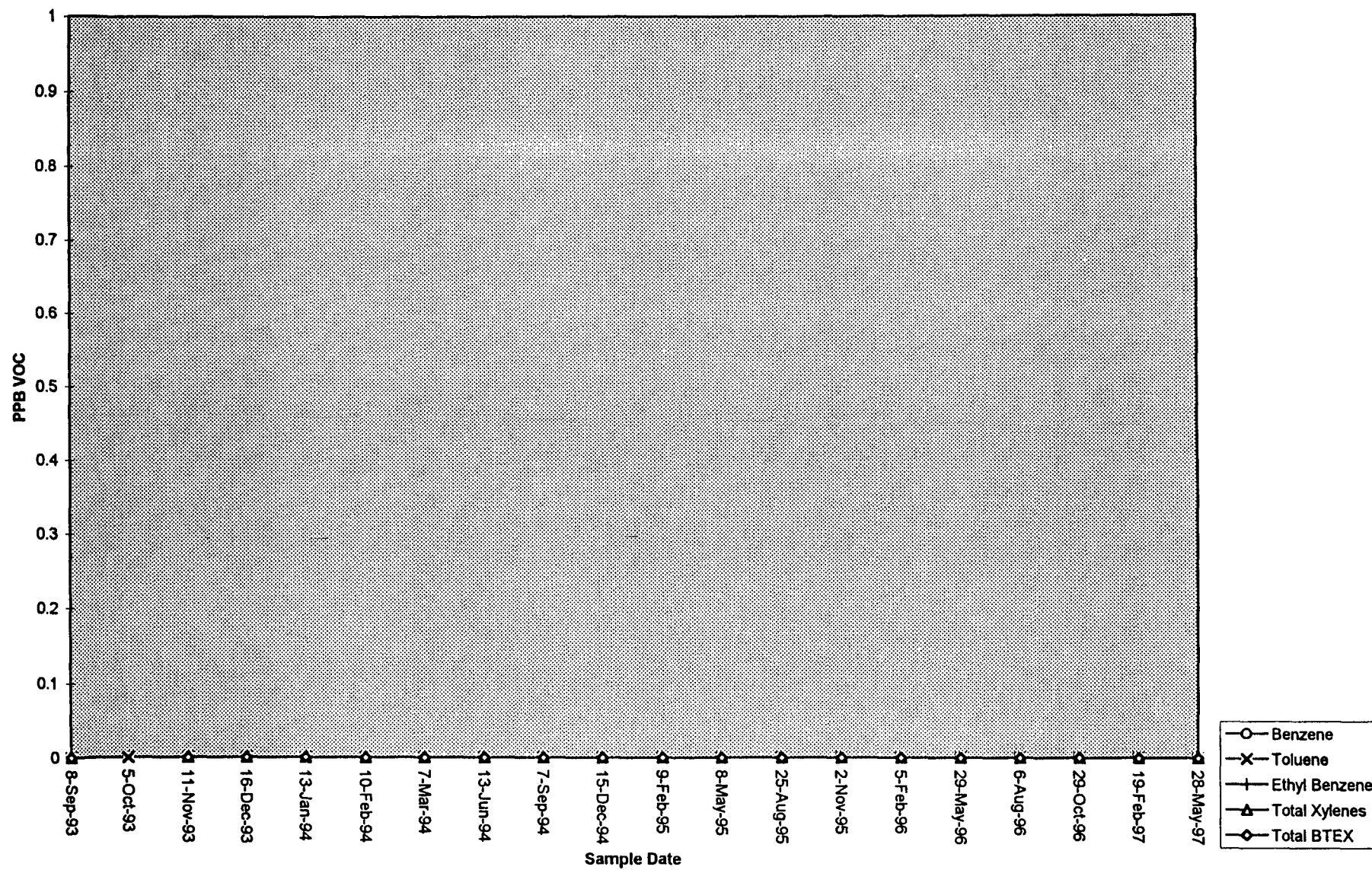
Approved By: _____

Date: _____

6/4/97

970509,6/4/97

Jaquez Monitor Well M-5





EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAYUEZ

☐ Development
☒ Purging

Well Number M-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.1
Initial Depth to Water (feet) 5.64
Height of Water Column in Well (feet) 10.06
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.6</u>	<u>19.9</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DAQCHEMETS KIT

Water Disposal

ON SITE BARRELS

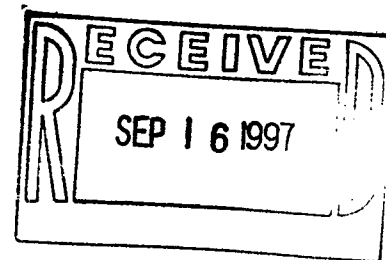
Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
5-28-97	1628										16.4	7.79	409		
5-28-97	1633						5.0	5.0			14.5	7.31	426		
5-28-97	1638						5.0	10.0			13.7	7.16	438		
5-28-97	1650						5.0	15.0			14.5	7.22	421	3.5	

Comments BAILED DRY @ 150 GALLONS

Developer's Signature Dennis Bird Date 5-28-97 Reviewer John Swick Date 9/5/97

September 15, 1997



3rd Quarter 1997 REPORT

**Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 970917 to 970925
Sampled August 21, 1997
Sampled by Dennis Bird**

Report Distribution:

Sandra Miller
Scott Pope - Philip Environmental
Results Log Book

Attachments



Project No.		Project Name		Type and No. of Sample Containers	Requested Analysis				Remarks		
Samplers: (Signature)		Date:			Preservation Technique						
Date	Time	Comp.	GRAB	Sample Number		IS	TX	MT			
8/21/97	0453		X	410717	4°C	X	X		MONITOR WSL R-3		
8/21/97	1133		X	770415	4°C	X	X		MONITOR WSL R-4		
8/21/97	1151		X	770419	4°C	X	X		MONITOR WSL R-5		
8/21/97	1325		X	770420	4°C	X	X		MONITOR WSL M-1		
8/21/97	1419		X	770421	4°C	X	X		MONITOR WSL M-2		
8/21/97	1531		X	770422	4°C	X	X		MONITOR WSL M-3		
8/21/97	1716		X	770423	4°C	X	X		MONITOR WSL M-4		
8/21/97	1716		X	770424	4°C	X	X		MONITOR WSL M-4 FIELD DUP		
8/21/97	1732		X	770425	4°C	X	X		MONITOR WSL M-5		
8/21/97			X		4°C	X			TRIP BLANK		
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
8/21/97		0725									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks:			
				8/25/97		0725					
Carrier Co:				Carrier Phone No.				Date Results Reported / by: (Signature)			
Air Bill No.:											



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970917
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	953
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/26/97	8/26/97
TYPE DESCRIPTION:	R-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	20.8	PPB				
ETHYL BENZENE	18.6	PPB				
TOTAL XYLENES	176	PPB				
TOTAL BTEX	215	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 105.9 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: John Sardin

Date: 9-11-97

970917BTEX, 9/8/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970917
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	0953
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	R-3

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	08/22/97

Lab Remarks:

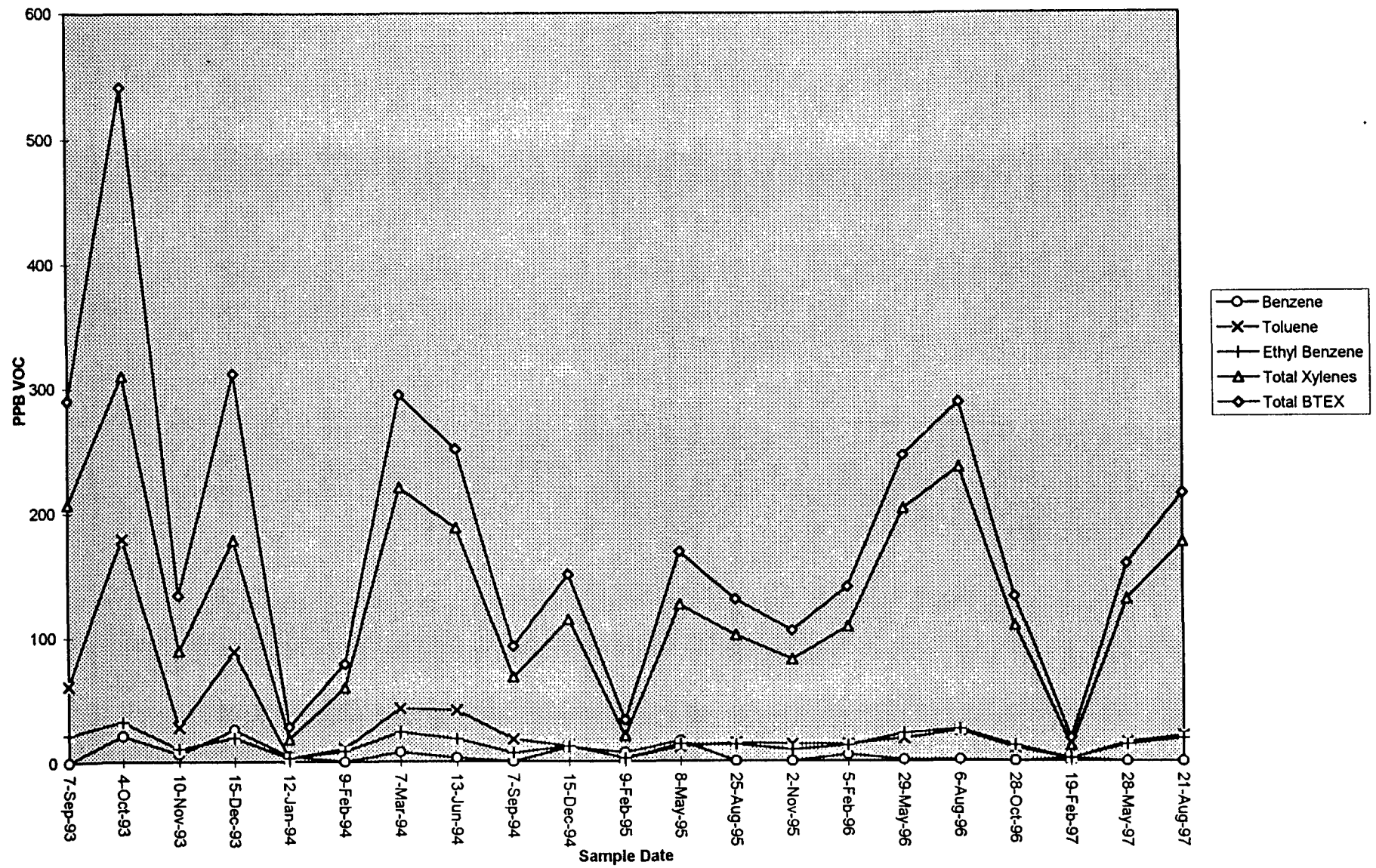
Reported By: John L. Linder

Approved By: John L. Linder

Date: 9-13-97

970917 Jacquez R-3 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well R-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970918
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1133
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/26/97	8/26/97
TYPE DESCRIPTION:	R-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	343	PPB	2	D		
TOLUENE	377	PPB	2	D		
ETHYL BENZENE	45.5	PPB	2	D		
TOTAL XYLENES	408	PPB	2	D		
TOTAL BTEX	1174	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 98.8 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative: _____

Approved By: _____

Date: 9-11-97

970918BTEX, 9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970918
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1133
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	R-4

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	< 0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	< 0.1	PPM	08/22/97

Lab Remarks:

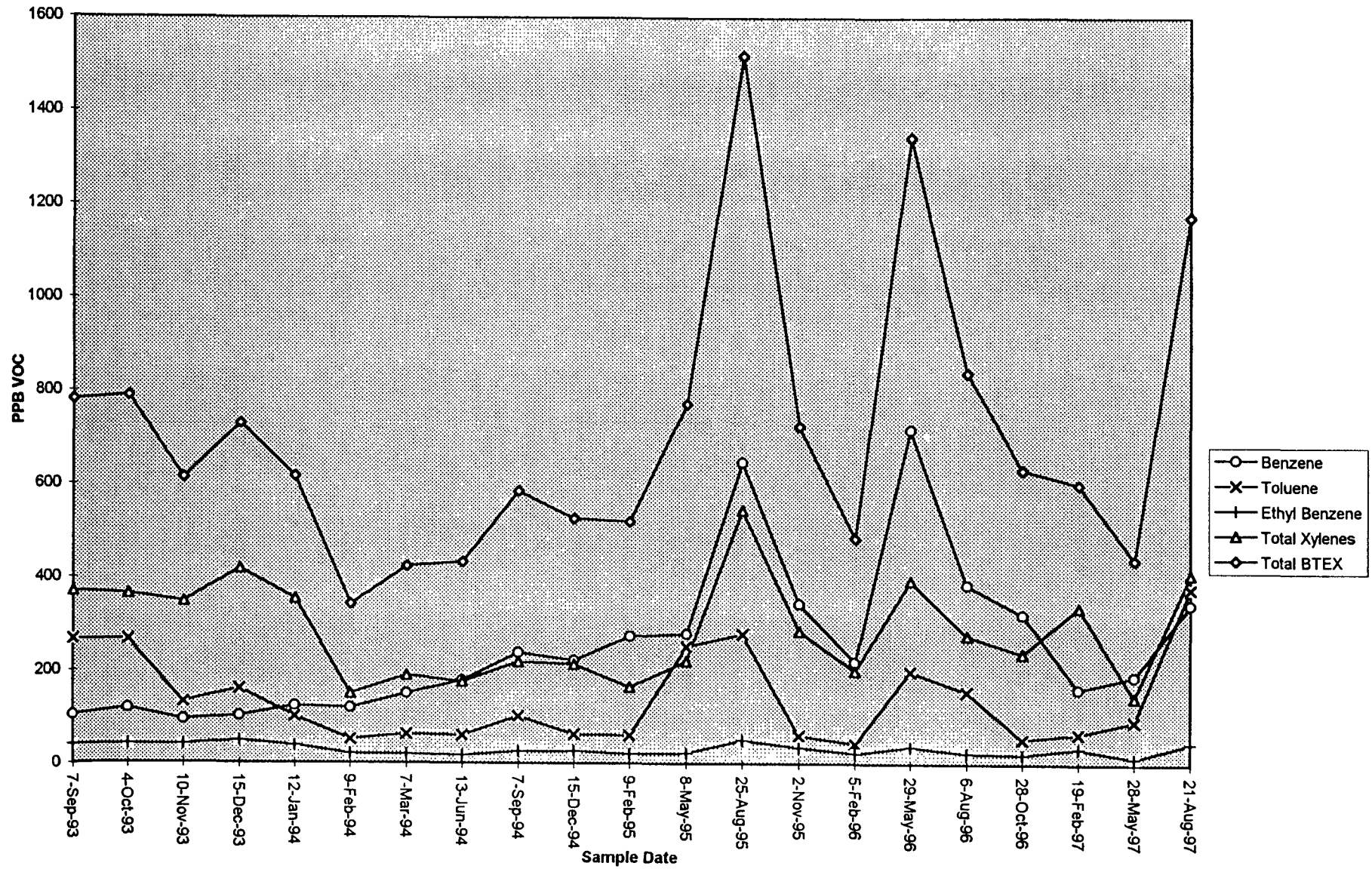
Reported By: JS

Approved By: John Linder

Date: 9-17-97

970918 Jacquez R-4 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well R-4





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970919
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1151
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/26/97	8/26/97
TYPE DESCRIPTION:	R-5	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	< 1	PPB				
TOTAL XYLENES	< 3	PPB				
TOTAL BTEX	< 6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 107.6 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: John Latch

Date: 9-11-97

970919BTEX, 9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970919
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1151
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	R-5

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	08/22/97

Lab Remarks:

Reported By:

J.F.

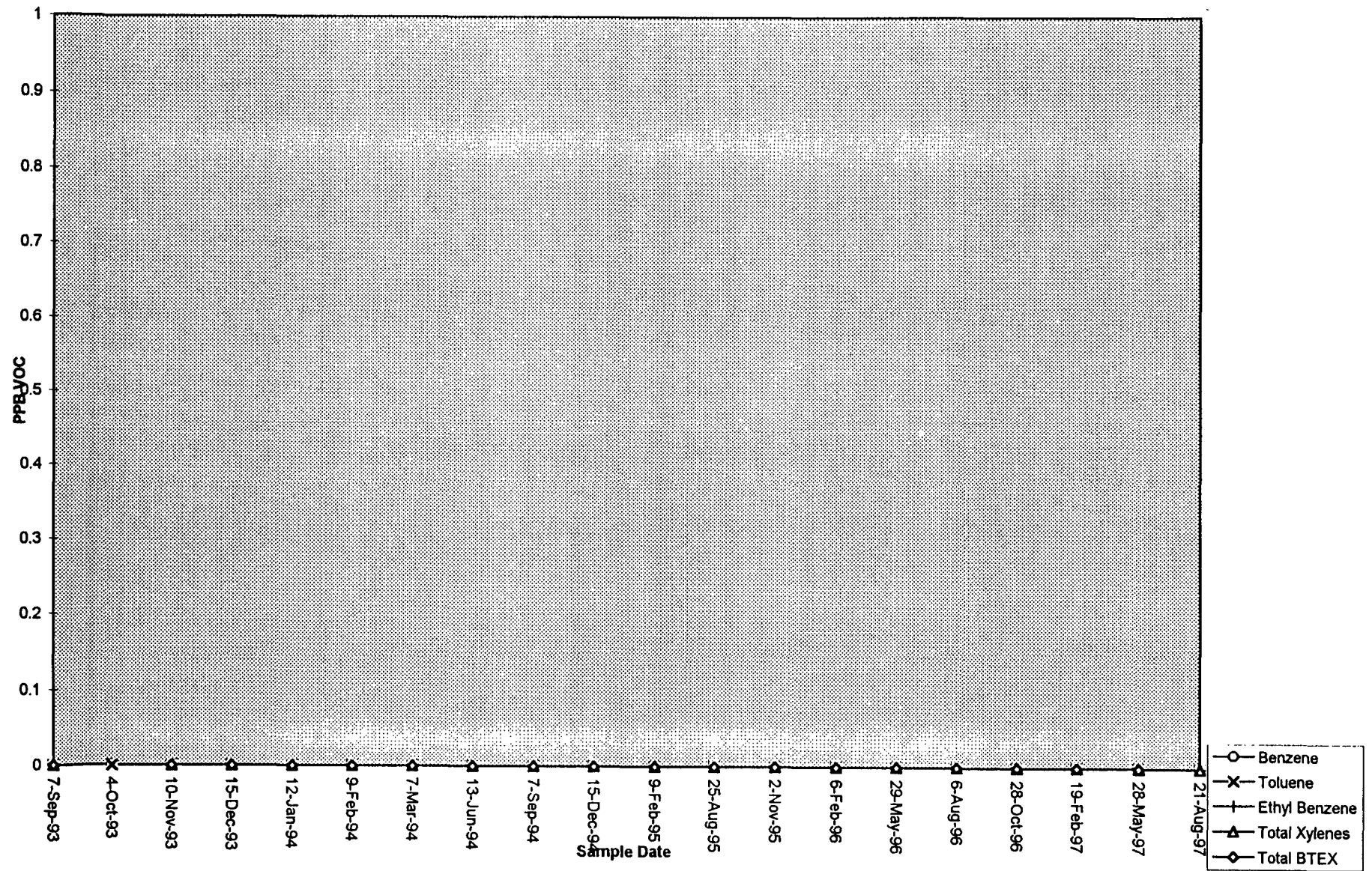
Approved By:

John Ladd

Date: 9-13-97

970919 Jacquez R-5 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well R-5





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970920
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1325
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/26/97	8/26/97
TYPE DESCRIPTION:	M-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 108.6 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: John Tardini

Date: 9-11-97

970920BTEX,9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970920
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1325
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	M-1

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	08/22/97

Lab Remarks:

Reported By:

