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REPORTS

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JAQUEZ COM. C #1 AND JAQUEZ COM. E #1

Semi-Annual Report for Soil and Groundwater Remediation

January 1997

Prepared For

EL PASO FIELD SERVICES,
FARMINGTON, NEW MEXICO

Project 17444

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1.0 INTRODUCTION

At the request of El Paso Field Services (EPFS), Philip Environmental Services Corporation (Philip) has prepared the following semi-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, and 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 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 actives 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 Citizens 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 currently sampled on a quarterly basis.
- October 1993 to October 1996 - Floating product has been observed in monitor wells R-1 and R-2 during the months of seasonally low groundwater levels (i.e. January through May). The use of passive skimmer systems were implemented to remove floating product during periods of product accumulation.
- November 1996 - A pumping test was initiated to determine if LNAPL can 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 magnesium peroxide socks were installed in monitoring wells M-3 and M-4 to supply oxygen to enhance natural bio degradation of hydrocarbons in groundwater.

2.0 CURRENT STATUS

Currently, all monitoring wells are sampled on a quarterly basis for BTEX and on an annual basis for polynuclear aromatic hydrocarbons (PAH's). No PAH samples were collected during the period covered by this report; however, PAH sample results from the last (February 1996) sampling event are presented in Appendix B. Currently, BTEX samples are not collected from monitoring wells when light non-aqueous phase liquids (LNAPL) are present. The next quarterly sampling event is scheduled for February of 1997. A summary of BTEX analysis can be found in Table 1, and the latest BTEX laboratory reports in Appendix A. A site map showing monitoring well locations is presented in Figure 1.

On November 5, 1996, Philip initiated a pump test to determine if LNAPL could be removed during the high seasonal groundwater by depressing the water table in and around R-1 and R-2. The test was concluded on November 15, 1996, and did not show any significant changes in LNAPL levels in R-1 and R-2. However, sample results from before and after the test showed reduced total BTEX in most of the wells at the site. The test was conducted during a transition period from high groundwater levels to low groundwater levels. This was confirmed by the lack of rebound of groundwater levels in all of the monitoring wells to pre-test levels. The report detailing the results from the pump test can be found in Attachment A.

On December 19, 1996, Philip injected approximately 500 gallons of urea nitrate in water into the passive vent system. 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. Once the nutrient solution was injected, magnesium peroxide socks were installed in monitoring wells M-3 and M-4 to supply oxygen to enhance natural bio degradation of hydrocarbons in groundwater.

On November 20, 1996, during post-test sampling R-2 had approximately .5 inches of LNAPL in the well. Between November 20, 1996, and January 7, 1997, 21.2 inches of LNAPL had accumulated in R-2.

Philip is currently in the process of installing a belt skimmer in R-2. The belt skimming system will consist of a 2-inch hydrophobic belt suspended in the well into the floating hydrocarbons. The belt will pick up the hydrocarbons and deposit them into a 55-gallon drum. The drum will be fitted with control switches which will automatically shut the system down when the drum is full. The drum will also be placed in a secondary containment device to prevent any potential spills. Once the drum is full it will be transported by EPFS to the Kutz separator in Bloomfield, New Mexico, for disposal. The system will be maintained weekly by Philip, and a monthly report will be submitted to EPFS on the progress of hydrocarbon removal at the site.

3.0 SUMMARY

Garden Area South of Citizen's Ditch

BTEX concentrations continue to decline in this area with the exception of M-3, which has shown a sporadic increase in benzene concentrations, usually during periods of seasonal low groundwater levels. With the injection of urea nitrate into the passive vent system and the installation of magnesium peroxide socks in M-4 and M-3, natural bio degradation should begin to reduce BTEX levels in these wells.

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. The installation of a hydrocarbon skimming system in R-2, and the aggressive removal of free-phase hydrocarbons during the low groundwater season should help reduce the source of the dissolved-phase hydrocarbons at the site. If free-phase hydrocarbons appear in R-1 as they traditionally do during the low groundwater season, a skimming system may also be warranted in R-1.

4.0 RECOMMENDATIONS

Based on the current site activities Philip recommends the following:

- If the next round of sampling shows BTEX values above NMWQCC standards (in M-3 and M-4), re-inject the passive vent system with urea nitrate and reinstall magnesium socks to stimulate naturally occurring microbial activity.
- If free-phase hydrocarbons appear in R-1, install a skimming system to remove hydrocarbons from the well.
- At the conclusion of the low groundwater season evaluate the feasibility of installing a total fluids pumping system to maintain low seasonal groundwater conditions, thus making free-phase hydrocarbons recoverable during periods of high seasonal groundwater levels.
- The injection of nutrients and oxygenates in monitoring wells surrounding R-1 and R-2 is recommended to enhance natural bio degradation of residual hydrocarbons in the vadous zone.