JB

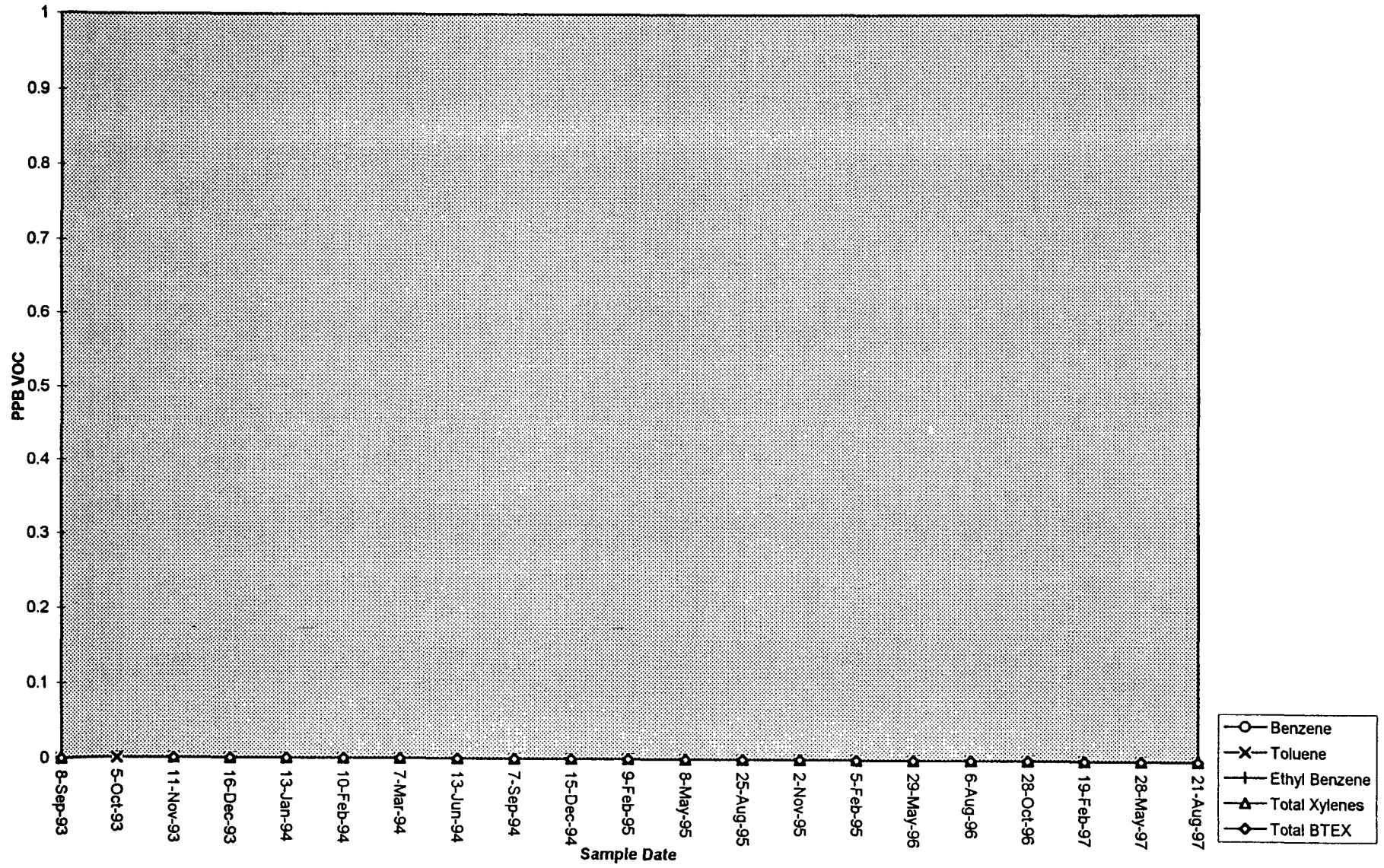
Approved By:

John Linder

Date: 9-13-97

970920 Jacquez M-1 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well M-1





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970921
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1419
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/26/97	8/26/97
TYPE DESCRIPTION:	M-2	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at
DF = Dilution Factor Used

110.1

% for this sample All QA/QC was acceptable.

Narrative:

Approved By: _____

John Lurchi

Date: _____

9-11-97

970921BTEX,9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970921
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1419
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	M-2

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	08/22/97

Lab Remarks:

Reported By:

[Signature]

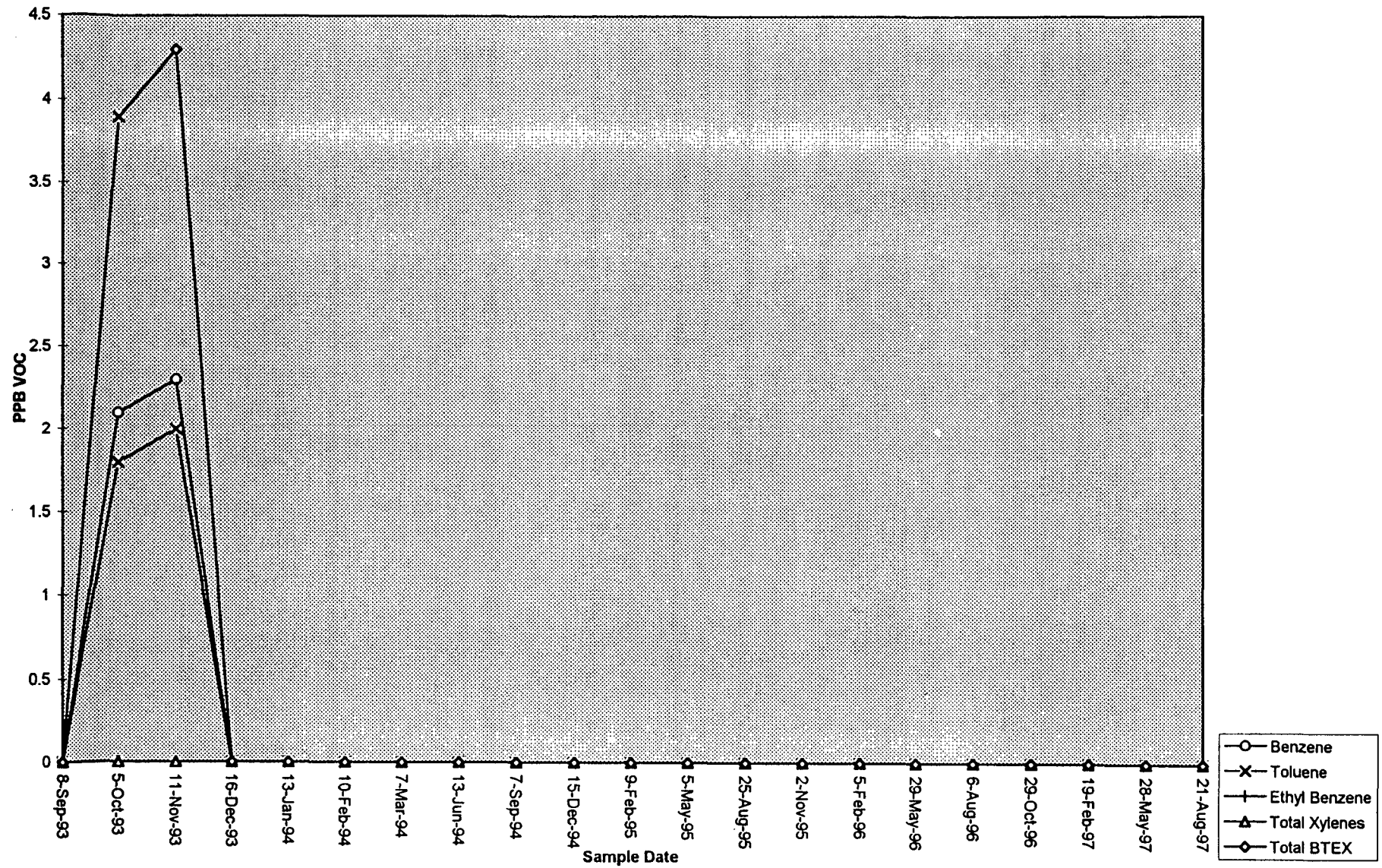
Approved By:

[Signature]

Date: 9-13-97

970921 Jacquez M-2 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well M-2





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970922
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1537
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/26/97	8/26/97
TYPE DESCRIPTION:	M-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	< 1	PPB				
TOTAL XYLENES	7.68	PPB				
TOTAL BTEX	8	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 109.9 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: 9-11-97

970922BTEX, 9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970922
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1537
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	M-3

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	08/22/97

Lab Remarks:

Reported By:

J.F.

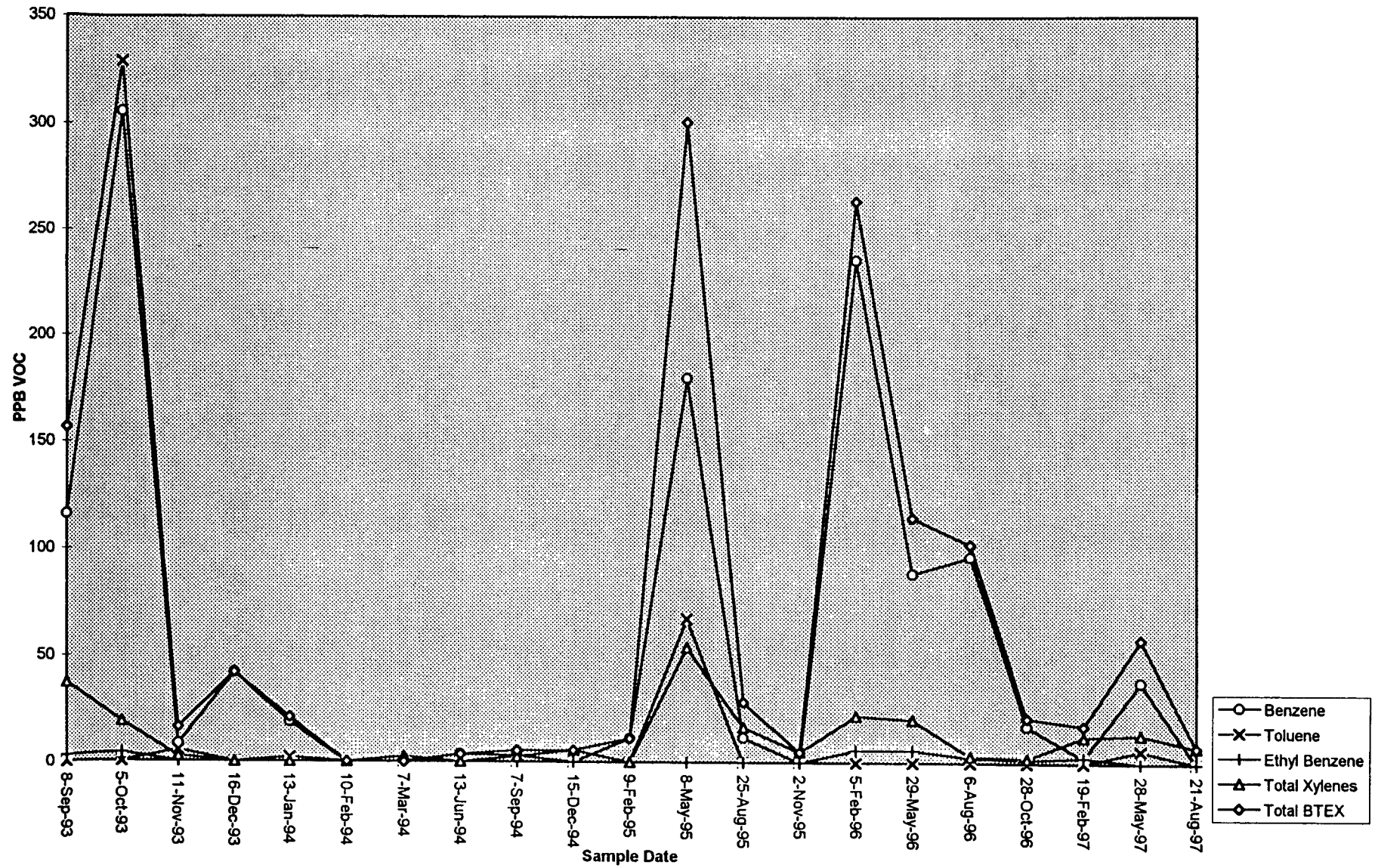
Approved By:

John F. Smith

Date: 9-13-97

970922 Jacquez M-3 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well M-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970923
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1716
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/27/97	8/27/97
TYPE DESCRIPTION:	M-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	39.7	PPB				
TOLUENE	3.17	PPB				
ETHYL BENZENE	1.51	PPB				
TOTAL XYLENES	100	PPB				
TOTAL BTEX	145	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at
DF = Dilution Factor Used

96.2

% for this sample All QA/QC was acceptable.

Narrative: _____

Approved By: _____

John Zarich

Date: _____

9-11-97

970923BTEX, 9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970923
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1716
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	M-4

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	19.7	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	1.13	PPM	08/22/97

Lab Remarks:

Reported By:

JP

Approved By:

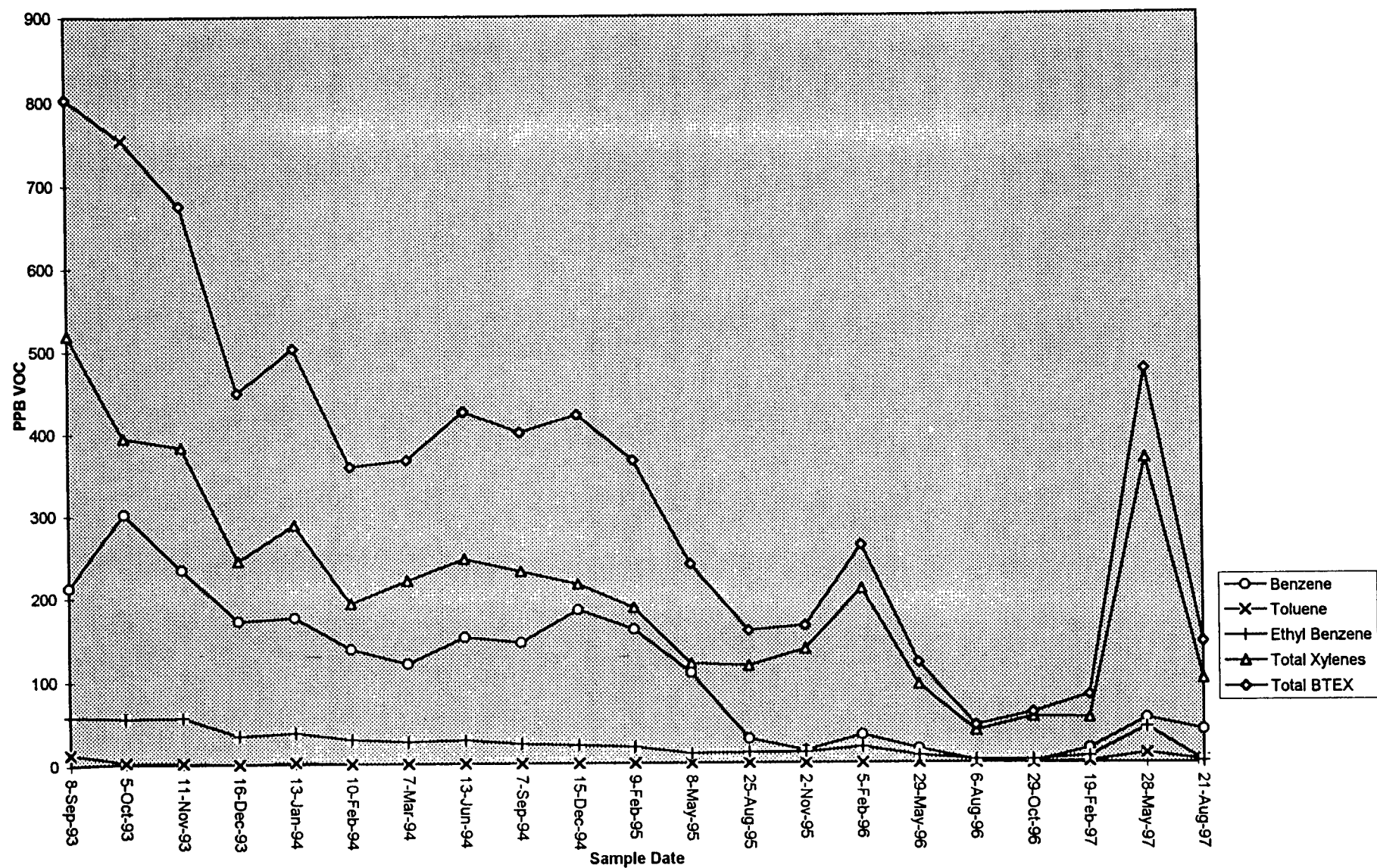
John F. [Signature]

Date:

9-15-97

970923 Jacquez M-4 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well M-4





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970924
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1716
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/27/97	8/27/97
TYPE DESCRIPTION:	M-4 Field Dup	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	37.4	PPB				
TOLUENE	2.44	PPB				
ETHYL BENZENE	1.10	PPB				
TOTAL XYLENES	99.3	PPB				
TOTAL BTEX	140	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.1 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John T. L. L.

Date: _____

9-11-97

970924BTEX,9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970924
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1716
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	M-4 Field Duplicate

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	19.9	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	1.11	PPM	08/22/97

Lab Remarks:

Reported By:

J.F.

Approved By:

John Felder

Date: 9-13-97

970924 Jacquez M-4 ED Nitrate-Nitrite, 9/15/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID N/A	Lab ID 970925
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	8/21/97	1732
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	8/27/97	8/27/97
TYPE DESCRIPTION:	M-5	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 87.4 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: John Larch

Date: 9-11-97

970925BTEX, 9/9/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970925
DATE SAMPLED:	08/21/97
TIME SAMPLED (Hrs):	1732
SAMPLED BY:	Dennis Bird
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jacquez Cornfield
SAMPLE POINT:	M-5

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	< 0.1	PPM	08/22/97
Nitrite as $\text{NO}_2\text{-N}$	< 0.1	PPM	08/22/97

Lab Remarks:

Reported By:

J.F.

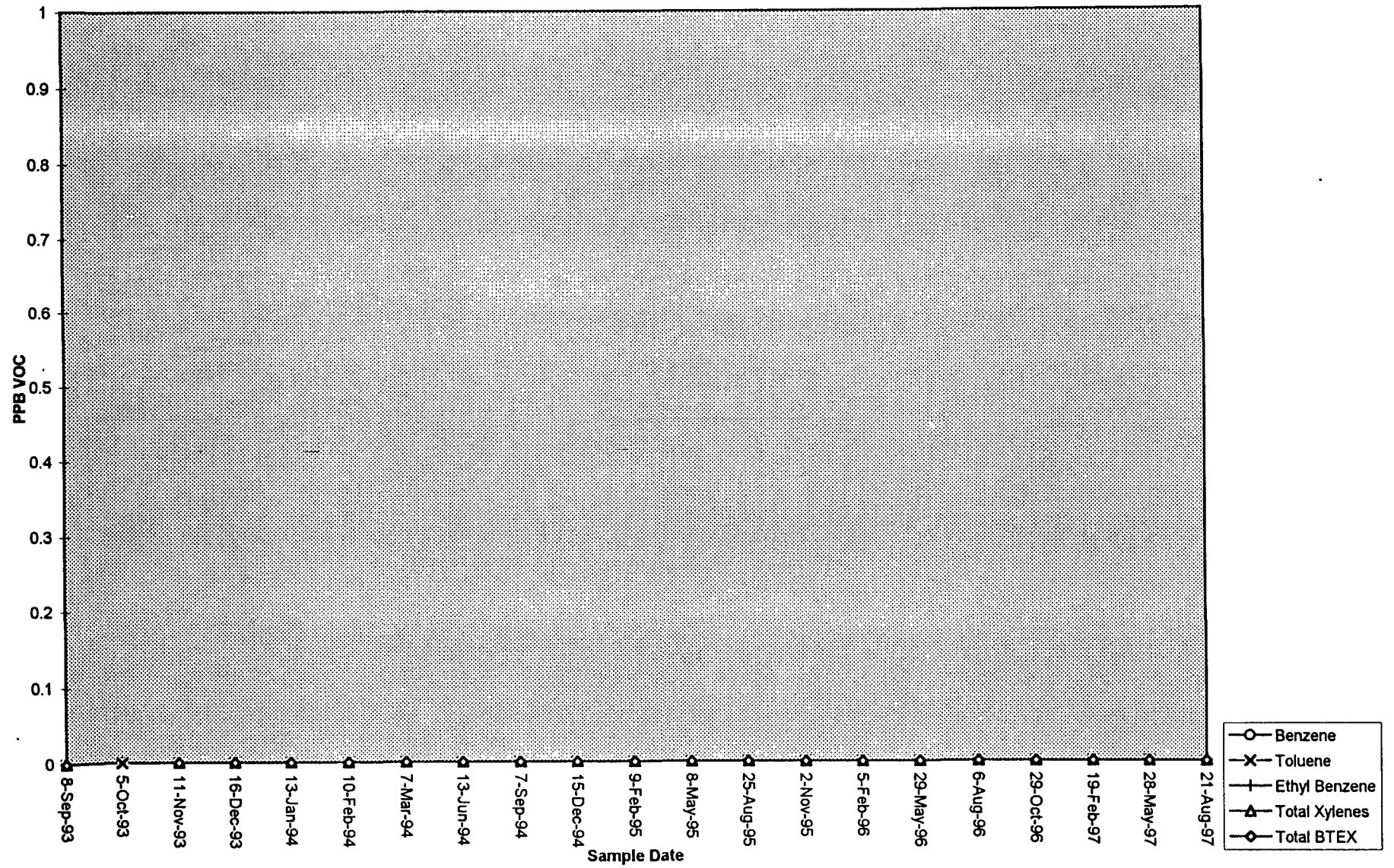
Approved By:

John Zula

Date: 9-13-97

970925 Jacquez M-5 Nitrate-Nitrite, 9/15/97

Jaquez Monitor Well M-5





Well Development and Purging Data

Site Name JAGUEZ

☐ Development
☒ Purging

Well Number P-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 2210
 Initial Depth to Water (feet) 17.41
 Height of Water Column in Well (feet) 8.69
 Diameter (inches) Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.7</u>	<u>17.2</u>
Gravel Pack		<u>-</u>	
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
8-21-97	0918										18.0	6.45	745		
8-21-97	0923						5.0	5.0			16.0	6.86	795		
8-21-97	0929						5.0	10.0			15.5	7.02	643		
8-21-97	0937						5.8	15.8			15.3	7.08	538		
8-21-97	0944						5.0	20.0			16.0	7.11	549	1.5	

Comments _____

Developer's Signature

Dennis Bird

Date

8-21-97

Reviewer

John Zude

Date

9-11-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAUQUEZ

☐ Development
☒ Purging

Well Number R-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 23.10
Initial Depth to Water (feet) 13.12
Height of Water Column in Well (feet) 8.98
Diameter (inches) Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.9</u>	<u>17.8</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
8-21-97	1015										20.0	7.41	636		
8-21-97	1023						5.0	5.0			19.0	7.42	621		
8-21-97	1029						5.0	10.0			18.0	7.41	665		
8-21-97	1040						5.0	15.0			18.0	7.52	958		
8-21-97	1126						5.0	20.0			18.0	7.48	995	1.5	

Comments BAILED DRY P 15.0 GALLONS.

Developer's Signature Jennie Bird

Date 8-21-97

Reviewer John Furler

Date 9-11-97



☐ Development
☒ Purging

Meter Code _____

Site Name JAPUEZ

☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

<input type="checkbox"/> Centrifugal	<input checked="" type="checkbox"/> Bottom Valve
<input type="checkbox"/> Submersible	<input type="checkbox"/> Double Check Valve
<input type="checkbox"/> Peristaltic	<input type="checkbox"/> Stainless-steel Kemmerer
<input type="checkbox"/> Other	

Initial Depth of Well (feet) 24.40
Initial Depth to Water (feet) 16.50
Height of Water Column in Well (feet) 7.90
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.2	15.7
Gravel Pack			
Drilling Fluids			
Total			

☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

ON SITE BARRELS

[illegible]

Comments BAILED DRY @ 10.0 GALLONS.

Developer's Signature

Jennis Bird

Date 8/2/97

Reviewer

Idem Zulu

Date:



☐ Development
☒ Purging

Well Number *M-1*

Site Name JAQUEZ

Meter Code

☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 3.54
Height of Water Column in Well (feet) 11.76
Diameter (inches): Well 4 Gravel Pack

☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DO, CHEMETS KIT

☐ Pump

☐ Centrifugal

☐ Submersible

☐ Peristaltic

☐ Other

☒ Bailer

☐ Bottom Valve

☐ Double Check Valve

☐ Stainless-steel Kemmerer

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.8	723
Gravel Pack			
Drilling Fluids			
Total			

ON SITE BARRELS

[illegible]

Comments BAILED WRY @ 10.0 GALLONS.

Developer's Signature Tennio Bird

Date 8-21-97 Reviewer John Faldut Date 9-11-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JARQUEZ

☐ Development
☒ Purging

Well Number M-2

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.10
Initial Depth to Water (feet) 2.91
Height of Water Column in Well (feet) 12.19
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>8.1</u>	<u>24.2</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DA CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
8-21-97	1343										22.3	7.18	532		
8-21-97	1347						5.0	5.0			20.5	6.94	713		
8-21-97	1352						5.0	10.0			19.9	6.94	742		
8-21-97	1359						5.0	15.0			20.0	6.98	750		
8-21-97	1404						5.0	20.0			19.9	6.95	689		
8-21-97	1412						5.0	25.0			19.6	6.98	765	1.5	

Comments _____

Developer's Signature

Jennie Bird

Date

8-21-97

Reviewer

John Talen

Date

8-11-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name Jaquez

☐ Development
☒ Purging

Well Number M-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 1520
Initial Depth to Water (feet) 481
Height of Water Column in Well (feet) 1039
Diameter (inches) Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>69</u>	<u>20.6</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
8-21-97	1453										24.8	6.98	794		
8-21-97	1458						5.0	5.0			21.7	6.96	769		
8-21-97	1504						5.0	10.0			20.6	7.05	681		
8-21-97	1514						5.0	15.0			21.0	7.12	596		
8-21-97	1520						5.0	20.0			21.1	7.22	820	3.5	

Comments PUT THE ORC SOCKS BACK IN WELL ON 8/25/97.

Developer's Signature Lennie Bird

Date 8-21-97 Reviewer John Jatch

Date 9-11-97

Well Development and Purging Data

Site Name JAGUET

☐ Development
☒ Purging

Well Number 11-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 2.86
Height of Water Column in Well (feet) 12.44
Diameter (inches) Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>8.2</u>	<u>24.7</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
8-21-97	1608										25.0	7.60	1281		
8-21-97	1606						5.0	5.0			21.7	7.87	1361		
8-21-97	1612						5.0	10.0			19.9	7.92	1028	3.5	

Comments BALCO DRY P 10.0 GAUS. PUT THE ORC SOCKS BACK IN WELL ON 8/25/97.

Developer's Signature Dennis Bird

Date 8-31-97 Reviewer John Tull Date 9-11-97



EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JTAQUEZ

☐ Development
☒ Purging

Well Number M-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 1510
Initial Depth to Water (feet) 348
Height of Water Column in Well (feet) 11.70
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.7	23.2
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DO CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
8-21-97	1634										31.9	7.24	536		
8-21-97	1638						5.0	5.0			19.4	6.93	624		
8-21-97	1643						5.0	10.0			18.0	6.91	6.24		
8-21-97	1652						5.0	15.0			17.8	6.97	639		
8-21-97	1657						5.0	20.0			16.7	6.91	537		
8-21-97	1706						5.0	25.0			17.7	6.99	541	3.5	

Comments _____

Developer's Signature

Dennis Bird

Date

8-21-97

Reviewer

John L. Litch

Date

9-11-97

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 970910 to 970913, 970917 to 970925

QA/QC for 8/26/97 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
1CV LA-52589 50 PPB					YES	NO
					RANGE	
Benzene	Standard	50.0	50.3	100.6	75 - 125 %	X
Toluene	Standard	50.0	50.5	101	75 - 125 %	X
Ethylbenzene	Standard	50.0	50.4	101	75 - 125 %	X
m & p - Xylene	Standard	100	101.4	101.4	75 - 125 %	X
o - Xylene	Standard	50.0	50.4	101	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
LCS LA-45476 25 PPB					YES	NO
					RANGE	
Benzene	Standard	25.0	25.4	101.6	39 - 150	X
Toluene	Standard	25.0	25.5	102	46 - 148	X
Ethylbenzene	Standard	25.0	25.4	101	32 - 160	X
m & p - Xylene	Standard	50.0	50.6	101	Not Given	X
o - Xylene	Standard	25.0	25.5	102	Not Given	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
CCV LA-52589 50 PPB					YES	NO
					RANGE	
Benzene	Standard	50.0	52.7	105.4	75 - 125 %	X
Toluene	Standard	50.0	52.5	105.0	75 - 125 %	X
Ethylbenzene	Standard	50.0	52.1	104.3	75 - 125 %	X
m & p - Xylene	Standard	100	104.1	104.1	75 - 125 %	X
o - Xylene	Standard	50.0	52.2	104	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
CCV LA-52589 50 PPB					YES	NO
					RANGE	
Benzene	Standard	50.0	55.0	109.9	75 - 125 %	X
Toluene	Standard	50.0	53.7	107.4	75 - 125 %	X
Ethylbenzene	Standard	50.0	53.2	106.5	75 - 125 %	X
m & p - Xylene	Standard	100	106.0	106.0	75 - 125 %	X
o - Xylene	Standard	50.0	53.4	106.7	75 - 125 %	X

Narrative: Acceptable.

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 970910 to 970913, 970917 to 970925

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					RANGE	YES NO
970910						
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2	<2	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					RANGE	YES NO
2nd Analysis 970910						
Benzene	50	<1	53.5	107.0	75 - 125 %	X
Toluene	50	<1	52.6	105	75 - 125 %	X
Ethylbenzene	50	<1	52.3	105	75 - 125 %	X
m & p - Xylene	100	<2	104.8	104.8	75 - 125 %	X
o - Xylene	50	<1	52.4	105	75 - 125 %	X

Narrative: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

SOURCE		PPB	STATUS
AUTO BLANK			
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOURCE		PPB	STATUS
SOIL VIAL BLANK Lot MB1461		(None analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOURCE		PPB	STATUS
CONTAMINATION CARRYOVER CHECK		(None analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 970910 to 970913, 970917 to 970925

SAMPLE NUMBER	TYPE	EXPECTED	ANALYTICAL	%R	ACCEPTABLE	
		RESULT	RESULT		YES	NO
		PPB	PPB		RANGE	
CCV LA-52589						
50 PPB						
Benzene	Standard	50.0	44.9	89.8	75 - 125 %	X
Toluene	Standard	50.0	43.5	86.9	75 - 125 %	X
Ethylbenzene	Standard	50.0	42.4	84.9	75 - 125 %	X
m & p - Xylene	Standard	100	84.1	84.1	75 - 125 %	X
o - Xylene	Standard	50.0	42.6	85.2	75 - 125 %	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE	DUPLICATE	RPD	ACCEPTABLE	
		RESULT	RESULT		YES	NO
		PPB	PPB		RANGE	
970917						
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	20.8	20.4	1.85	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	18.57	18.26	1.68	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	141.16	138.7	1.76	+/- 20 %	X
o - Xylene	Matrix Duplicate	34.76	34.23	1.53	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE	SPIKE	%R	ACCEPTABLE	
		RESULT	SAMPLE		YES	NO
		PPB	RESULT PPB		RANGE	
2nd Analysis 970917						
Benzene	50	<1	54.4	108.8	75 - 125 %	X
Toluene	50	20.8	68.5	96	75 - 125 %	X
Ethylbenzene	50	18.57	65.8	94	75 - 125 %	X
m & p - Xylene	100	141.16	215.5	74.4	75 - 125 %	X
o - Xylene	50	34.76	79.5	90	75 - 125 %	X

Narrative: The spike result exceeded the calibration curve limit for m & p Xylenes.

8/20 TRIP BLANK	SOURCE	PPB	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

8/21 TRIP BLANK	SOURCE	PPB	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

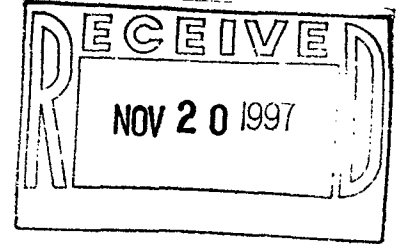
Reported By: CV

Approved By: John Teller

Date: 8-9-97

Qw090397

November 19, 1997



4th Quarter 1997 REPORT

**Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 971196 to 971204
Sampled November 10, 1997
Sampled by Dennis Bird**

Report Distribution:

Sandra Miller
Scott Pope - Philip Services Company
Results Log Book

Attachments



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971196
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	0944
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	R-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	13.6	PPB				
ETHYL BENZENE	17.2	PPB				
TOTAL XYLENES	149	PPB				
TOTAL BTEX	180	PPB				

—BTEX is by EPA Method 8020—

The Surrogate Recovery was at 89.7 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John L. Ladd

Date: _____

11/18/97

971196BTEXJacquez,11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971196
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	0944
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	R-3

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks:

Reported By: CV

Approved By: John F. Jordan

Date: 11/18/97

971196SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

Jaquez Cornfield

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971197
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1043
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	R-4	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	542	PPB	5	D		
TOLUENE	129	PPB	5	D		
ETHYL BENZENE	31.1	PPB	5	D		
TOTAL XYLENES	267	PPB	5	D		
TOTAL BTEX	969	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 88.6 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By:

John T. Luebke

Date:

11/18/97

971197BTEXJaquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971197
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1043
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	R-4

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks: _____

Reported By: CV

Approved By: _____

Date: 11/18/97

971197SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971198
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1043
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	R-4 Field Dup	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	536	PPB	5	D		
TOLUENE	121	PPB	5	D		
ETHYL BENZENE	31.5	PPB	5	D		
TOTAL XYLENES	267	PPB	5	D		
TOTAL BTEX	955	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 82.6 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative: _____

Approved By: _____

John Larden

Date: _____

11/18/97

971198BTEXJacquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971198
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1043
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	R-4 Field Dup

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks: _____

Reported By: CV

Approved By: _____

Date: 11/18/97

971198SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971199
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1146
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	R-5	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.0 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Tambini

Date: _____

11-18-97

971199BTEXJaquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971199
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1146
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	R-5

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks:

Reported By: CR

Approved By: John L. Linder

Date: 11/18/97

971199SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971200
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1341
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	M-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 88.4 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John L. Linder

Date:

11/18/97

971200BTEXJaquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971200
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1341
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-1

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks:

Reported By: CV

Approved By: John L. Larkin

Date: 11/18/97

971200SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971201
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1355
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	M-2	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 90.3 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John L. Linder

Date:

11/18/97

971201BTEXJaquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971201
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1355
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-2

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks:

Reported By: CV

Approved By: John L. Ladd

Date: 11/18/97

971201SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT Jaquez Cornfield

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971202
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1457
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/12/97	9/12/97
TYPE DESCRIPTION:	M-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 89.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John T. Ladd

Date: _____

11/18/97

971202BTEXJacquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971202
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1457
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-3

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks: _____

Reported By: CV

Approved By: _____

John L. Jordan

Date: 11/15/97

971202SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971203
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1630
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/13/97	9/13/97
TYPE DESCRIPTION:	M-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	44.8	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	71.0	PPB				
TOTAL BTEX	116	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 86.3 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Sanchez

Date: 11/18/97

971203BTEXJacquez, 11/17/97



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971203
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1630
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-4

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	0.79	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	0.52	PPM	11/11/97

Lab Remarks: _____

Total Nitrates = 1.31 PPM

Reported By: OV

Approved By: _____

John Lathan

Date: 11/18/97

971203SingleSampleNitrate, 11/19/97



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971204
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	11/10/97	1700
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	9/13/97	9/13/97
TYPE DESCRIPTION:	M-5	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 84.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John Latch

Date:

11/18/97

971204BTEXJaquez, 11/17/97



Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	971204
DATE SAMPLED:	11/10/97
TIME SAMPLED (Hrs):	1700
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	M-5

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	11/11/97
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	11/11/97

Lab Remarks: _____

Reported By: CV

Approved By: John Larden

Date: 11/18/97

971204SingleSampleNitrate, 11/19/97

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number R-3

Meter Code _____

Site Name JAGUET

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 22.10
Initial Depth to Water (feet) 14.87
Height of Water Column in Well (feet) 7.23
Diameter (Inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>4.8</u>	<u>14.3</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
11-10-97	0907										13.8	6.22	891		
11-10-97	0912						5.0	5.0			13.4	6.59	796		
11-10-97	0919						5.0	10.0			13.1	6.90	497		
11-10-97	0935						5.0	15.0			13.7	7.07	492	1.5	

Comments _____

Developer's Signature

Lennie Bird

Date

11-10-97

Reviewer

John Larcher

Date

11/18/97

Well Development and Purging Data

☐ Development
☒ Purging

Well Number R4

Meter Code _____

Site Name JAPUEZ

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- ☐ Pump ☐ Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 22.10
Initial Depth to Water (feet) 14.55
Height of Water Column in Well (feet) 7.55

Diameter (Inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.0</u>	<u>15.0</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
<u>11-10-97</u>	<u>1003</u>										<u>14.8</u>	<u>7.22</u>	<u>559</u>		
<u>11-10-97</u>	<u>1008</u>						<u>5.0</u>	<u>5.0</u>			<u>14.6</u>	<u>7.32</u>	<u>590</u>		
<u>11-10-97</u>	<u>1017</u>						<u>5.0</u>	<u>10.0</u>			<u>14.0</u>	<u>7.41</u>	<u>937</u>		
<u>11-10-97</u>	<u>1033</u>						<u>5.0</u>	<u>15.0</u>			<u>14.3</u>	<u>7.59</u>	<u>1054</u>	<u>1.5</u>	

Comments _____

Developer's Signature Dennis Bied Date 11-10-97 Reviewer John Jordin Date 11/18/97

Well Development and Purging Data

☐ Development
☒ Purging

Well Number P-5

Meter Code _____

Site Name JACQUEZ

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 24.40
Initial Depth to Water (feet) 17.48
Height of Water Column in Well (feet) 6.92
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>4.6</u>	<u>13.7</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
11-10-97	1115										17.0	7.81	658		
11-10-97	1120						3.0	3.0			16.0	7.78	691		
11-10-97	1123						2.0	5.0			15.6	7.67	763		
11-10-97	1135						3.0	8.0			15.1	7.71	1020	2.5	

Comments THE WELL BAILED DRY P 8.0 GALLONS.

Developer's Signature Lennis Bird

Date 11-10-97 Reviewer John Landini Date 11/18/97

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-1

Meter Code _____

Site Name JAGUER

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 3.41
Height of Water Column in Well (feet) 9.89
Diameter (Inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.5</u>	<u>19.6</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
11-10-97	1244										13.7	7.02	352		
11-10-97	1247						5.0	5.0			12.6	7.16	350		
11-10-97	1300						3.0	8.0			13.4	7.38	343	25	

Comments THE WELL BAILED DRY @ 8.0 GALLONS.