Table 1 - Summary of BTEX Results

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

Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-1	N30969	9/7/93	991	164	113	1111	2379	No	ND
R-1	N31056	10/4/93	1280	1328	74	799	3481	No	1"
R-1	N31240	11/10/93	242	322	15.0	93.9	673	No	ND
R-1	N31384	12/15/93	328	411	26.6	196	962	No	ND
R-1	940026	1/12/94	1830	1965	90.3	1053	4938	No	17"
R-1	940233	2/9/94	1255	1504	42.3	730	3531	No	32"
R-1	940491	3/7/94	7600	8500	280	2700	19080	Yes	4"
R-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	10"
R-1	941003	6/13/94	1450	1930	70.0	944	4394	No	11"
R-1	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	2"
R-1	941619	12/15/94	1890	2130	105.0	990	5115	No	TR
R-1	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR
R-1	951178	11/2/95	2330	2400	108	946	5784	No	ND
R-1	N/A	2/5/96	No Test	No Test	No Test	No Test	No Test	Yes	0.24"
R-1	N/A	5/28/96	No Test	No Test	No Test	No Test	No Test	No	4.8"
R-1	960684	8/6/96	2970	3080	130	1200	7380	No	TR
R-1	960900	10/28/96	1690	1970	60.8	800	4520	No	ND
R-1	961007	11/20/96	1240	1540	61.9	600	3450	No	ND
R-2	N30970	9/7/93	278	651	59.0	538	1526	No	ND
R-2	N31057	10/4/93	509	789	73.0	741	2112	No	ND
R-2	N31241	11/10/93	284	470	38.0	401	1193	No	ND
R-2	N31385	12/15/93	529	864	65.3	709	2167	No	1"
R-2	940027	1/12/94	1722	2501	150	1702	6075	No	24"
R-2	940234	2/9/94	2806	3667	89.5	1520	8083	No	26"
R-2	940492	3/7/94	5600	6800	290	2700	15390	Yes	4"

Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	7"
R-2	941004	6/13/94	3210	3790	139	1670	8809	No	7"
R-2	N/A	9/7/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-2	941620	12/15/94	1140	2200	148	1520	5008	No	0.6"
R-2	N/A	8/25/95	No Test	No Test	No Test	No Test	No Test	No	TR
R-2	951179	11/2/95	1250	2030	116	1010	4406	No	TR
R-2	N/A	2/5/96	No Test	No Test	No Test	No Test	No Test	Yes	2.52
R-2	N/A	5/28/96	No Test	No Test	No Test	No Test	No Test	No	2.04"
R-2	960685	8/6/96	2610	3960	165	1540	8275	No	0.72"
R-2	960901	10/28/96	1100	2300	85.4	1100	4585	No	0.96"
R-2	961009	11/20/96	428	1340	87.3	821	2680	No	0.48"
R-3	N30971	9/7/93	<2.0	61.4	22.0	207	290	No	ND
R-3	N31058	10/4/93	21	179	32.0	310	542	No	ND
R-3	N31242	11/10/93	6.19	27.7	10.4	89.2	134	No	ND
R-3	N31386	12/15/93	26	88.4	19.4	178	312	No	ND
R-3	940028	1/12/94	4.4	2.9	2.7	18	28	No	ND
R-3	940235	2/9/94	<2.0	10.9	8.3	59.6	79	No	ND
R-3	940493	3/7/94	7.7	43	24	220	295	Yes	ND
R-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-3	941005	6/13/94	3.03	41.4	18.4	188	251	No	ND
R-3	941259	9/7/94	<2.5	18	6.9	67.9	93	No	ND
R-3	941621	12/15/94	11.7	12.2	12.4	114	150	No	ND
R-3	950099	2/9/95	7.36	2.7	2.68	20.8	34	Yes	ND
R-3	950562	5/8/95	16.6	11.7	13.9	126	168	No	ND
R-3	950896	8/25/95	<2.5	15.2	13.6	101	130	No	ND
R-3	951180	11/2/95	<2.5	14.0	9.3	82	105	No	ND
R-3	960095	2/5/96	5.34	14.0	12.8	108	140	Yes	ND
R-3	960479	5/28/96	1.05	18.7	22.9	203	246	No	ND
R-3	960686	8/6/96	1.24	24.7	25.9	236	288	No	ND
R-3	960902	10/28/96	<1.0	10.7	12.6	109	132	No	ND

Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-3	961010	11/20/96	<1.0	12.5	12.4	114	139	No	ND
R-4	N30972	9/7/93	104	267	39.9	370	781	No	ND
R-4	N31060	10/4/93	118	266	41	364	789	No	ND
R-4	N31243	11/10/93	93.6	132	40.4	347	613	No	ND
R-4	N31387	12/15/93	102	161	48.4	418	729	No	ND
R-4	940030	1/12/94	124	101	38.5	353	617	No	ND
R-4	940237	2/9/94	120	51.4	20.8	150	342	No	ND
R-4	940494	3/7/94	150	63	20	190	423	Yes	ND
R-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
R-4	941007	6/13/94	179	60.6	17.2	176	433	No	ND
R-4	941260	9/7/94	238	102	26	218	584	No	ND
R-4	941622	12/15/94	222	63.3	26.9	213	525	No	ND
R-4	950100	2/9/95	273	61	20.4	165	519	Yes	ND
R-4	950564	5/8/95	278	251	23.1	220	772	No	ND
R-4	950897	8/25/95	646	278	50.8	544	1519	No	ND
R-4	951181	11/2/95	343	60.4	35.1	284	723	No	ND
R-4	960097	2/5/96	218	43.3	23.1	200	484	Yes	ND
R-4	960481	5/28/96	716	199.0	36.6	394	1346	No	ND
R-4	960687	8/6/96	384	156.0	24	275	839	No	ND
R-4	960904	10/28/96	320	53.4	20.1	237	631	No	ND
R-4	9601011	11/20/96	289	31.2	19.3	220	560	No	ND
R-5	N30973	9/7/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	N31061	10/4/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	N31244	11/10/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	N31388	12/15/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	940031	1/12/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	940238	2/9/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	940496	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
R-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND

Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
R-5	941008	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
R-5	941261	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	941623	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	950102	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
R-5	950565	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	950898	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	951182	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
R-5	960098	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
R-5	960482	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
R-5	960689	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
R-5	960905	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
R-5	961012	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
M-1	N30974	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	N31062	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	N31245	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	N31389	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	940032	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	940239	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	940497	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
M-1	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-1	941009	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-1	941262	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	941624	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	950103	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-1	950566	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	950899	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	951183	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-1	960099	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-1	960483	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
M-1	960690	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
M-1	960906	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND

Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
M-1	961013	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
M-2	N30975	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	N31063	10/5/93	2.0	2.0	<2.0	<2.0	4.0	No	ND
M-2	N31246	11/11/93	2.3	2.0	<2.0	<2.0	4.3	No	ND
M-2	N31390	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	940033	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	940240	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	940498	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
M-2	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-2	941010	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-2	941263	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	941625	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	950104	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-2	950567	5/5/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	950900	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	951184	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-2	960100	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-2	960484	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
M-2	960691	8/6/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
M-2	960907	10/28/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
M-2	961014	11/20/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
M-3	N30976	9/8/93	116	<2.0	3.0	37.6	157	No	ND
M-3	N31064	10/5/93	306	<2.0	4.0	19	329	No	ND
M-3	N31247	11/11/93	8.4	5.3	<2.0	2.6	16	No	ND
M-3	N31391	12/16/93	42	<2.0	<2.0	<2.0	42	No	ND
M-3	940034	1/13/94	19	2.1	<2.0	<2.0	21	No	ND
M-3	940241	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-3	940499	3/7/94	<0.5	<0.5	<0.5	2.5	3	Yes	ND
M-3	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND

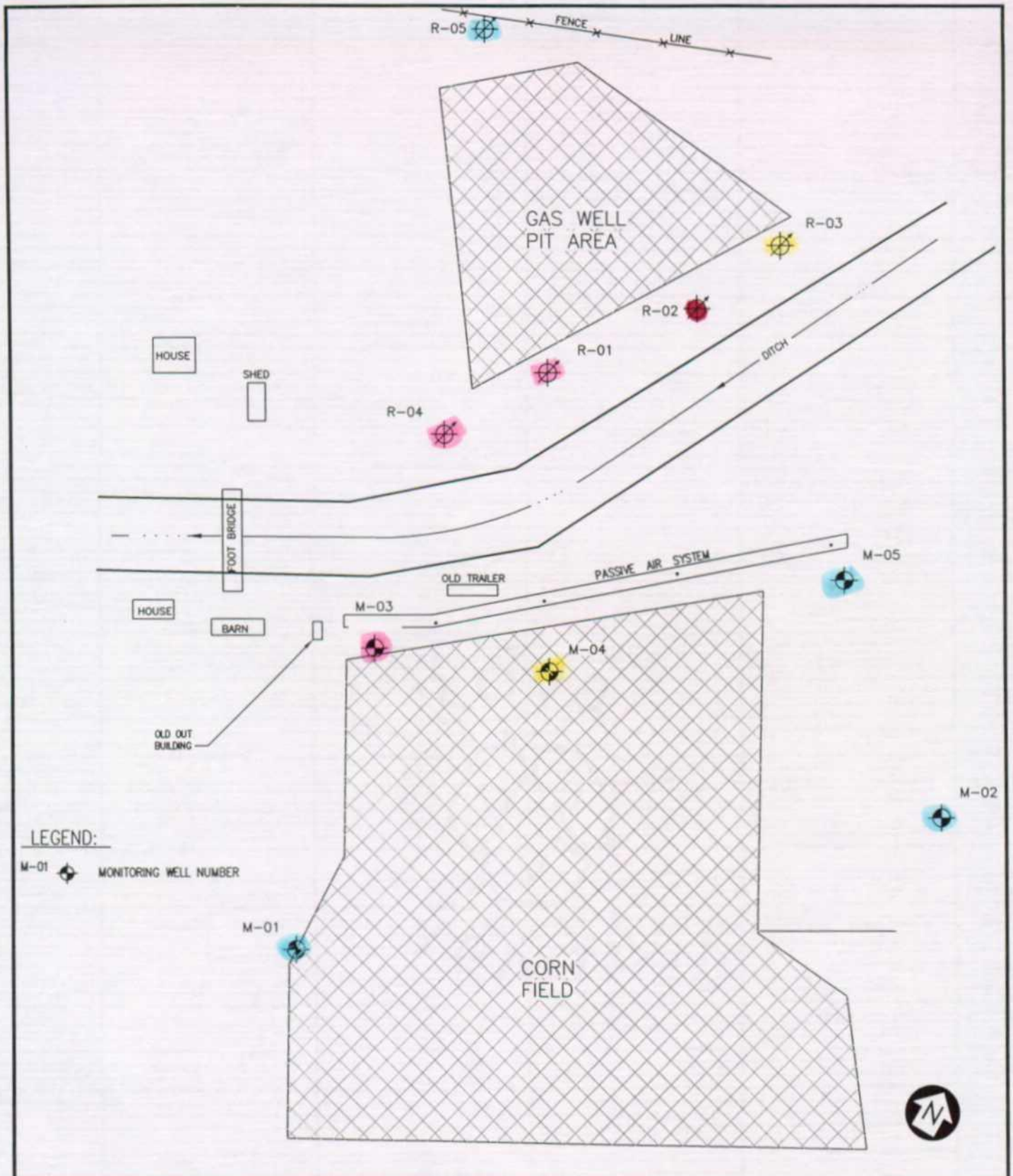
Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
M-3	941011	6/13/94	3.65	<2.0	<2.0	<2.0	4	No	ND
M-3	941264	9/7/94	2.87	<2.5	<2.5	2.5	5	No	ND
M-3	941626	12/15/94	<2.5	<2.5	<2.5	5.61	6	No	ND
M-3	950105	2/9/95	11.4	<2.5	<2.5	<2.5	11	Yes	ND
M-3	950568	5/8/95	180	67.2	<2.5	53.9	301	No	ND
M-3	950901	8/25/95	11.8	<2.5	<2.5	16.8	29	No	ND
M-3	951185	11/2/95	<2.5	<2.5	<2.5	5.03	5	No	ND
M-3	960101	2/5/96	236	<2.5	5.77	22.2	264	Yes	ND
M-3	960485	5/28/96	88.4	<1.0	5.93	20.3	115	No	ND
M-3	960692	8/6/96	96.4	<1.0	2.5	3.27	102	No	ND
M-3	960908	10/29/96	17.4	<1.0	1.55	2.23	21	No	ND
M-3	961015	11/20/96	70.2	<1.0	1.89	<3	72	No	ND
M-4	N30977	9/8/93	213	13.3	58	519	803	No	ND
M-4	N31065	10/5/93	302	2.0	55	395	754	No	ND
M-4	N31248	11/11/93	234	2.0	56	383	675	No	ND
M-4	N31392	12/16/93	171	<2.0	34.3	244	449	No	ND
M-4	940035	1/13/94	175	2.5	38	288	504	No	ND
M-4	940242	2/10/94	137	<2.0	29.8	192	359	No	ND
M-4	940500	3/7/94	120	<2.5	27	220	367	Yes	ND
M-4	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-4	941012	6/13/94	151	<2.0	28.4	246	425	No	ND
M-4	941265	9/7/94	145	<2.5	24.1	231	400	No	ND
M-4	941628	12/15/94	184	<2.5	22.3	215	421	No	ND
M-4	950106	2/9/95	160	<2.5	19.6	186	366	Yes	ND
M-4	950569	5/8/95	108	<2.5	11.7	119	239	No	ND
M-4	950902	8/25/95	29.3	<2.5	13	116	158	No	ND
M-4	951187	11/2/95	15.1	<2.5	12.9	136	164	No	ND
M-4	960102	2/5/96	33.5	<2.5	19.3	209	262	Yes	ND
M-4	960486	5/28/96	17	<1.0	8.93	93.6	120	No	ND
M-4	960693	8/6/96	2.77	<1.0	3.5	38.5	45	No	ND

Table 1

Well Number	Sample Number	Date of Sample	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX ug/L	PAH Analysis Performed	Floating Product Inches
M-4	960909	10/29/96	1.03	<1.0	3.66	55.5	60	No	ND
M-4	961016	11/22/96	3.28	<1.0	7.77	90.3	101	No	ND
M-5	N30979	9/8/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	N31066	10/5/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	N31250	11/11/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	N31393	12/16/93	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	940036	1/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	940243	2/10/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	940501	3/7/94	<0.5	<0.5	<0.5	<0.5	N/A	Yes	ND
M-5	N/A	5/17/94	No Test	No Test	No Test	No Test	No Test	No	ND
M-5	941013	6/13/94	<2.0	<2.0	<2.0	<2.0	N/A	No	ND
M-5	941267	9/7/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	941629	12/15/94	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	950107	2/9/95	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-5	950570	5/8/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	950904	8/25/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	951188	11/2/95	<2.5	<2.5	<2.5	<2.5	N/A	No	ND
M-5	960103	2/5/96	<2.5	<2.5	<2.5	<2.5	N/A	Yes	ND
M-5	960487	5/28/96	<1.0	<1.0	<1.0	<1.0	N/A	No	ND
M-5	960694	8/6/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
M-5	960910	10/29/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND
M-5	961017	11/21/96	<1.0	<1.0	<1.0	<3.0	N/A	No	ND

Figure 1 - Site Map



PHILIP ENVIRONMENTAL

NO.	REVISION	BY	APPR.	DATE

TITLE:
JAQUEZ GAS COM E#1 & C#1
SITE MAP

SCALE	NONE	DATE
DWN:		1/29/97
DES:		
CHKD:		
APPD:		