Developer's Signature Lennie Bird

Date 11-10-97 Reviewer John Larkin Date 11/18/97

EL PASO FIELD SERVICES

Well Development and Purging Data

Site Name JAPUEZ

☐ Development
☒ Purging

Well Number M-2

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- ☐ Centrifugal ☒ Bailer
☐ Submersible ☐ Bottom Valve
☐ Peristaltic ☐ Double Check Valve
☐ Other _____ ☐ Stainless-steel Kemmerer

Water Volume Calculation

Initial Depth of Well (feet) 15.10
Initial Depth to Water (feet) 4.76
Height of Water Column in Well (feet) 10.34
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.8</u>	<u>20.5</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
11-10-97	1309										12.6	7.13	632		
11-10-97	1314						5.0	5.0			12.2	6.96	624		
11-10-97	1319						5.0	10.0			12.2	6.96	622		
11-10-97	1325						5.0	15.0			12.4	7.00	597		
11-10-97	1329						5.0	20.0			12.5	7.01	610	1.0	

Comments _____

Developer's Signature

Jennie Bied

Date

11-10-97

Reviewer

John Ladd

Date

11/18/97

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-3

Meter Code _____

Site Name JAUQUEZ

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.20
Initial Depth to Water (feet) 6.07
Height of Water Column in Well (feet) 9.13
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.0</u>	<u>18.1</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
1-10-97	1423										13.8	7.67	591		
1-10-97	1428						5.0	5.0			13.9	7.39	559		
1-10-97	1433						5.0	10.0			13.4	7.40	541		
1-10-97	1440						5.0	15.0			13.0	7.55	532		
1-10-97	1445						5.0	20.0			13.0	7.51	493	25	

Comments REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 21 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird

Date 11-10-97 Reviewer John Latch Date 11/18/97



Well Development and Purging Data

Site Name JACQUEZ

☐ Development
☒ Purging

Well Number M-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 4.41
Height of Water Column in Well (feet) 10.89

Diameter (Inches): Well _____ Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>7.2</u>	<u>21.6</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
10-10-97	1515										12.3	8.36	760		
11-10-97	1520						3.0	3.0			12.8	8.68	789		
11-10-97	1524						2.0	5.0			12.8	8.80	776		
11-10-97	1532						3.0	8.0			12.4	9.26	770		
11-10-97	1556						2.0	10.0			12.0	8.80	652	3.5	

Comments THE WELL BAILED DRY P 8.0 GALLONS. REMOVED THE OXYGEN COMPOUND SOCK 21 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird

Date 11-10-97

Reviewer John Lumb

Date 11/18/97

Well Development and Purging Data

Site Name JAGUEZ
☐ Development
☒ Purging

Well Number M-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.10
 Initial Depth to Water (feet) 5.32
 Height of Water Column in Well (feet) 9.78
 Diameter (Inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.5	19.4
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
11-10-97	1602										11.9	826	402		
11-10-97	1606						5.0	5.0			12.0	7.71	413		
11-10-97	1611						5.0	10.0			12.0	7.51	410		
11-10-97	1622						5.0	15.0			11.7	7.54	392		
11-10-97	1646						5.0	20.0			11.2	7.48	390	3.5	