PROJECT NO: 17444
EL PASO FIELD SERVICES COMPANY

FIGURE 1

REV: 0

COL J:\17444\CIV\CL01-4

Appendix A - BTEX Analytical From the Current Report Period

November 4, 1996

Pre-Test Pumping Results

Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 960900 to 960910
Sampled October 28, 1996
Sampled by D. Bird

Report Distribution:

Scott Pope, Philip Environmental
Results Log Book

El Paso Natural Gas Company

A 2661

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Samplers: (Signature)	Date
	TRAVEL	Dennis Bird	10-29-96

Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTXE	Remarks
10-29-96	0950		X	960703	G2	X		MONITOR WELL R-1
10-29-96	1135		X	960701	G2	X		MONITOR WELL R-2
10-29-96	1215		X	960702	G2	X		MONITOR WELL R-3
10-29-96	1215		X	960703	G2	X		MONITOR WELL R-3
10-29-96	1242		X	960704	G2	X		MONITOR WELL R-4
10-29-96	1325		X	960705	G2	X		MONITOR WELL R-5
10-29-96	1507		X	960706	G2	X		MONITOR WELL M-1
10-29-96	1513		X	960707	G2	X		MONITOR WELL M-2
10-29-96	1625		X	960708	G2	X		MONITOR WELL M-3
10-29-96	1044		X	960709	G2	X		MONITOR WELL M-4
10-29-96	1100		X	960710	G2	X		MONITOR WELL M-5
10-29-96	—		X	———	G1	X		TRIP BLANK

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	10-29-96 1325				
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:	
		Maria Hoppe	10/29/96 1345		

Carrier Co:

Carrier Phone No.

Date Results Reported / by: (Signature)

Air Bill No.:

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960900
MTR CODE | SITE NAME:		Jacquez MW R-1
SAMPLE DATE | TIME (Hrs):	10/28/96	950
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/30/96	10/30/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	1690	PPB	25	D		
TOLUENE	1970	PPB	25	D		
ETHYL BENZENE	60.8	PPB	25	D		
TOTAL XYLENES	800	PPB	25	D		
TOTAL BTEX	4520	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 90.8 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: John Franklin Date: 11/1/96

947967.XLS,10/30/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-1

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 22
Initial Depth to Water (feet) 13.93
Height of Water Column in Well (feet) 8.17
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing		5.4	16.2
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other O.C. CHEMETS KIT

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	Bottom Valve
[ ]	Submersible	[ ]	Double Check Valve
[ ]	Peristaltic	[ ]	Stainless-steel Kemmerer

[ ] Other

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method Pump	Development Method Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal) Increment	Water Volume Removed (gal) Cumulativ	Product Volume Removed (gallons) Increment	Product Volume Removed (gallons) Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-28-96	1006										12.8	7.12	653		
10-28-96	1011						5.0	5.0			13.0	7.25	805		
10-28-96	1017						5.0	10.0			12.9	7.34	672		
10-28-96	1022						5.0	15.0			12.7	7.31	589		
10-28-96	1028						5.0	20.0			12.7	7.29	569	1.0	

Comments STRONG HYDROCARBON SMELL.

Developer's Signature Dennis Bird Date 10-28-96 Reviewer [signature] Date 11/1/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960901
MTR CODE | SITE NAME:		Jacquez MW R-2
SAMPLE DATE | TIME (Hrs):	10/28/96	1135
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/30/96	10/30/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	1100	PPB	25	D		
TOLUENE	2300	PPB	25	D		
ETHYL BENZENE	85.4	PPB	25	D		
TOTAL XYLENES	1100	PPB	25	D		
TOTAL BTEX	4585	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 90.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: John Fowler Date: 11/1/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number R-2

Site Name JAQUEZ

Meter Code

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 22.1
Initial Depth to Water (feet) 12.77
Height of Water Column in Well (feet) 9.33
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing		6.2	18.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Methods of Development

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

☐ Other

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method Pump	Development Method Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal) Increment	Water Volume Removed (gal) Cumulativ	Product Volume Removed (gallons) Increment	Product Volume Removed (gallons) Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-28-96	1050										13.7	7.30	367		
10-28-96	1055						5.0	5.0			13.5	7.00	455		
10-28-96	1102						5.0	10.0			13.1	7.07	452		
10-28-96	1110						5.0	15.0			13.0	7.11	448		
10-28-96	1123						5.0	20.0			12.7	7.11	417	1.0	

Comments * 0.08' OF FREE FLOATING HYDROCARBON. STRONG HYDROCARBON SMELL

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Leeds Date 10/1/1/96

*0.08' = 0.96 Inches of Product

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960902
MTR CODE | SITE NAME:		Jacquez MW R-3
SAMPLE DATE | TIME (Hrs):	10/28/96	1215
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	10.7	PPB				
ETHYL BENZENE	12.6	PPB				
TOTAL XYLENES	109	PPB				
TOTAL BTEX	132	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 94.5 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Faulkner Date: 11/1/96

960901.XLS,10/30/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960903
MTR CODE | SITE NAME:		Jacquez MW R-3
SAMPLE DATE | TIME (Hrs):	10/28/96	1215
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: Field Duplicate

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	17.6	PPB				
ETHYL BENZENE	17.2	PPB				
TOTAL XYLENES	150	PPB				
TOTAL BTEX	185	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 93.1 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Laskin Date: 11/1/96

960902.XLS,10/30/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-3

Site Name JAQUEZ

Meter Code

Development Criteria

- [ ] 3 to 5 Casing Volumes of Water Removel
- [ ] Stabilization of Indicator Parameters
- [ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 13.63
Height of Water Column in Well (feet) 8.47
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		5.6	16.8
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- [X] pH Meter
- [ ] DO Monitor
- [X] Conductivity Meter
- [X] Temperature Meter
- [X] Other D.O. CHEMETS KIT

Water Disposal

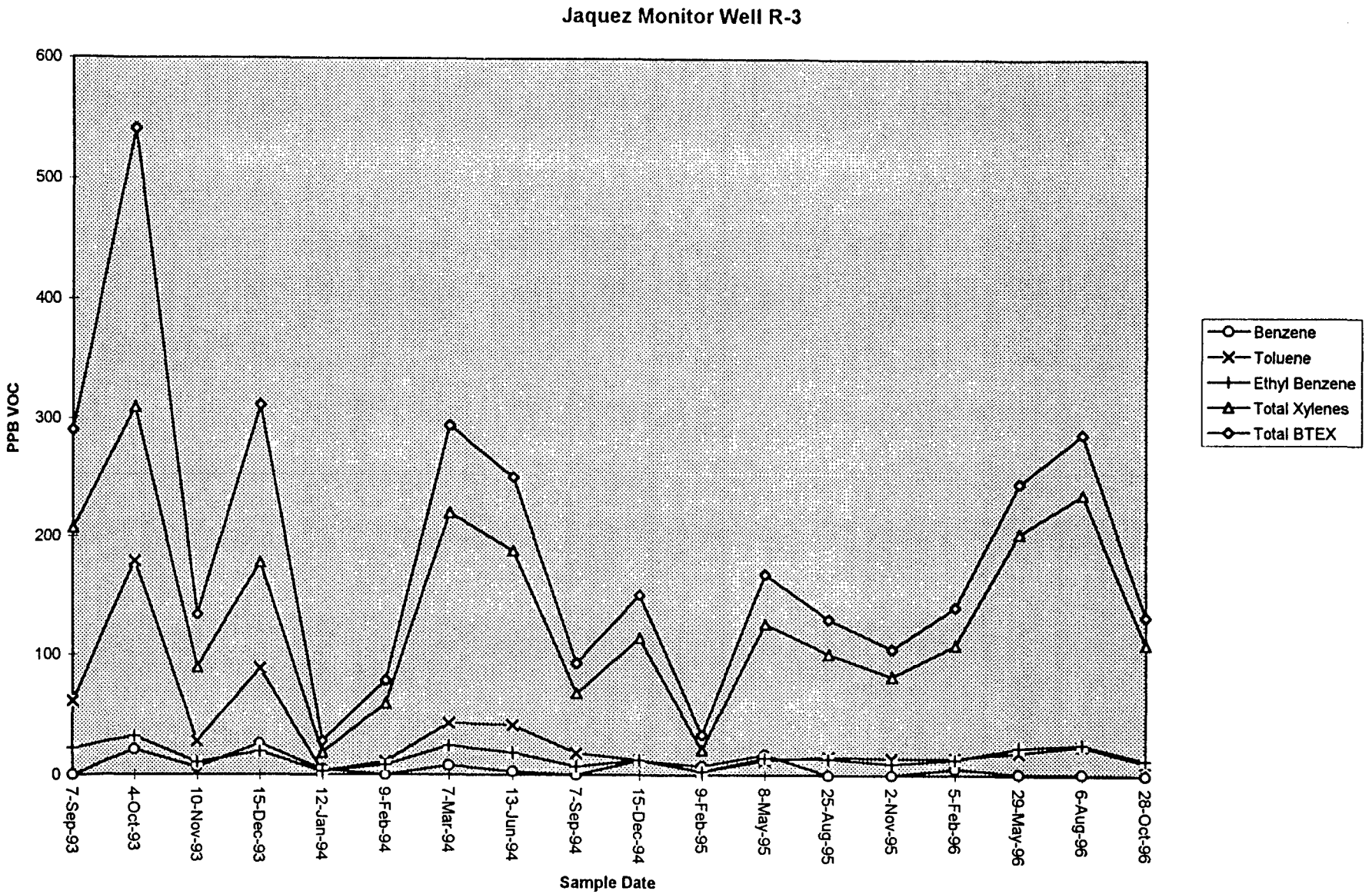
ON SITE BARRELS

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-28-96	0915										13.8	6.54	618		
10-28-96	0921						5.0	5.0			13.2	6.23	711		
10-28-96	0927						5.0	10.0			12.5	6.50	553		
10-28-96	0935						5.0	15.0			12.3	6.61	470		
10-28-96	0941						5.0	20.0			12.1	6.74	394	1.0	