Comments _____

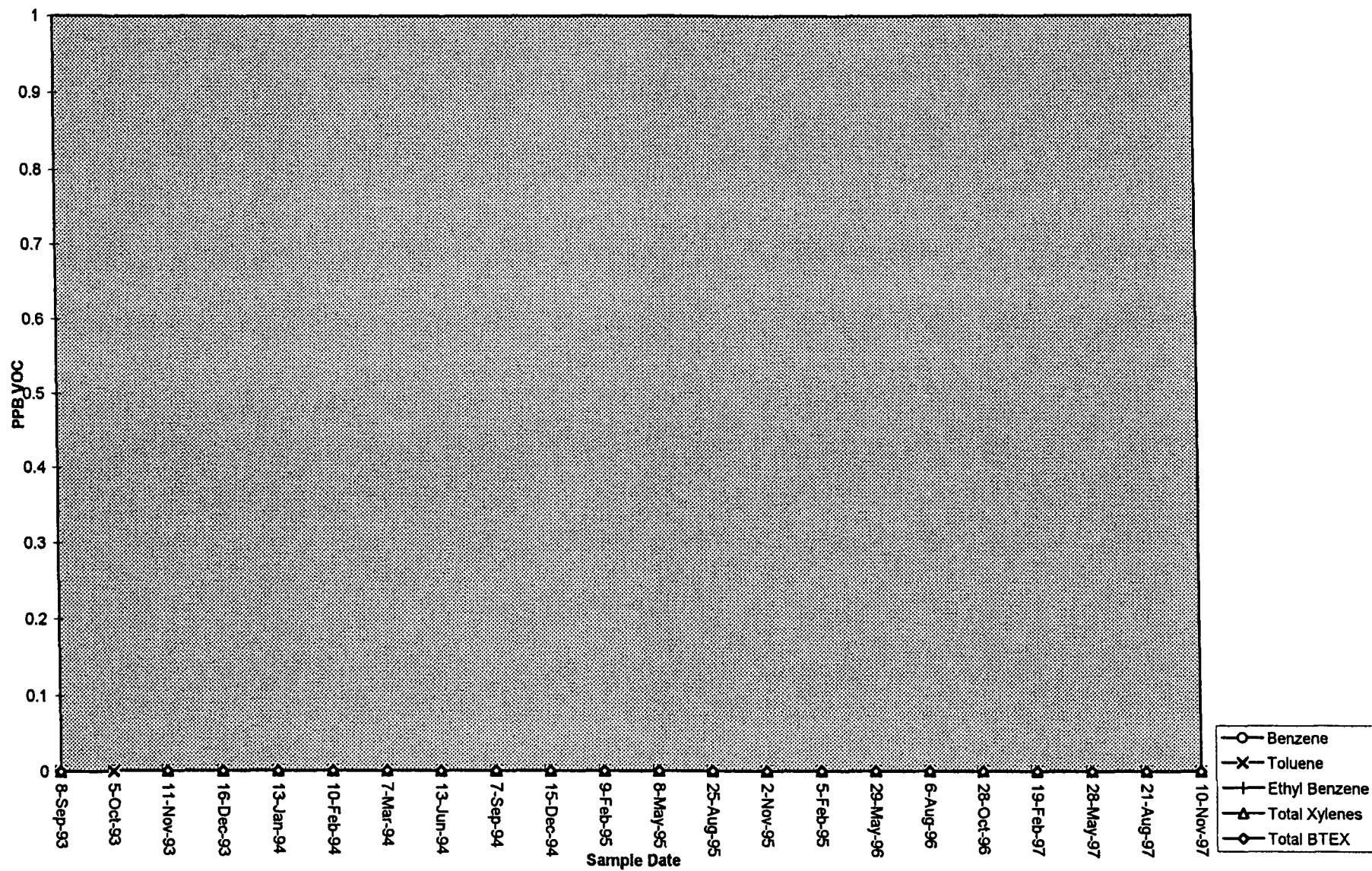
Developer's Signature Lennio Bird

Date 11-10-97

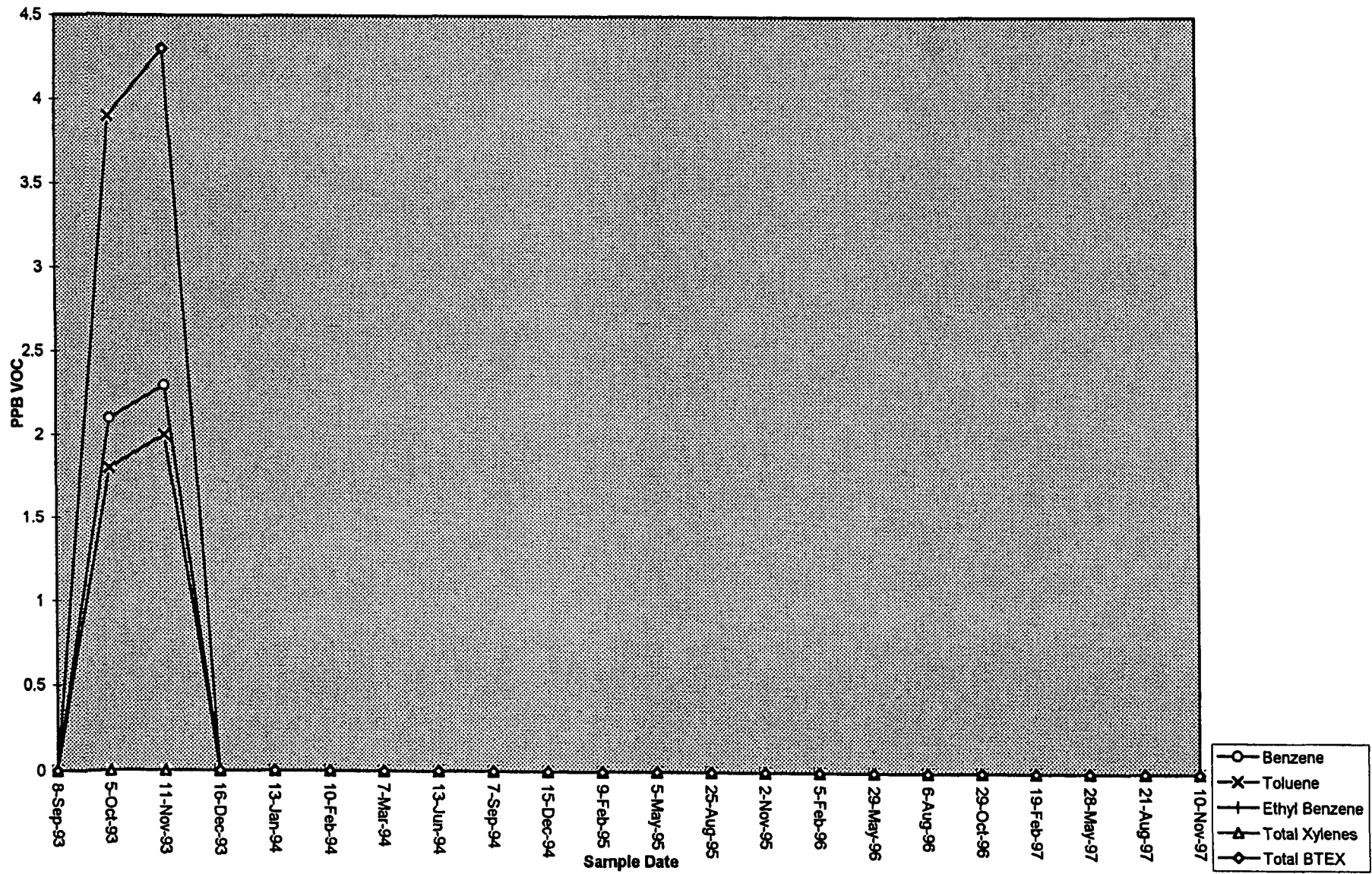
Reviewer John Lentini

Date 4/18/97

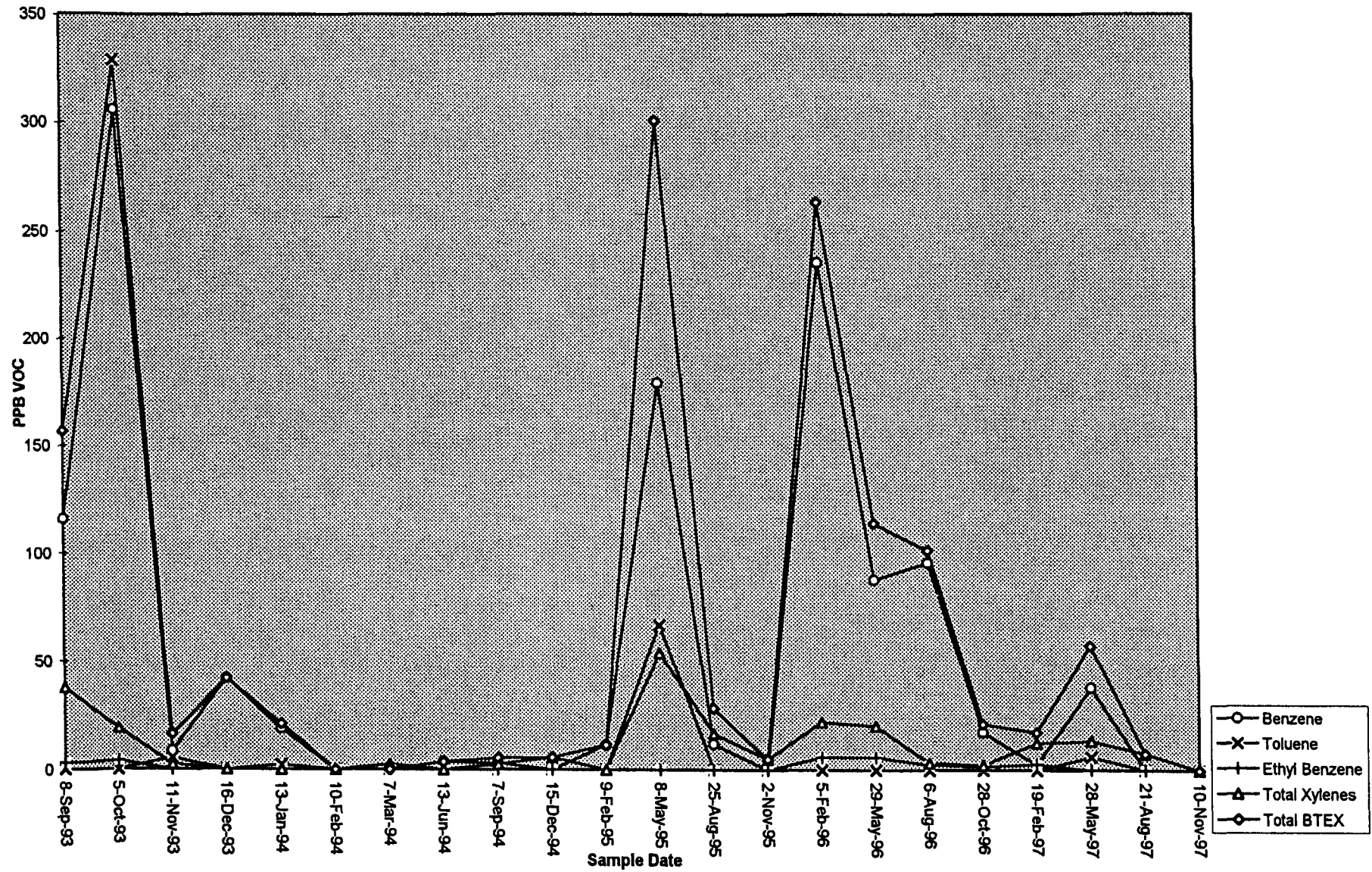
Jaquez Monitor Well M-1



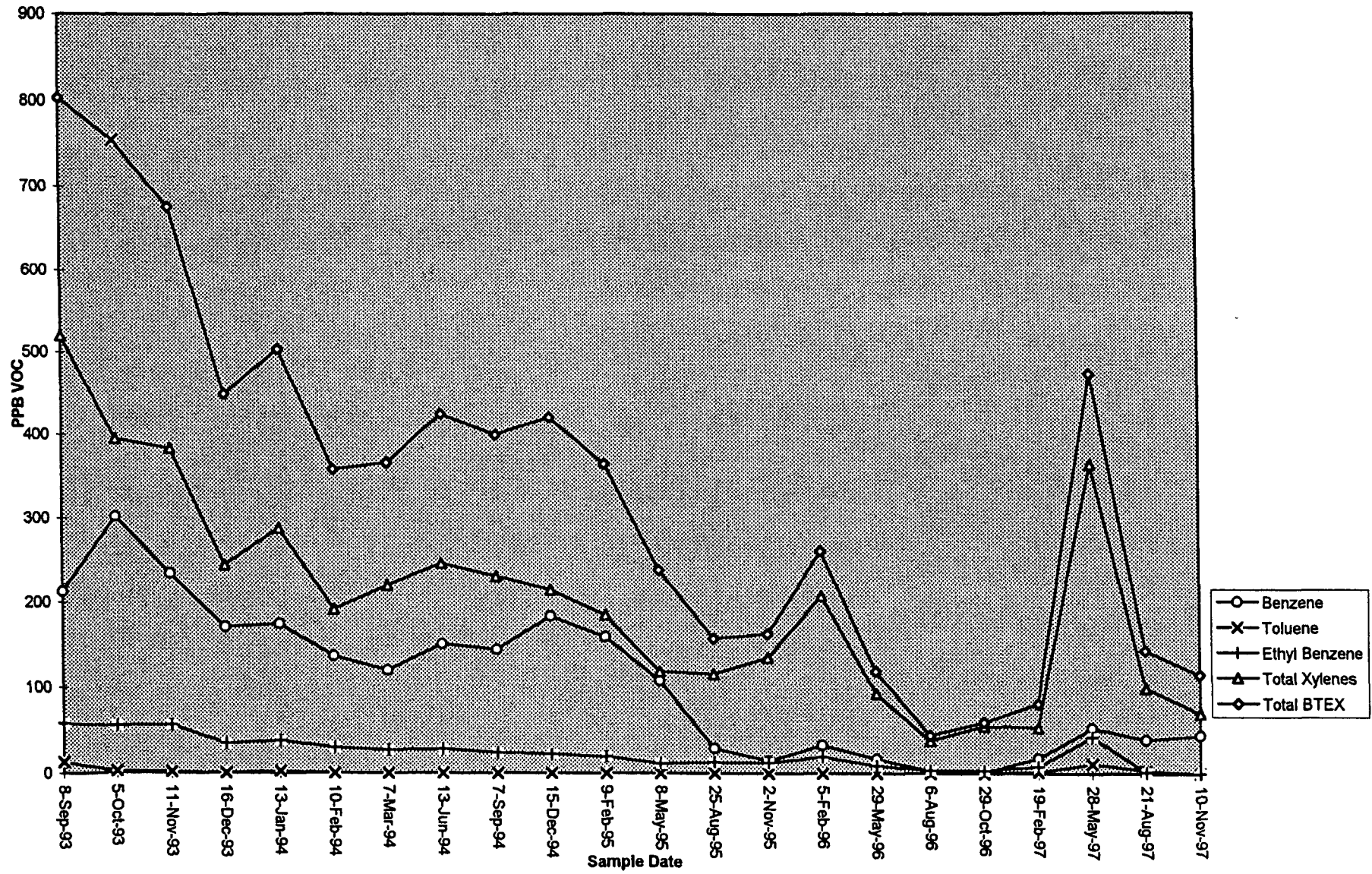
Jaquez Monitor Well M-2



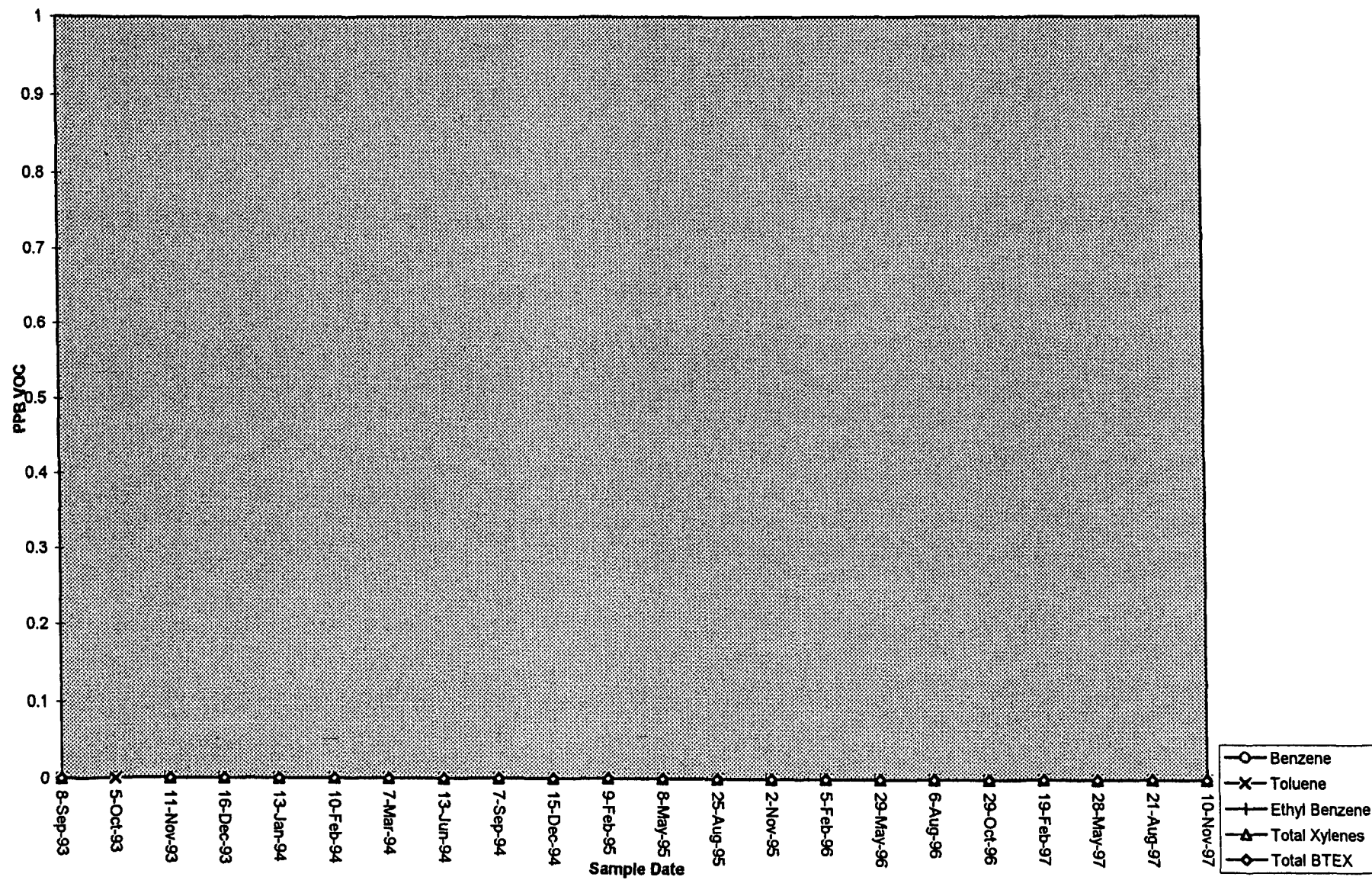
Jaquez Monitor Well M-3



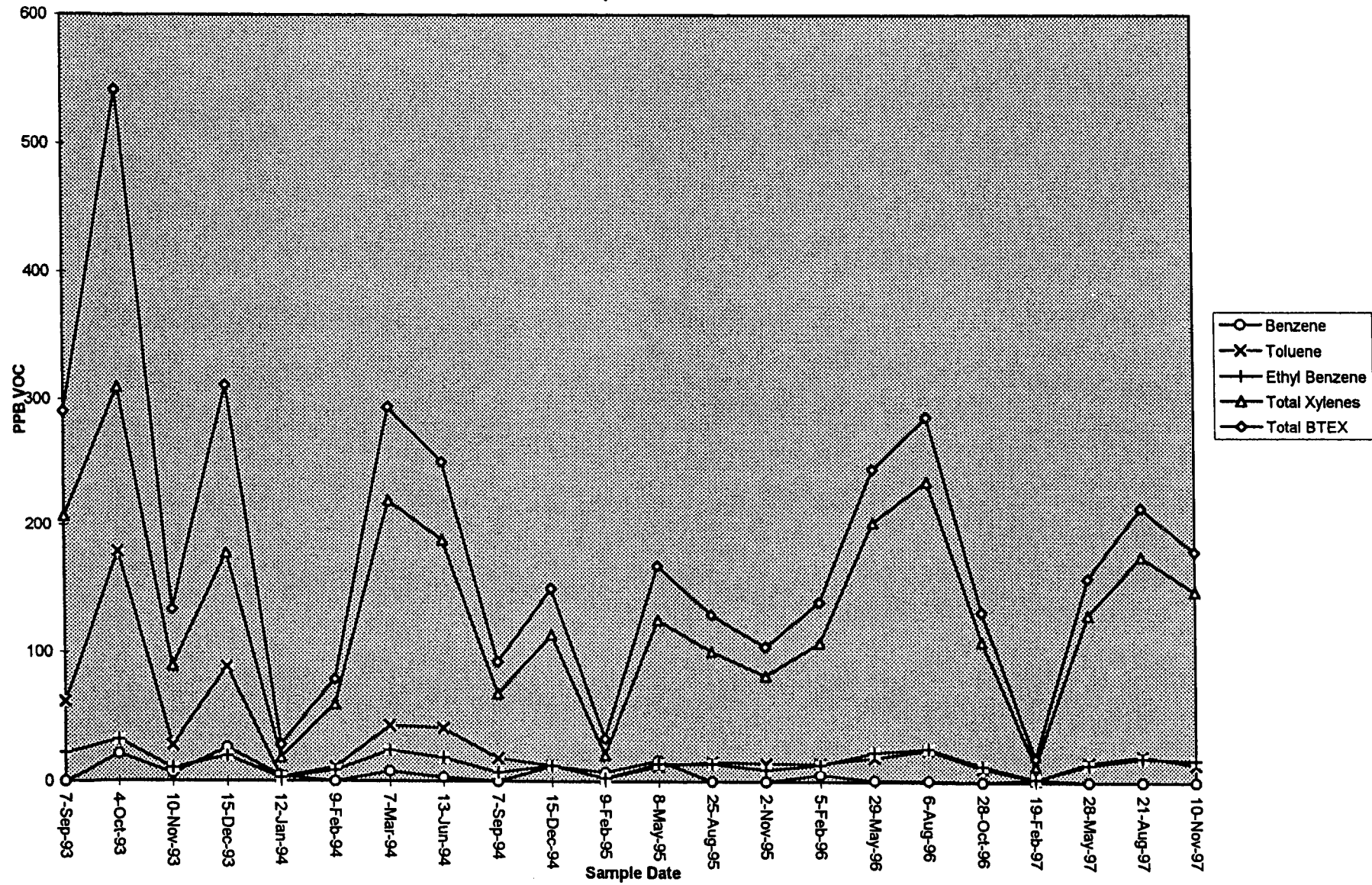
Jaquez Monitor Well M-4



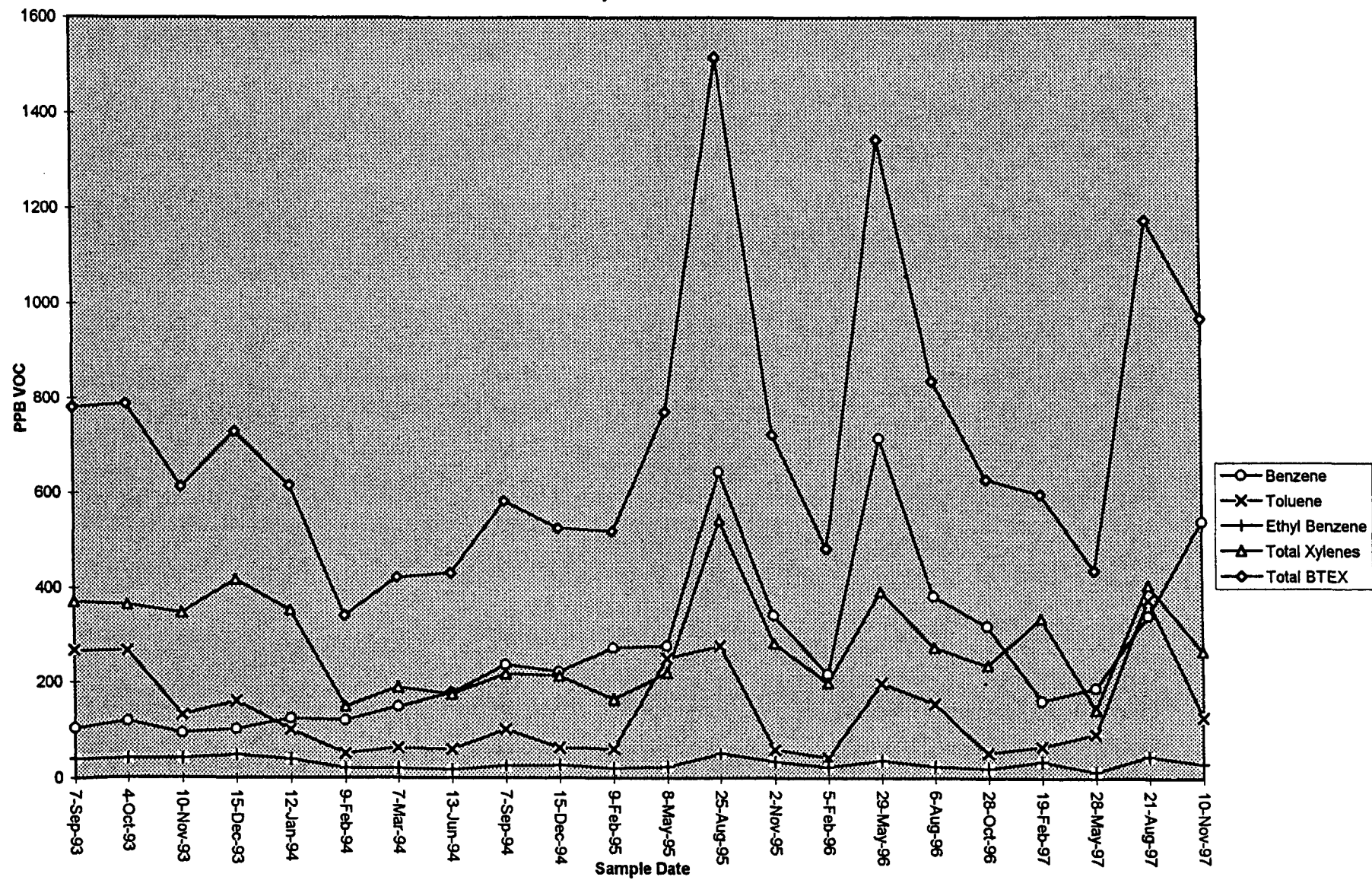
Jaquez Monitor Well M-5



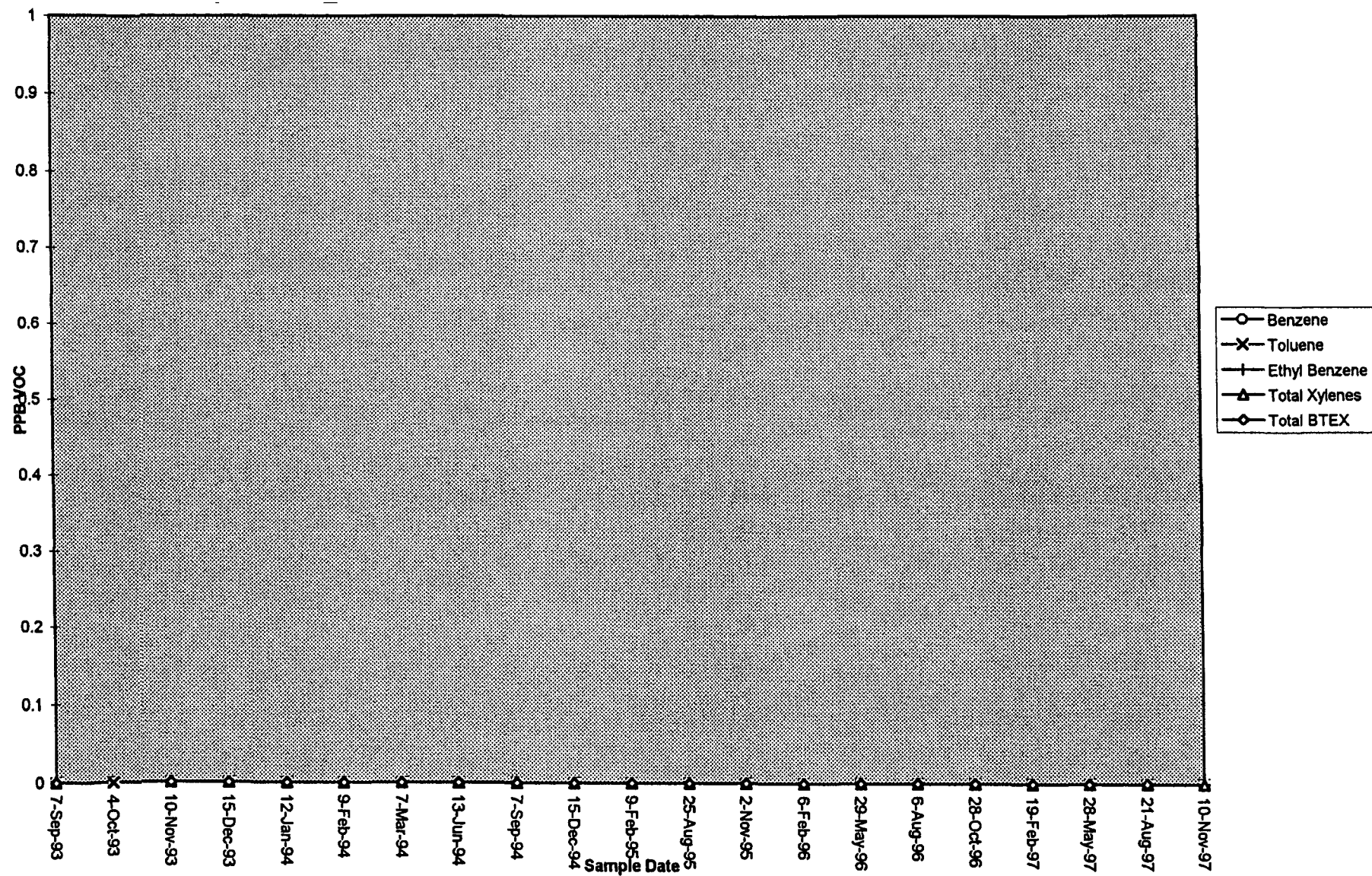
Jaquez Monitor Well R-3



Jaquez Monitor Well R-4



Jaquez Monitor Well R-5





EL PASO FIELD SERVICES

QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX

Samples: 971195 to 971204, 971206 to 971216

QA/QC for 11/12/97 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	47.2	94.3	75 - 125 %	X
Toluene	Standard	50.0	46.8	94	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.4	95	75 - 125 %	X
m & p - Xylene	Standard	100	94.1	94.1	75 - 125 %	X
o - Xylene	Standard	50.0	47.2	94	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	24.5	98.0	39 - 150	X
Toluene	Standard	25.0	23.5	94	46 - 148	X
Ethylbenzene	Standard	25.0	23.9	96	32 - 160	X
m & p - Xylene	Standard	50.0	47.5	95	Not Given	X
o - Xylene	Standard	25.0	24.0	96	Not Given	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	47.9	95.8	75 - 125 %	X
Toluene	Standard	50.0	47.0	93.9	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.3	94.7	75 - 125 %	X
m & p - Xylene	Standard	100	94.8	94.8	75 - 125 %	X
o - Xylene	Standard	50.0	47.6	95	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	47.3	94.6	75 - 125 %	X
Toluene	Standard	50.0	46.2	92.4	75 - 125 %	X
Ethylbenzene	Standard	50.0	46.3	92.7	75 - 125 %	X
m & p - Xylene	Standard	100	92.6	92.6	75 - 125 %	X
o - Xylene	Standard	50.0	46.7	93.3	75 - 125 %	X

Narrative: Acceptable.

SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	47.1	94.1	75 - 125 %	X
Toluene	Standard	50.0	45.7	91.5	75 - 125 %	X
Ethylbenzene	Standard	50.0	45.5	91.0	75 - 125 %	X
m & p - Xylene	Standard	100	90.5	90.5	75 - 125 %	X
o - Xylene	Standard	50.0	45.9	91.8	75 - 125 %	X

Narrative: Acceptable.

SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	47.2	94.4	75 - 125 %	X
Toluene	Standard	50.0	46.3	92.6	75 - 125 %	X
Ethylbenzene	Standard	50.0	46.5	93.1	75 - 125 %	X
m & p - Xylene	Standard	100	93.3	93.3	75 - 125 %	X
o - Xylene	Standard	50.0	46.8	93.6	75 - 125 %	X

Narrative: Acceptable.

SAMPLE ID 971199	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2	<2	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID 2nd Analysis 971199	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	50	<1	47.6	95.2	75 - 125 %	X
Toluene	50	<1	46.5	93	75 - 125 %	X
Ethylbenzene	50	<1	46.8	94	75 - 125 %	X
m & p - Xylene	100	<2	93.6	93.6	75 - 125 %	X
o - Xylene	50	<1	46.9	94	75 - 125 %	X

Narrative: Acceptable

SAMPLE ID 971207	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2	<2	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID 2nd Analysis 971207	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	50	<1	44.2	88.5	75 - 125 %	X
Toluene	50	<1	43.0	86	75 - 125 %	X
Ethylbenzene	50	<1	42.8	86	75 - 125 %	X
m & p - Xylene	100	<2	85.6	85.6	75 - 125 %	X
o - Xylene	50	<1	43.3	87	75 - 125 %	X

Narrative: Acceptable

AUTO BLANK	SOURCE	PPB (2 analyzed with set)	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (none analyzed with set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (none analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

11/12/97 TRIP and 4/10/97 BLANK 11/11/97	SOURCE	PPB (4 analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

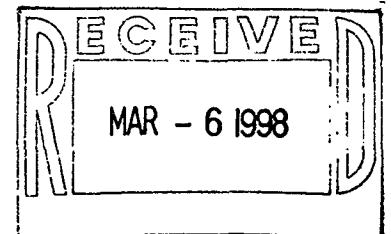
Reported By: CV

Approved By: John L. Lunden

Date: 11/18/97

March 4, 1998

1st Quarter 1998 REPORT

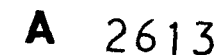


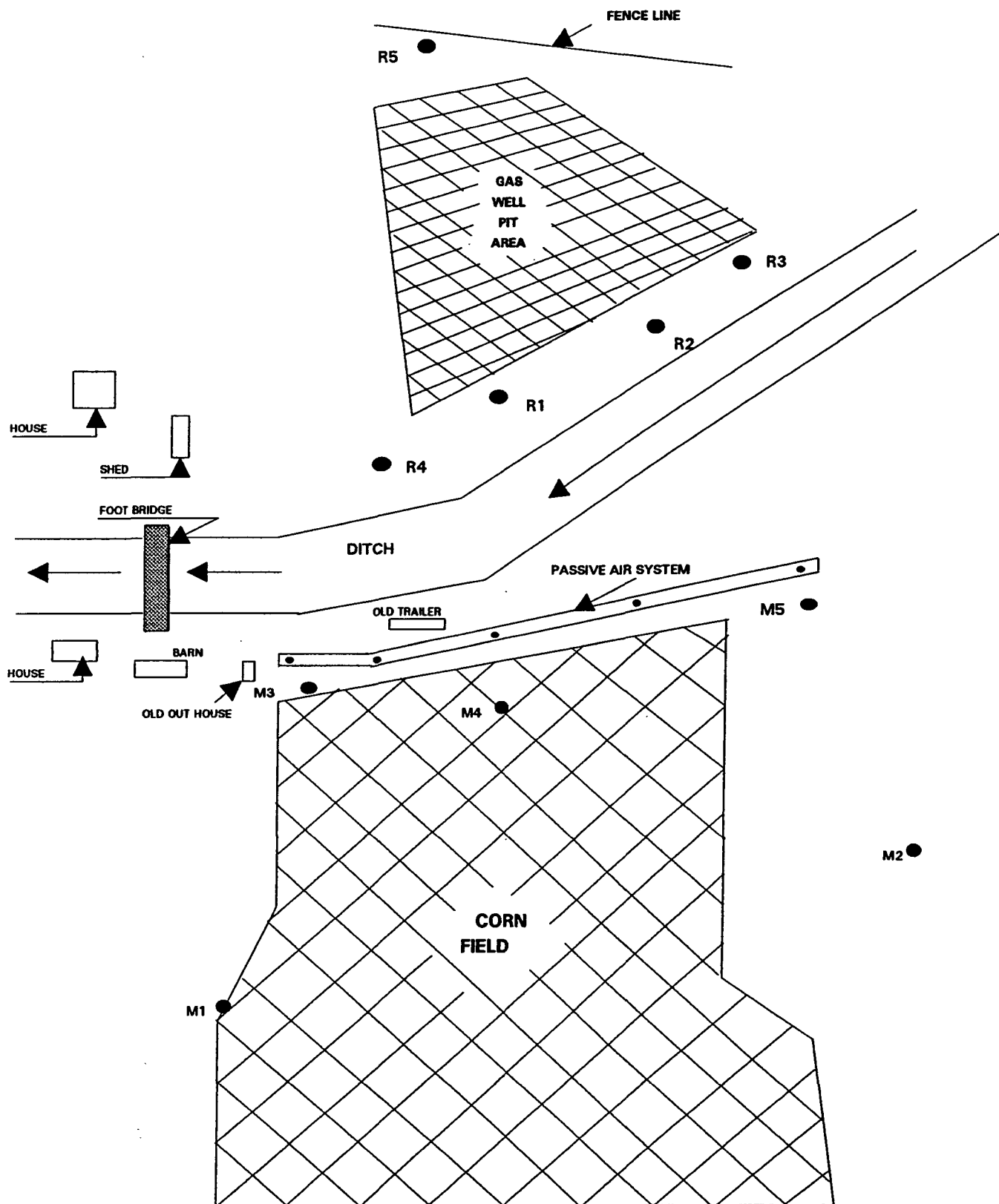
**Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 980164 to 980172
Sampled February 18, 1998
Sampled by Dennis Bird**

Report Distribution:

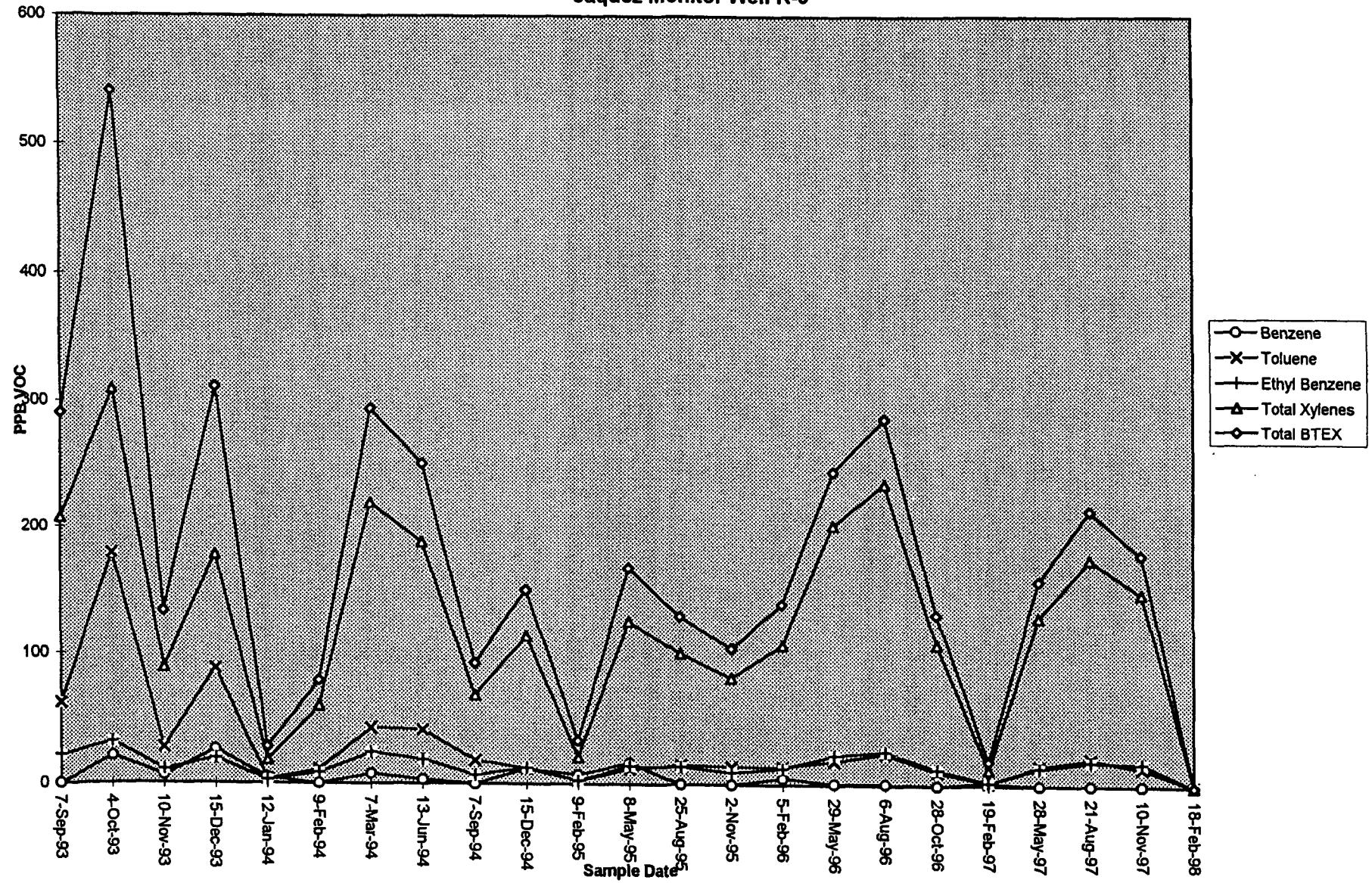
**Sandra Miller
Scott Pope - Philip Services Company
Results File**

Attachments

[illegible]



Jaquez Monitor Well R-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980164
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1005
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	R-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 88.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Fadden

Date: _____

2/24/98

980164BTEXJaquezCornfield,2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980164
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1005
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW R-3

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks: _____

Reported By: CV

Approved By: _____

980164GCSS Nitrate-Nitrite, 3/3/98

Date: 3/4/98



Well Development and Purging Data

Site Name JAGUET

☐ Development
☒ Purging

Well Number R-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- ☐ Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic
☐ Other _____
- ☐ Bailer
☒ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

Water Volume Calculation

Initial Depth of Well (feet) 22.10
Initial Depth to Water (feet) 17.07
Height of Water Column in Well (feet) 5.03

Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>3.3</u>	<u>10.0</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other O.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-18-98	0926										11.2	6.08	937		
2-18-98	0931						3.0	3.0			11.3	6.18	753		
2-18-98	0935						2.0	5.0			11.3	6.18	452		
2-18-98	0954						5.0	10.0			10.9	6.54	373	1.5	

Comments _____

Developer's Signature Lennis Bird Date 2-18-98 Reviewer John Lander Date 2/24/98



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JACQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980165
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1005
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	R-3 Field Dup	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 91.2 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John L. Ladd

Date: _____

2/24/98

980165BTEXJacquezCornfield, 2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980165
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1005
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW R-3 Field Dup

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks:

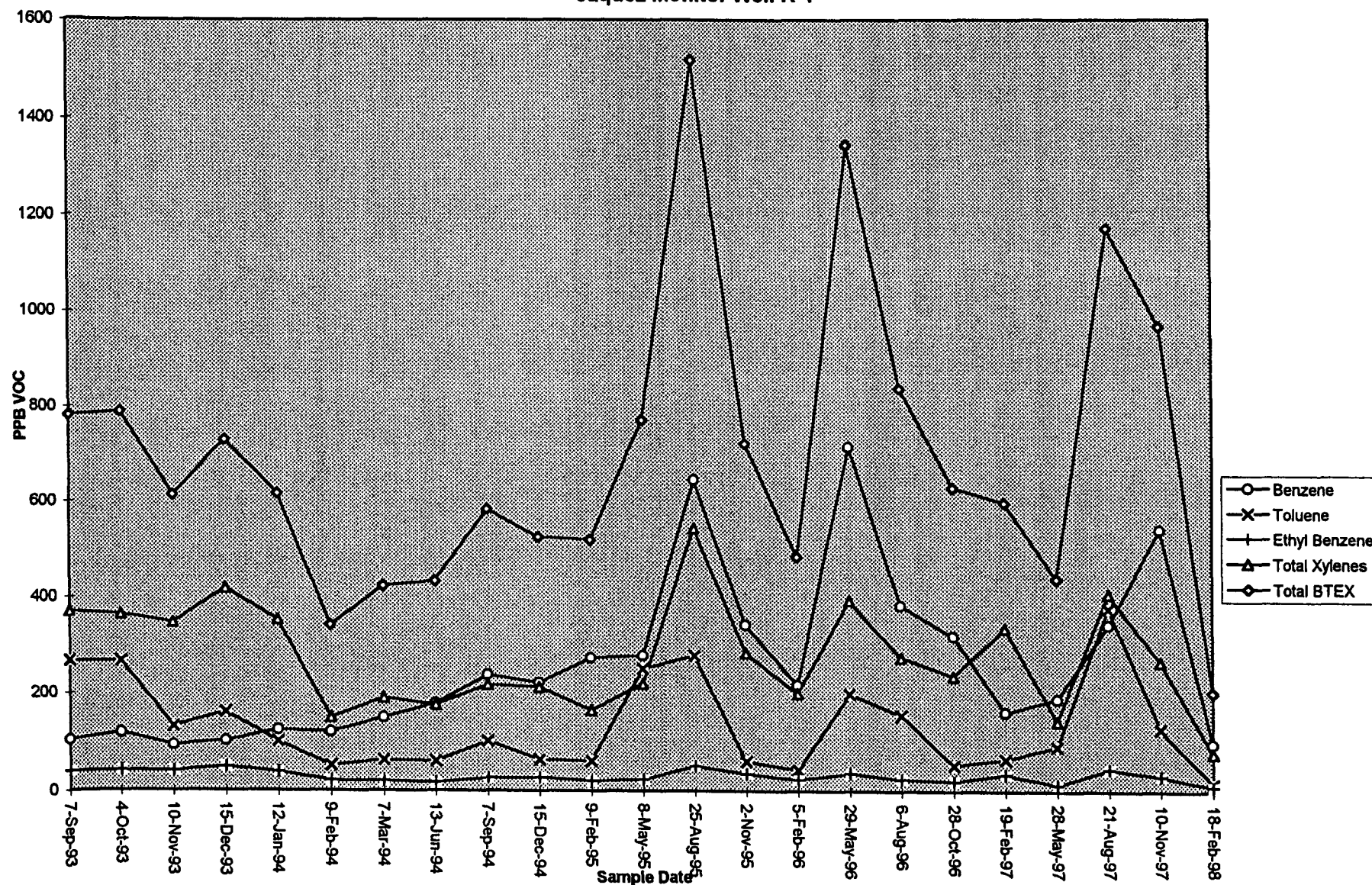
Reported By: CV

Approved By: John Larch

Date: 3/4/98

980165GCSS Nitrate-Nitrite, 3/3/98

Jaquez Monitor Well R-4





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980166
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1118
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	R-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	98.0	PPB	2	D		
TOLUENE	15.9	PPB	2	D		
ETHYL BENZENE	10.0	PPB	2	D		
TOTAL XYLENES	79.3	PPB	2	D		
TOTAL BTEX	203	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 86.7 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative: _____

Approved By: _____

John L. Larkin

Date: _____

2/24/98

980166BTEXJaquezCornfield, 2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980166
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1118
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW R-4

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks:

Reported By: CV

Approved By: John L. Linder

Date: 3/4/98

980166GCSSNitrate-Nitrite, 3/3/98

Well Development and Purging Data

Site Name JARVIS
☐ Development
☒ Purging

Well Number P-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 22.10
 Initial Depth to Water (feet) 16.51
 Height of Water Column in Well (feet) 5.59

Diameter (Inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>3.7</u>	<u>11.1</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

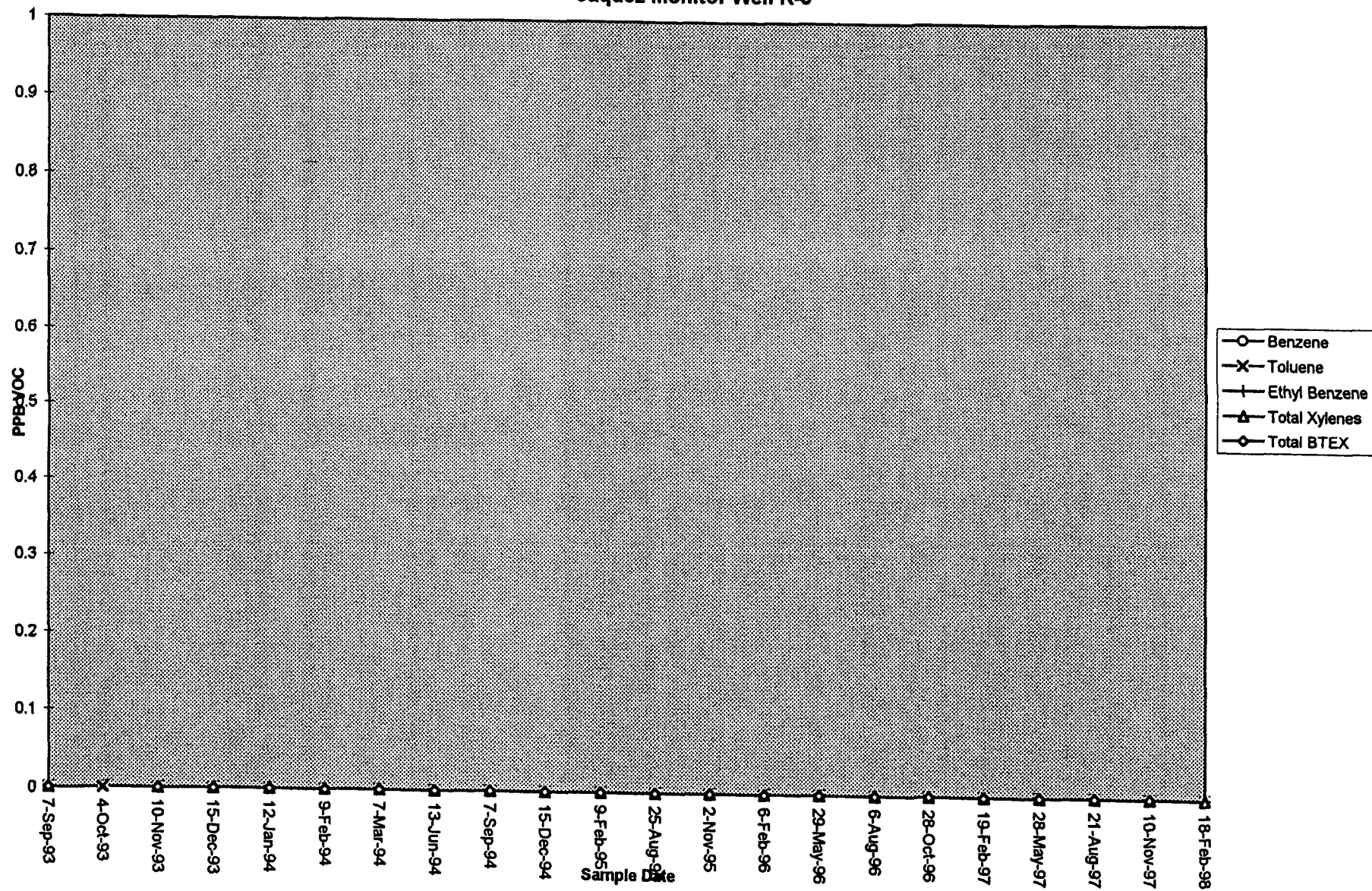
Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-18-98	1030										12.4	6.73	565		
2-18-98	1036						5.0	5.0			12.7	7.10	609		
2-18-98	1059						5.0	10.0			13.6	7.47	1040		
2-18-98	1111						3.0	13.0			13.6	7.48	1075	1.5	

Comments _____

Developer's Signature Dennis Bird Date 2-18-98 Reviewer John Lard Date 2/24/98

Jaquez Monitor Well R-5





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT Jaquez Cornfield

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980167
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1225
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	R-5	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 88.8 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John Lardner

Date:

2/24/98

980167BTEXJaquezCornfield,2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980167
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1225
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW R-5

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks:

Reported By: CV

Approved By: John Jordan

Date: 3/4/98

980167GCSSNitrate-Nitrite, 3/3/98



☐ Development
☒ Purging

Well Number P-5

Meter Code

Site Name JARQUEZ

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Methods of Development

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Pump | <input checked="" type="checkbox"/> Bailer |
| <input type="checkbox"/> Centrifugal | <input checked="" type="checkbox"/> Bottom Valve |
| <input type="checkbox"/> Submersible | <input type="checkbox"/> Double Check Valve |
| <input type="checkbox"/> Peristaltic | <input type="checkbox"/> Stainless-steel Kemmerer |
| <input type="checkbox"/> Other | |

Water Volume Calculation

Initial Depth of Well (feet) 24.40

Initial Depth to Water (feet) 1923

Height of Water Column in Well (feet) 5.17

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		3.4	10.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

[illegible]

Comments THE WELL BAILED DRY @ 4.0 GALLONS.

Developer's Signature Tennis Bird

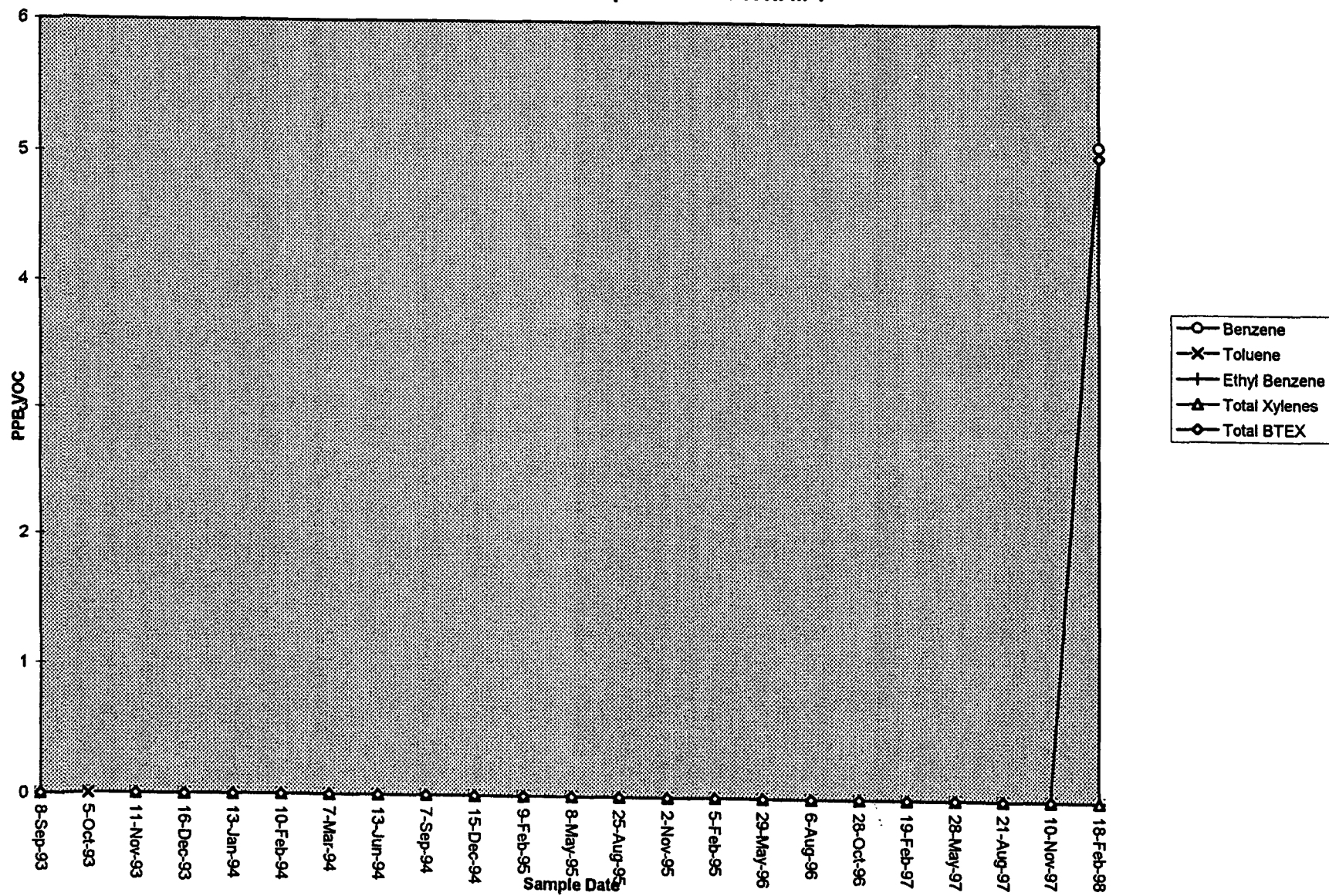
Date 2-12-98

Reviewer

John Laver

Date 2/24/98

Jaquez Monitor Well M-1





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980168
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1415
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	M-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	5.08	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	5	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 86.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Fardhi

Date: _____

2/24/98

980168BTEXJaquezCornfield, 2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980168
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1415
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW M-1

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks:

Reported By: CV

Approved By:

John L. Linder

Date:

3/4/98

980168GCSS Nitrate-Nitrite, 3/3/98

Well Development and Purging Data

Site Name JAYUEZ

☐ Development
☒ Purging

Well Number M-1

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Methods of Development

- | | | | |
|--------------------------|--------------------|-------------------------------------|---------------------------------|
| <input type="checkbox"/> | Pump | <input checked="" type="checkbox"/> | Bailer |
| <input type="checkbox"/> | Centrifugal | <input type="checkbox"/> | Bottom Valve |
| <input type="checkbox"/> | Submersible | <input type="checkbox"/> | Double Check Valve |
| <input type="checkbox"/> | Peristaltic | <input type="checkbox"/> | Stainless-steel Kemmerer |
| <input type="checkbox"/> | Other | | |

Water Volume Calculation

Initial Depth of Well (feet) 15.30
Initial Depth to Water (feet) 6.64
Height of Water Column in Well (feet) 8.66

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume In Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		5.7	17.2
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

[illegible]

Comments THE WELL BAILED DRY @ 7.0 GALLONS.