Comments

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Fowler Date 11/1/96


Jaquez Monitor Well R-3
PPB VOC
600
500
400
300
200
100
0
7-Sep-93
4-Oct-93
10-Nov-93
15-Dec-93
12-Jan-94
9-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
28-Oct-96
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960904
MTR CODE | SITE NAME:		Jacquez MW R-4
SAMPLE DATE | TIME (Hrs):	10/28/96	1242
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/30/96	10/30/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	320	PPB	2	D		
TOLUENE	53.4	PPB	2	D		
ETHYL BENZENE	20.1	PPB	2	D		
TOTAL XYLENES	237	PPB	2	D		
TOTAL BTEX	631	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 91.0 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: John Faldi Date: 11/1/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-4

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump	Bailer
[ ] Centrifugal	[X] 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) 13.32
Height of Water Column in Well (feet) 8.78
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing		5.8	17.4
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

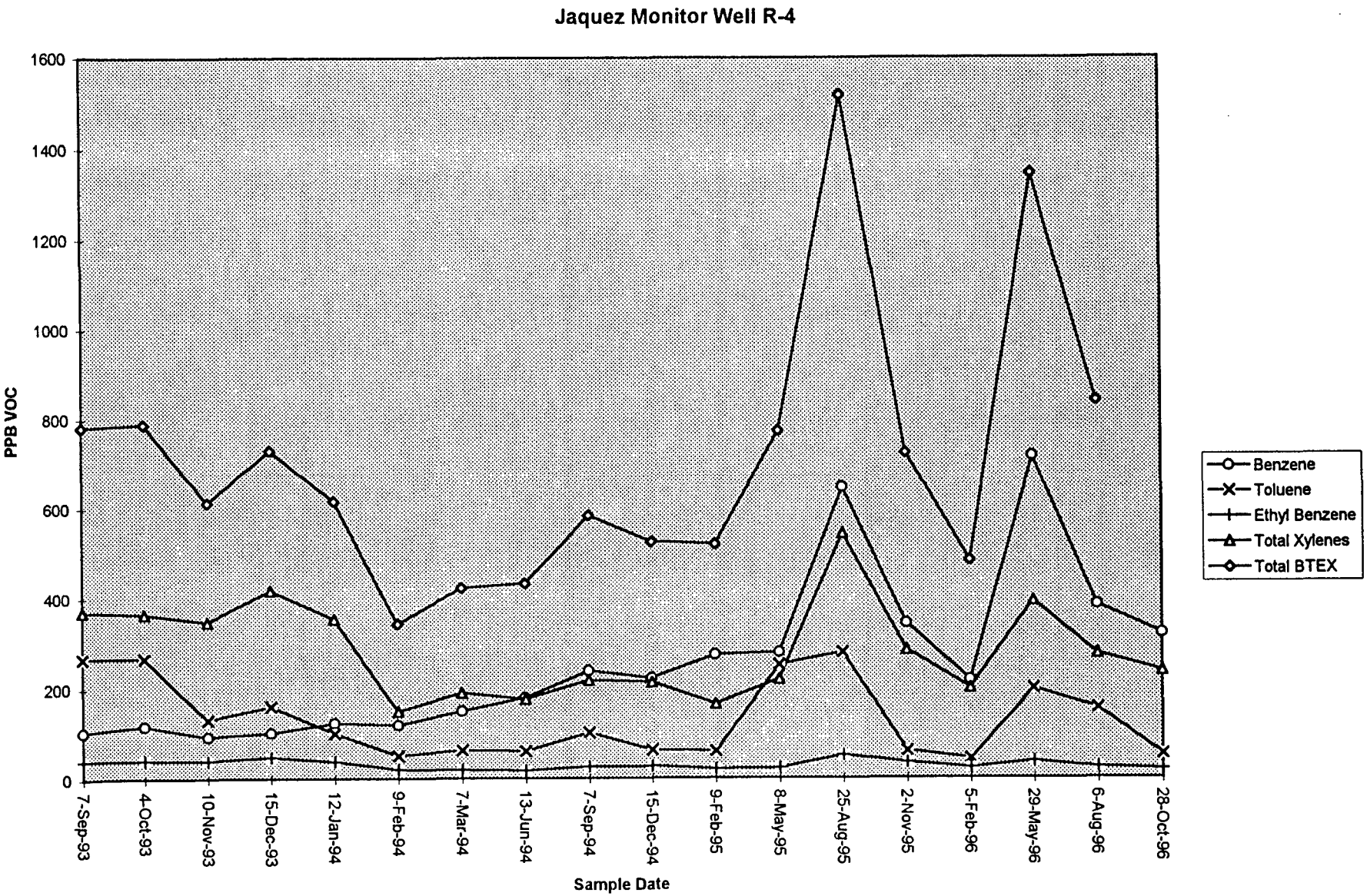
ON SITE BARRELS

Water Removal Data

Date	Time	Development Method Pump	Development Method Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal) Increment	Water Volume Removed (gal) Cumulativ	Product Volume Removed (gallons) Increment	Product Volume Removed (gallons) Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-28-96	1202										14.1	7.33	506		
10-28-96	1207						5.0	5.0			14.3	7.28	54		
10-28-96	1212						5.0	10.0			14.2	7.31	621		
10-28-96	1220						5.0	15.0			14.4	7.35	991		
10-28-96	1232						5.0	20.0			14.5	7.42	1071	1.0	