Developer's Signature.

Tennis Bird

Date _____

2-1898

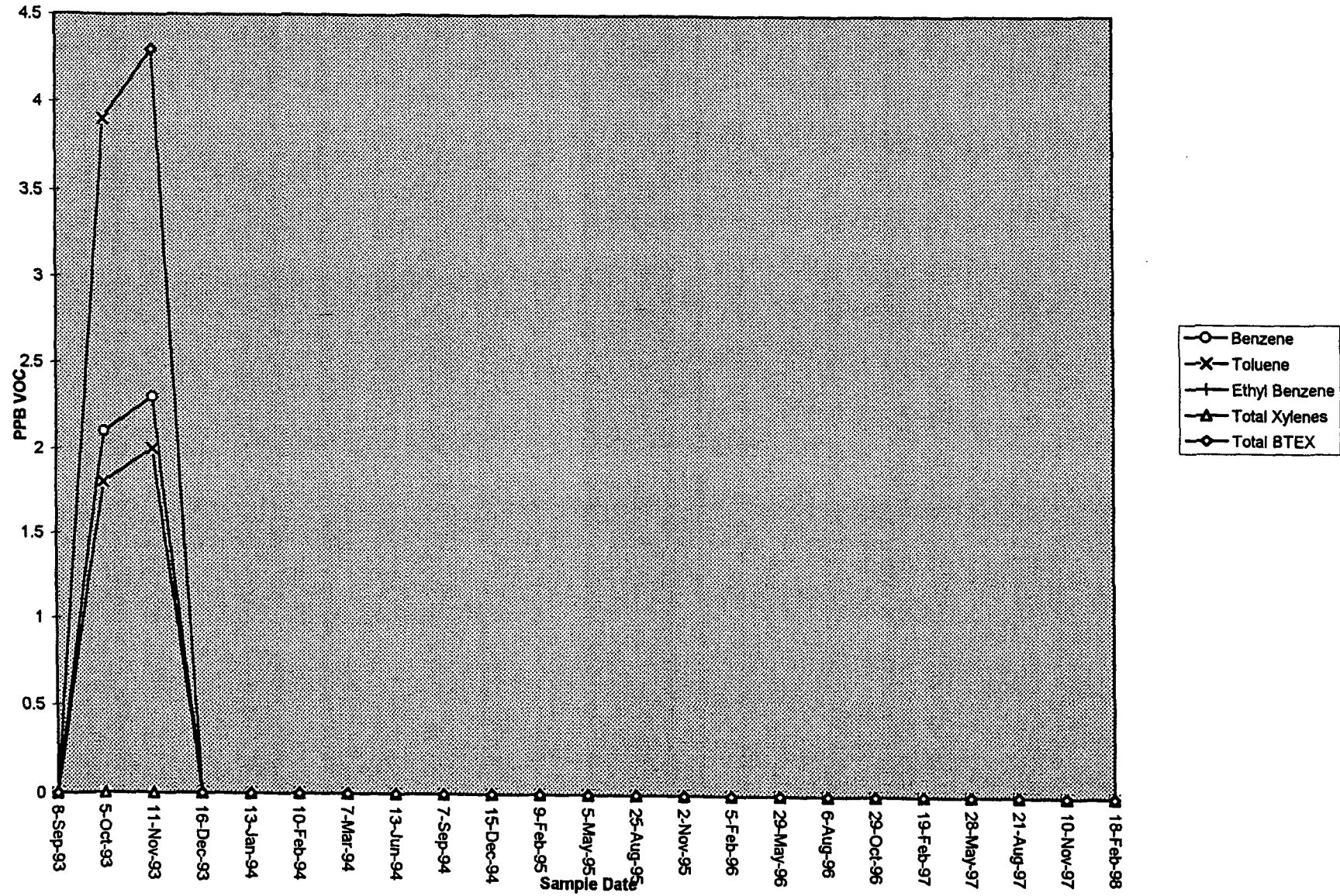
Reviewer

John Lubbock

Date _____

3/24/98

Jaquez Monitor Well M-2





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980169
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1438
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	M-2	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 87.1 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John Ladd

Date:

2/24/98

980169BTEXJaquezCornfield, 2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980169
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1438
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW M-2

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks:

Reported By: PV

Approved By: John J. J. J.

Date: 3/4/98

980169GCSSNtrate-Nitrite, 3/3/98

Well Development and Purging Data

Site Name JAUQUET

☐ Development
☒ Purging

Well Number M-2

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- ☐ Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic
☐ Other _____
- ☒ Bailer
☒ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

Water Volume Calculation

Initial Depth of Well (feet) 15.10
Initial Depth to Water (feet) 6.63
Height of Water Column in Well (feet) 8.48
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.6</u>	<u>16.8</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-18-98	1342										8.7	7.29	469		
2-18-98	1347						5.0	5.0			8.0	7.20	502		
2-18-98	1352						5.0	10.0			8.0	7.21	500		
2-18-98	1358						5.0	15.0			7.5	7.23	492		
2-18-98	1403						5.0	20.0			7.5	7.27	497	3.5	

Comments _____

Developer's Signature

Lennis Bird

Date 2-18-98

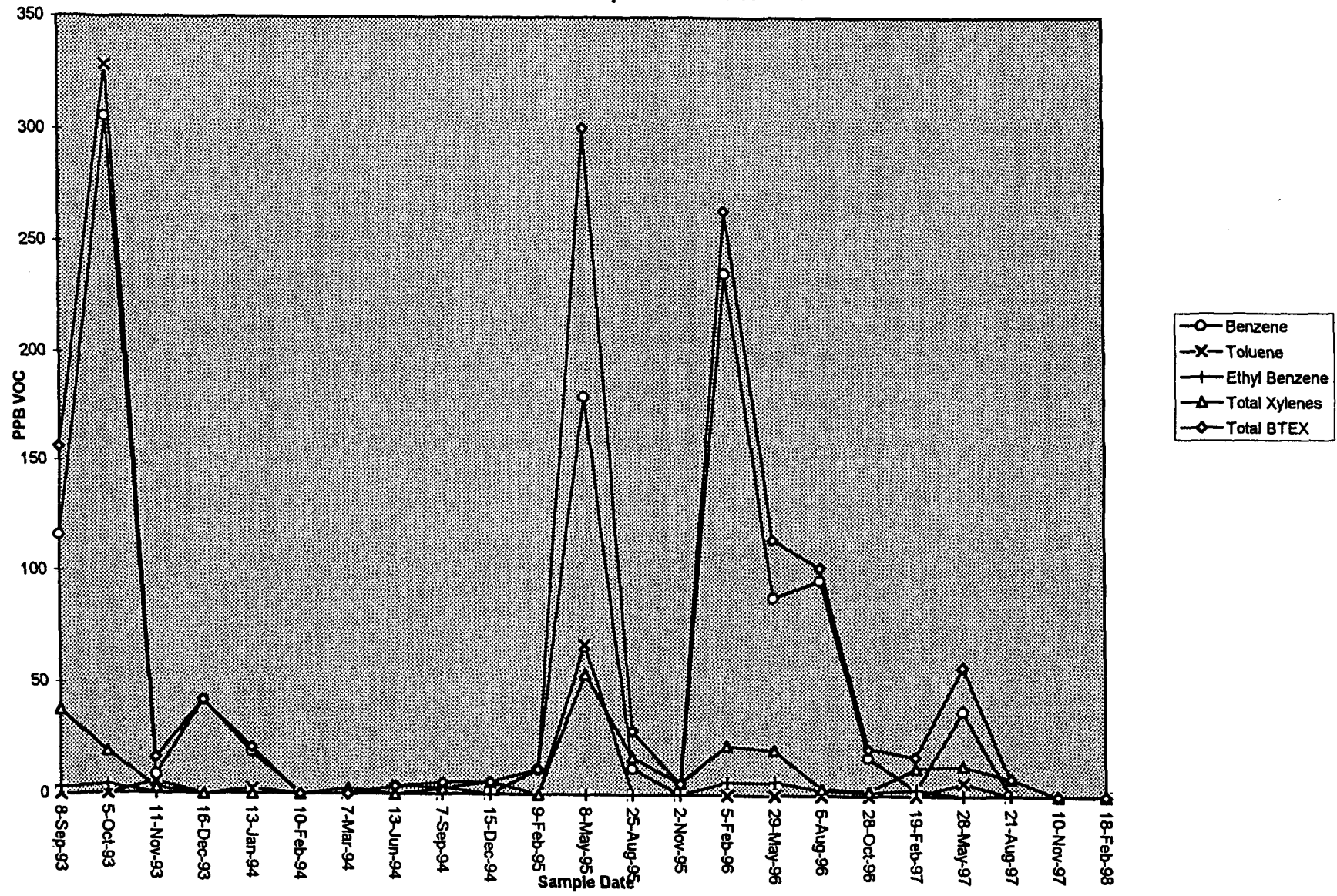
Reviewer

John Landon

Date

2/24/98

Jaquez Monitor Well M-3





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT JAEQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980170
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1556
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	M-3	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 84.0 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Lardner

Date: _____

2/24/98

980170BTEXJacquezCornfield, 2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980170
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1556
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW M-3

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	0.1	PPM	02/19/98

Lab Remarks:

Reported By: CV

Approved By: 

Date: 3/4/98

980170GCSSNitrate-Nitrite, 3/3/98

Well Development and Purging Data

Site Name JAGUEZ

☐ Development
☒ Purging

Well Number M-3

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.20
Initial Depth to Water (feet) 7.42
Height of Water Column in Well (feet) 7.78

Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.1</u>	<u>15.4</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

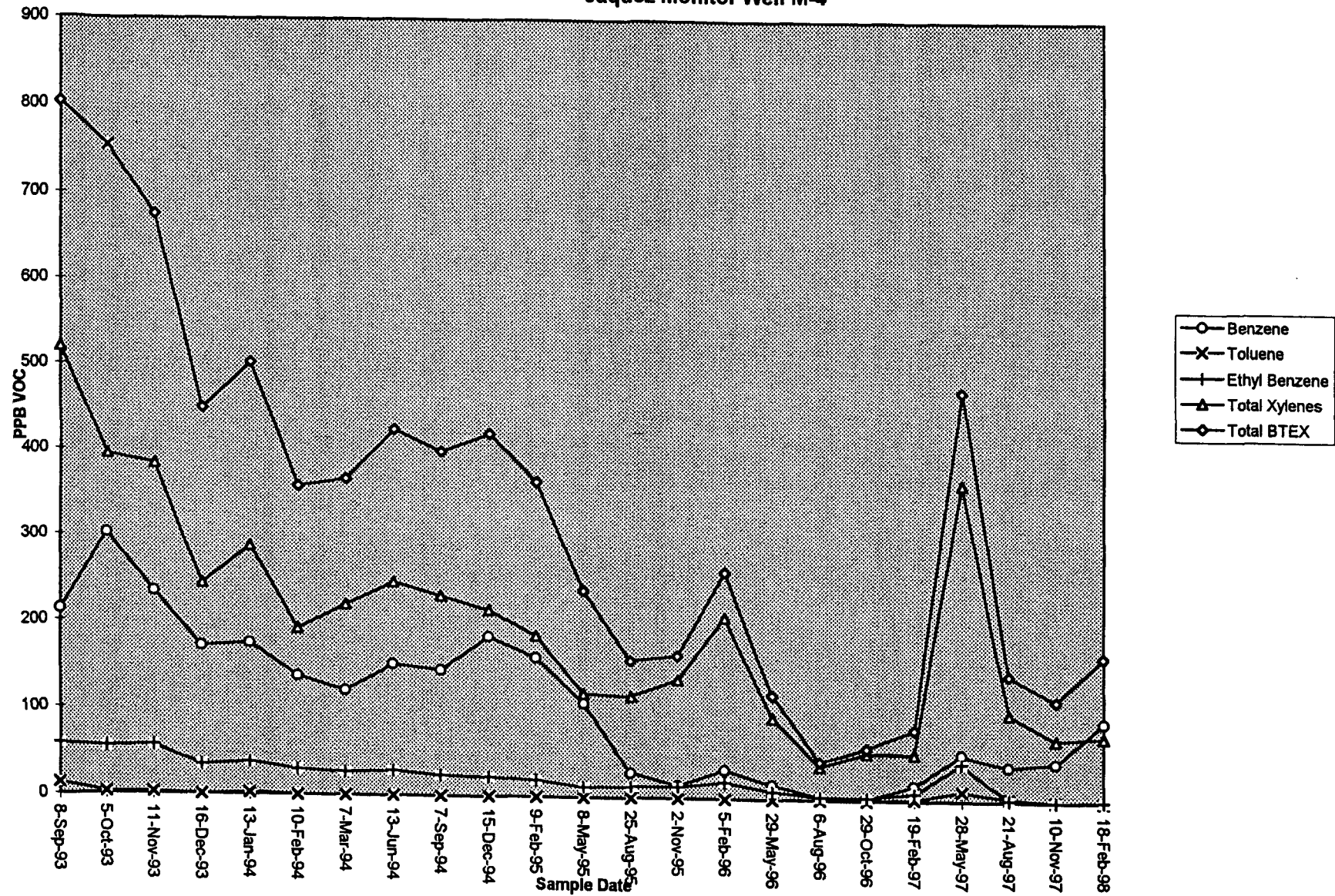
Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-18-98	1511										12.0	7.38	595		
2-18-98	1517						5.0	5.0			11.1	7.14	484		
2-18-98	1521						5.0	10.0			11.2	7.16	416		
2-18-98	1528						5.0	15.0			11.5	8.30	467		
2-18-98	1534						5.0	20.0			11.1	8.20	406	3.5	

Comments REMOVED THE OXYGEN RELEASE COMPOUND SOCKS 30 DAYS BEFORE SAMPLING.

Developer's Signature Dennis Bird

Date 2-18-98 Reviewer John Larkin Date 3/24/98

Jaquez Monitor Well M-4





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980171
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1738
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	M-4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	91.0	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	1.10	PPB				
TOTAL XYLENES	74.9	PPB				
TOTAL BTEX	167	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 86.9 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John Lavelle

Date: _____

2/24/98

980171BTEXJaquezCornfield,2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980171
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1738
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW M-4

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	0.1	PPM	02/19/98

Lab Remarks:

Reported By: CV

Approved By: John Saldan

Date: 3/4/98

980171GCSSNitrate-Nitrite, 3/3/98

Well Development and Purging Data

Site Name JAGUEZ

☐ Development
☒ Purging

Well Number M-4

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 1530
Initial Depth to Water (feet) 591
Height of Water Column in Well (feet) 939
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>6.2</u>	<u>18.6</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
2-18-98	1622										10.3	8.47	778		
2-18-98	1635						3.0	3.0			9.2	8.60	859		
2-18-98	1628						2.0	5.0			9.0	8.60	877		
2-18-98	1645						2.0	7.0			8.4	8.64	761	3.5	

Comments THE WELL BAILED DRY P 7.0 GALLONS. REMOVED THE OXYGEN COMPOUND SOCK 30 DAYS BEFORE SAMPLING.

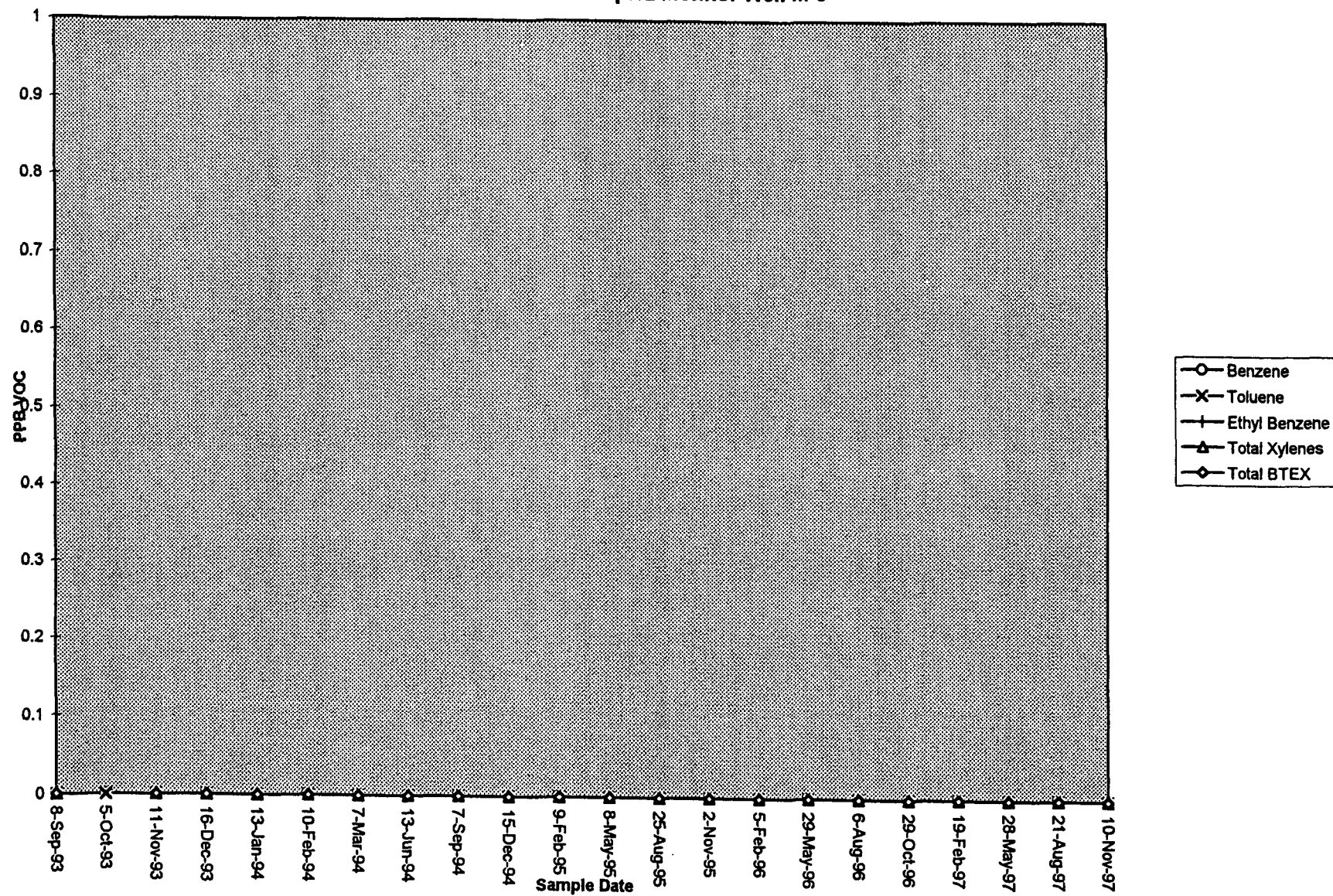
Developer's Signature Dennis Bird

Date 2-18-98

Reviewer John Fender

Date 2/24/98

Jaquez Monitor Well M-5





EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

JAQUEZ CORNFIELD

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980172
MTR CODE SITE NAME:	N/A	Jaquez Cornfield
SAMPLE DATE TIME (Hrs):	2/18/98	1801
PROJECT:	Monitor Well	
DATE OF BTEX EXT. ANAL.:	2/20/98	2/20/98
TYPE DESCRIPTION:	M-5	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 87.2 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

John L. Landon

Date: _____

2/24/98

980172BTEXJaquezCornfield, 2/23/98



EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	980172
DATE SAMPLED:	02/18/98
TIME SAMPLED (Hrs):	1801
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	N/A
SAMPLE SITE NAME:	Jaquez Cornfield
SAMPLE POINT:	MW M-5

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Nitrate as $\text{NO}_3\text{-N}$	<0.1	PPM	02/19/98
Nitrite as $\text{NO}_2\text{-N}$	<0.1	PPM	02/19/98

Lab Remarks:

Reported By: CV

Approved By: John Funder

Date: 3/4/98

980172GCSS Nitrate-Nitrite, 3/3/98

Well Development and Purging Data

Site Name JAPVEZ

☐ Development
☒ Purging

Well Number M-5

Meter Code _____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

- Pump Bailer
☐ Centrifugal ☒ Bottom Valve
☐ Submersible ☐ Double Check Valve
☐ Peristaltic ☐ Stainless-steel Kemmerer
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 15.10
Initial Depth to Water (feet) 7.26
Height of Water Column in Well (feet) 7.84
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		<u>5.2</u>	<u>15.5</u>
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
<u>2-18-98</u>	<u>1659</u>										<u>7.7</u>	<u>8.26</u>	<u>403</u>		
<u>2-18-98</u>	<u>1703</u>						<u>5.0</u>	<u>5.0</u>			<u>8.1</u>	<u>7.84</u>	<u>403</u>		
<u>2-18-98</u>	<u>1713</u>						<u>5.0</u>	<u>10.0</u>			<u>7.8</u>	<u>7.63</u>	<u>400</u>		
<u>2-18-98</u>	<u>1729</u>						<u>5.0</u>	<u>15.0</u>			<u>7.4</u>	<u>7.64</u>	<u>404</u>	<u>3.5</u>	

Comments _____

Developer's Signature Dennis Bird Date 2-18-98 Reviewer John Zarda Date 2/24/98



EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 980164 to 980172

QA/QC for 2/20/98 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	49.4	98.8	75 - 125 %	X
Toluene	Standard	50.0	49.4	99	75 - 125 %	X
Ethylbenzene	Standard	50.0	49.6	99	75 - 125 %	X
m & p - Xylene	Standard	100	99.5	99.5	75 - 125 %	X
o - Xylene	Standard	50.0	49.6	99	75 - 125 %	X
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	23.9	95.7	39 - 150	X
Toluene	Standard	25.0	24.1	97	46 - 148	X
Ethylbenzene	Standard	25.0	24.0	96	32 - 160	X
m & p - Xylene	Standard	50.0	48.1	96	Not Given	X
o - Xylene	Standard	25.0	23.9	96	Not Given	X
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	50.1	100.3	75 - 125 %	X
Toluene	Standard	50.0	49.6	99.3	75 - 125 %	X
Ethylbenzene	Standard	50.0	49.5	99.0	75 - 125 %	X
m & p - Xylene	Standard	100	98.7	98.7	75 - 125 %	X
o - Xylene	Standard	50.0	49.6	99	75 - 125 %	X
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	49.2	98.5	75 - 125 %	X
Toluene	Standard	50.0	48.6	97.2	75 - 125 %	X
Ethylbenzene	Standard	50.0	48.4	96.8	75 - 125 %	X
m & p - Xylene	Standard	100	96.2	96.2	75 - 125 %	X
o - Xylene	Standard	50.0	48.6	97.1	75 - 125 %	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
980164					RANGE	
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2	<2	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 980164					RANGE	
Benzene	50	<1	50.7	101.3	75 - 125 %	X
Toluene	50	<1	50.3	101	75 - 125 %	X
Ethylbenzene	50	<1	50.2	100	75 - 125 %	X
m & p - Xylene	100	<2	101.0	101.0	75 - 125 %	X
o - Xylene	50	<1	50.4	101	75 - 125 %	X

Narrative: Acceptable

AUTO BLANK	SOURCE	PPB (2 analyzed with set)	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (none analyzed with set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (none analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

TRIP BLANK	SOURCE	PPB (1 analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: CLV

Approved By: John Latchi

Date: 2/24/98



PARAGON ANALYTICS, INC.

225 Commerce Drive ♦ Fort Collins, CO 80524 ♦ (800) 443-1511 ♦ (970) 490-1511 ♦ FAX (970) 490-1522

March 6, 1998

Mr. John Lambdin
El Paso Field Services
P.O. Box 4990
Farmington, NM 87499



RE: Paragon Workorder: 98-02-154
Client Project Name: Jaquez Monitor Wells
Client Project Number: Not Submitted

Dear Mr. Lambdin:

Eight water samples were received from El Paso Field Services on February 20, 1998. The samples were scheduled for PAHs by HPLC analysis. The results for this analysis are contained in the enclosed report pages 1-13.

Thank you for your confidence in Paragon Analytics, Inc. Should you have any questions, please call.

Sincerely,

Paragon Analytics, Inc.
Adrienne Mackzum
Project Manager

AM/asg
Enclosure: Report

*Reviewed
QA/QC
Acceptable
3/17/98
[Signature]*

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9802154

Client Name: El Paso Field Services

Client Project Name:

Client Project Number: Jaquez Monitor Wells

Client PO Number:

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
980164	9802154-1		Water	2/18/98	10:05
980166	9802154-2		Water	2/18/98	11:18
980167	9802154-3		Water	2/18/98	12:25
980168	9802154-4		Water	2/18/98	14:15
980169	9802154-5		Water	2/18/98	14:38
980170	9802154-6		Water	2/18/98	15:56
980171	9802154-7		Water	2/18/98	17:38
980172	9802154-8		Water	2/18/98	18:01





PARAGON ANALYTICS, INC.
225 Commerce Drive Ft. Collins, CO 80524

(800) 443-1511 or (970) 490-1511
(970) 490-1522 - Fax

CHAIN OF CUSTODY DATE 2-18-98 Page 1 of 1

*ACCESSION NUMBER (LAB ID) 9802154

REPORT TO: JOHN LAMBDAIN
COMPANY: EL PASO FIELD SERVICE CO.
ADDRESS: 614 REILLY AVENUE
FARMINGTON NM 87401
SAMPLER: Jennie Bird
505-599-2244 505-599-2261
PHONE NO. FAX NO.

ANALYSIS REQUESTED

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Oil & Grease 9070/9071/413.2	418.1 - TRPH	8015 Mod. - Gasoline	8015 Mod. - Diesel	8015ml/8020 - Gasoline/BETX	8020 - BETX only	8240/8260 - GC/MS VOC's	8270 - GC/MS SVOC's	8080 - Pesticides/PCB's	8080 - PCB's only	8310/610 - HPLC PNA's	8150 - Herbicides	8141/614 - OP Pesticides	TOX - EOX - ADX - TX	Total Metals *(specify in comments)	TCLP: *(specify parameters in comments)	Gross Alpha / Beta	Gross Gamma	Gamma Spec	Isotopic Plutonium	Isotopic Uranium	Total Uranium (KPA)	Radium 226 / 228	Tritium (H3)	Strontium 89 / 90	8315 - Formaldehyde	% Moisture	Number of Containers
980164	2-18-98	1005	WATER	01											X																1A	2
980166	2-18-98	1118	WATER	02											X																(7)	2
980167	2-18-98	1225	WATER	03											X																	2
980168	2-18-98	1415	WATER	04											X																	2
980169	2-18-98	1438	WATER	05											X																	2
980170	2-18-98	1536	WATER	06											X																	2
980171	2-18-98	1738	WATER	07											X																	2
980172	2-18-98	1801	WATER	08											X																	2

PROJECT INFORMATION

PROJECT NUMBER:
PROJECT NAME: JADUE MONITOR WELLS
P.O. NUMBER:
TAT: ☒ STANDARD ☐ RUSH DUE
SAMPLE DISPOSAL: ☐ HAZ WASTE \$5.00 ea ☐ RAD CHEM \$15.00 ea ☐ RETURN

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS
CHAIN OF CUSTODY SEALS Y/N
SEALS INTACT? Y/N/NA
REC'D GOOD COND/COLD?
RAD CHEM \$15.00 ea RETURN

RELINQUISHED BY:

1 Sign. Jennie Bird Time 1942
2-18-98
Print DEANIS BIRD Date
Company EL PASO FIELD SERVICE

RELINQUISHED BY:

1 Sign. Federal Time
Print Date
Company

RELINQUISHED BY:

2 Sign. Time
Print Date
Company

COMMENTS: LOW LEVEL BENZO(A) PYRENE < 0.17 PPB

RECEIVED BY:

1 Sign. FedEx Time
Print Date
Company

RECEIVED BY:

1 Sign. D Hunter Time 0930
2-18-98
Print D Hunter Date
Company PAI

RECEIVED BY:

2 Sign. Time
Print Date
Company

CONDITION OF SAMPLE UPON RECEIPT

CLIENT: Al Pross Field ServicesSHIPPING CONTAINER #: (Orders)WORKORDER NO. 9802154INITIALS: PHDATE: 2/20/98

1.	Does this project require special handling according to NEESA, Level 3, or CLP protocols? If yes, complete a. and b. a. Cooler Temperature _____ b. Lot No's. _____ c. Airbill Number _____	Yes	<u>No</u>
2.	Are custody seals on the cooler intact? If so, how many <u>2</u>	N/A	<u>Yes</u> No
3.	Are custody seals on sample containers intact?	N/A	<u>Yes</u> No
4.	Is there a Chain of Custody (COC) or other representative documents, letters or shipping memos?	<u>Yes</u>	No
5.	Is the COC complete? Relinquished: Yes <u>✓</u> No _____ Requested Analysis: Yes <u>✓</u> No _____	N/A	<u>Yes</u> No
6.	Is the COC in agreement with the samples received? No. of Samples: Yes <u>✓</u> No _____ Sample ID's: Yes <u>✓</u> No _____ Matrix: Yes <u>✓</u> No _____ No. of Containers: Yes <u>✓</u> No _____	<u>Yes</u>	No
7.	Are the samples requiring chemical preservation preserved correctly?	N/A	<u>Yes</u> No
8.	Is there enough sample? If so, are they in the proper containers?	<u>Yes</u>	No
9.	Are all samples within holding times for the requested analyses?	<u>Yes</u>	No
10.	Were the sample(s) shipped on ice?	N/A	<u>Yes</u> No
11.	Were all sample containers received intact? (not broken or leaking, etc.)	<u>Yes</u>	No
12.	Are samples requiring no headspace, headspace free?	N/A	<u>Yes</u> No
13.	Do the samples require quarantine?	<u>Yes</u>	<u>No</u>
14.	Do samples require Paragon disposal?	<u>Yes</u>	No
15.	Did the client return any unused bottles?	<u>Yes</u>	<u>No</u>

Describe "NO" items (except No's 1, 13, & 14): _____

Was the client contacted? Yes _____ No _____

If yes, Date: _____ Name of person contacted: _____

Describe actions taken or client instructions: _____

Group Leader's Signature: _____

Date: _____

Cooler Temperature: 2°C, 2°C

Paragon Analytics, Inc.



PAHs by HPLC Case Narrative

El Paso Field Services

EL PASO FS

Order Number - 9802154

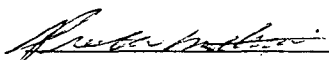
1. This report consists of 8 water samples received by Paragon on 2/20/98.
2. These samples were extracted and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water samples were extracted using continuous liquid-liquid extractors, based on Method 3520.
3. The extracts were then analyzed using HPLC with UV and fluorescence detectors with a reverse phase C18 column according to protocols based on Method 8310. All compounds are analyzed using UV at 254 nm. Confirmation is performed for positive results using the fluorescence detector or confirmed by UV at 280 nm for those compounds that do not respond to the fluorescence detector. The quantitation of each analyte is usually taken from the detector that exhibits the fewest interferences. These quantitations minimize the chances of reporting elevated results based on interferences. If compounds do not confirm quantitatively (if the higher amount is greater than twice the lower amount the 2 amounts are considered not to confirm each other quantitatively), then the value is flagged with a "K" and noted on the report page.
4. All samples were extracted and analyzed within the established holding times.
5. The method blank associated with this project was below the reporting limits for all analytes.
6. All Laboratory Control Spike and Laboratory Control Spike Duplicate recoveries and RPDs were within the acceptance criteria.
7. Matrix Spikes and Matrix Spike Duplicates could not be performed because of insufficient sample volume. A Blank Spike and Blank Spike Duplicate were performed instead. See Item 6 for details on recoveries.
8. All surrogate recoveries were within acceptance criteria.

9. All initial and continuing calibration criteria were within acceptance criteria with the following exceptions: Phenanthrene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene exceeded the acceptance criteria on the fluorescence detector in the second continuing calibration verification run on 2/24/98-2/25/98. Phenanthrene was detected in sample 3, but the results reported were based on the quantitation from the detector that did meet the calibration criteria.

Phenanthrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene exceeded the acceptance criteria on the fluorescence detector in the third continuing calibration verification run on 2/24/98-2/25/98. Phenanthrene was detected in samples 2, 4, 6, & 8, Benzo(a)anthracene was detected in sample 6, & Chrysene was detected in sample 2, but the results reported were based on the quantitation from the detector that did meet the calibration criteria.

Phenanthrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene exceeded the acceptance criteria on the fluorescence detector in the fourth continuing calibration verification run on 2/24/98-2/25/98. Phenanthrene was detected in sample 7, but the results reported were based on the quantitation from the detector that did meet the calibration criteria.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, Paragon Analytics, Inc. certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.


Preston Mathiesen
HPLC Analyst

2/26/98
Date

EM
Reviewer's Initials

3-5-98
Date

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9802154

Client Name: El Paso Field Services

Client Project Name:

Client Project Number: Jaquez Monitor Wells

Client PO Number:

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
980164	9802154-1		Water	2/18/98	10:05
980166	9802154-2		Water	2/18/98	11:18
980167	9802154-3		Water	2/18/98	12:25
980168	9802154-4		Water	2/18/98	14:15
980169	9802154-5		Water	2/18/98	14:38
980170	9802154-6		Water	2/18/98	15:56
980171	9802154-7		Water	2/18/98	17:38
980172	9802154-8		Water	2/18/98	18:01

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

Reagent Blank

Lab Name: Paragon Analytics, Inc.

Client Name: El Paso Field Services

Client Project ID: EL PASO FS

Lab Sample ID: WMB1 2/25/98

Date Collected: N/A

Date Extracted: 2/23/98

Date Analyzed: 2/24/98

Sample Matrix: Water

Cleanup: N/A

Sample Volume: 1000 mL

Final Volume: 1 mL

Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	ND	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	75	35 - 119

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

000004

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980164

Lab Name: Paragon Analytics, Inc.

Client Name: El Paso Field Services

Client Project ID: EL PASO FS

Lab Sample ID: 9802154-1

Date Collected: 2/18/98

Date Extracted: 2/23/98

Date Analyzed: 2/25/98

Sample Matrix: Water

Cleanup: N/A

Sample Volume: 1000 mL

Final Volume: 1 mL

Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	ND	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	78	35 - 119

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

000005

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980166

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: EL PASO FS

Date Collected: 2/18/98
Date Extracted: 2/23/98
Date Analyzed: 2/25/98

Lab Sample ID: 9802154-2

Sample Matrix: Water
Cleanup: N/A

Sample Volume: 1000 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	1.4	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	2.0 K	1.0
2-Methylnaphthalene	4.0	1.0
Acenaphthene	ND	1.0
Fluorene	0.49	0.10
Phenanthrene	0.80	0.050
Anthracene	0.13	0.10
Fluoranthrene	0.11 K	0.10
Pyrene	0.096 K	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	0.059	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	85	35 - 119

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

K = Concentration confirmation does not agree within 50%.

000006

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980167

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: EL PASO FS

Date Collected: 2/18/98
Date Extracted: 2/23/98
Date Analyzed: 2/25/98

Lab Sample ID: 9802154-3

Sample Matrix: Water
Cleanup: N/A

Sample Volume: 1000 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	0.037 J	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	77	35 - 119

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

J = Estimated value. Below reporting limits.

000007

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980168

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: EL PASO FS

Date Collected: 2/18/98
Date Extracted: 2/23/98
Date Analyzed: 2/25/98

Lab Sample ID: 9802154-4

Sample Matrix: Water
Cleanup: N/A

Sample Volume: 1000 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	0.028 J	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	72	35 - 119

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

J = Estimated value. Below reporting limits.

✱

fm

000008

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980169

Lab Name: Paragon Analytics, Inc.

Client Name: El Paso Field Services

Client Project ID: EL PASO FS

Lab Sample ID: 9802154-5

Date Collected: 2/18/98

Date Extracted: 2/23/98

Date Analyzed: 2/25/98

Sample Matrix: Water

Cleanup: N/A

Sample Volume: 1000 mL

Final Volume: 1 mL

Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	ND	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	76	35 - 119

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

00.0009

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980170

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: EL PASO FS

Date Collected: 2/18/98
Date Extracted: 2/23/98
Date Analyzed: 2/25/98

Lab Sample ID: 9802154-6

Sample Matrix: Water
Cleanup: N/A

Sample Volume: 1000 mL
Final Volume: 1 mL
Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L) -
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	0.095	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	0.036 J, K	0.050
Benzo(a)anthracene	0.030 J	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	82	35 - 119

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

J = Estimated value. Below reporting limits.

K = Concentration confirmation does not agree within 50%.

000010

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980171

Lab Name: Paragon Analytics, Inc.

Client Name: El Paso Field Services

Client Project ID: EL PASO FS

Lab Sample ID: 9802154-7

Date Collected: 2/18/98

Date Extracted: 2/23/98

Date Analyzed: 2/25/98

Sample Matrix: Water

Cleanup: N/A

Sample Volume: 1000 mL

Final Volume: 1 mL

Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	3.4	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	2.6	1.0
2-Methylnaphthalene	3.1	1.0
Acenaphthene	ND	1.0
Fluorene	0.33	0.10
Phenanthrene	0.21	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	77	35 - 119

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

000011

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Sample ID

980172

Lab Name: Paragon Analytics, Inc.

Client Name: El Paso Field Services

Client Project ID: EL PASO FS

Lab Sample ID: 9802154-8

Date Collected: 2/18/98

Date Extracted: 2/23/98

Date Analyzed: 2/25/98

Sample Matrix: Water

Cleanup: N/A

Sample Volume: 1000 mL

Final Volume: 1 mL

Dilution Factor: 1

Analyte	Conc (ug/L)	Reporting Limit (ug/L)
Naphthalene	ND	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	ND	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	0.027 J	0.050
Anthracene	ND	0.10
Fluoranthrene	ND	0.10
Pyrene	ND	0.050
Benzo(a)anthracene	ND	0.050
Chrysene	ND	0.050
Benzo(b)fluoranthrene	ND	0.10
Benzo(k)fluoranthrene	ND	0.050
Benzo(a)pyrene	ND	0.10
Dibenzo(a,h)anthracene	ND	0.10
Benzo(g,h,i)perylene	ND	0.10
Indeno(1,2,3-c,d)pyrene	ND	0.10

SURROGATE RECOVERY

Analyte	% Recovery	% Rec Limits
2-Chloroanthracene	74	35 - 119

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

J = Estimated value. Below reporting limits.

000012

POLYNUCLEAR AROMATIC HYDROCARBONS BLANK SPIKE

Method 8310

Lab Name: Paragon Analytics, Inc.
Client Name: El Paso Field Services
Client Project ID: EL PASO FS

Sample ID

Blank Spike

Lab Sample ID: WLCS1, 2/25/98

Date Extracted: 2/23/98

Date Analyzed: 2/24/98

Sample Matrix: Water
Cleanup: N/A

Sample Volume: 1,000 mL

Final Volume: 1 mL

Analyte	Spike Added (ug/L)	BS Concentration (ug/L)	BS Percent Recovery	QC Limits % Rec
Acenaphthylene	10.0	7.60	76	36 - 93
Phenanthrene	1.00	0.811	81	45 - 107
Pyrene	1.00	0.847	85	40 - 104
Benzo(k)fluoranthene	0.250	0.249	100	61 - 126
Dibenzo(a,h)anthracene	1.00	0.789	79	55 - 113

Accepted
[Signature]

Lab Sample ID: WCLSD1, 2/25/98

Analyte	Spike Added (ug/L)	BSD Concentration (ug/L)	BSD Percent Recovery	RPD	QC Limits RPD
Acenaphthylene	10.0	7.61	76	0.2	20
Phenanthrene	1.00	0.799	80	2	20
Pyrene	1.00	0.847	85	0	20
Benzo(k)fluoranthene	0.250	0.239	95	4	20
Dibenzo(a,h)anthracene	1.00	0.779	78	1	20

SURROGATE RECOVERY BS/BSD

Analyte	% Recovery BS	% Recovery BSD	% Rec Limits
2-Chloroanthracene	82	78	35 - 119

000013 *PM*