Comments

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Fowler Date 11/1/96


Jaquez Monitor Well R-4
PPB VOC
1600
1400
1200
1000
800
600
400
200
0
7-Sep-93
4-Oct-93
10-Nov-93
15-Dec-93
12-Jan-94
9-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
28-Oct-96
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960905
MTR CODE | SITE NAME:		Jacquez MW R-5
SAMPLE DATE | TIME (Hrs):	10/28/96	1325
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	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 93.6 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Fast Date: 11/1/96

960904.XLS,10/30/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number R-5

Site Name JAQUEZ

Meter Code

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removel
☐ 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) 16.19
Height of Water Column in Well (feet) 8.21
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		5.4	16.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

ON SITE BARRELS

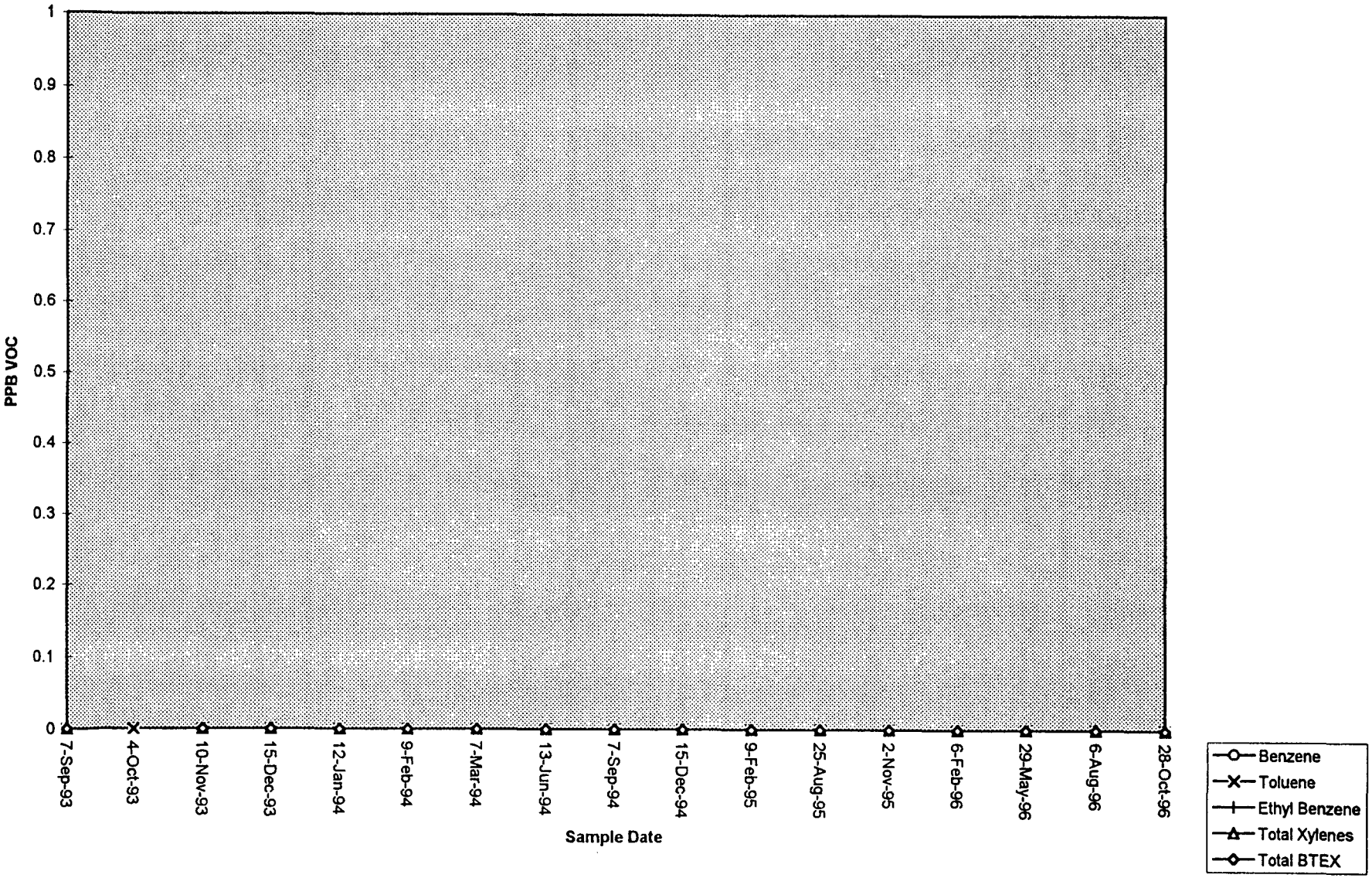
Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-28-96	1258										14.3	7.78	549		
10-28-96	1303						5.0	5.0			14.7	7.75	586		
10-28-96	1312						5.0	10.0			14.0	7.55	1137	2.5	

Comments BAILED DRY @ 10.0 GALLONS

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Laub Date 11/1/96

Jaquez Monitor Well R-5



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960906
MTR CODE | SITE NAME:		Jacquez MW M-1
SAMPLE DATE | TIME (Hrs):	10/28/96	1507
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	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 93.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Labrie Date: 11/1/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-1

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump	Bailer
[ ] Centrifugal	[X] 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) 4.39
Height of Water Column in Well (feet) 10.91
Diameter (inches): Well 4 Gravel Pack

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

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

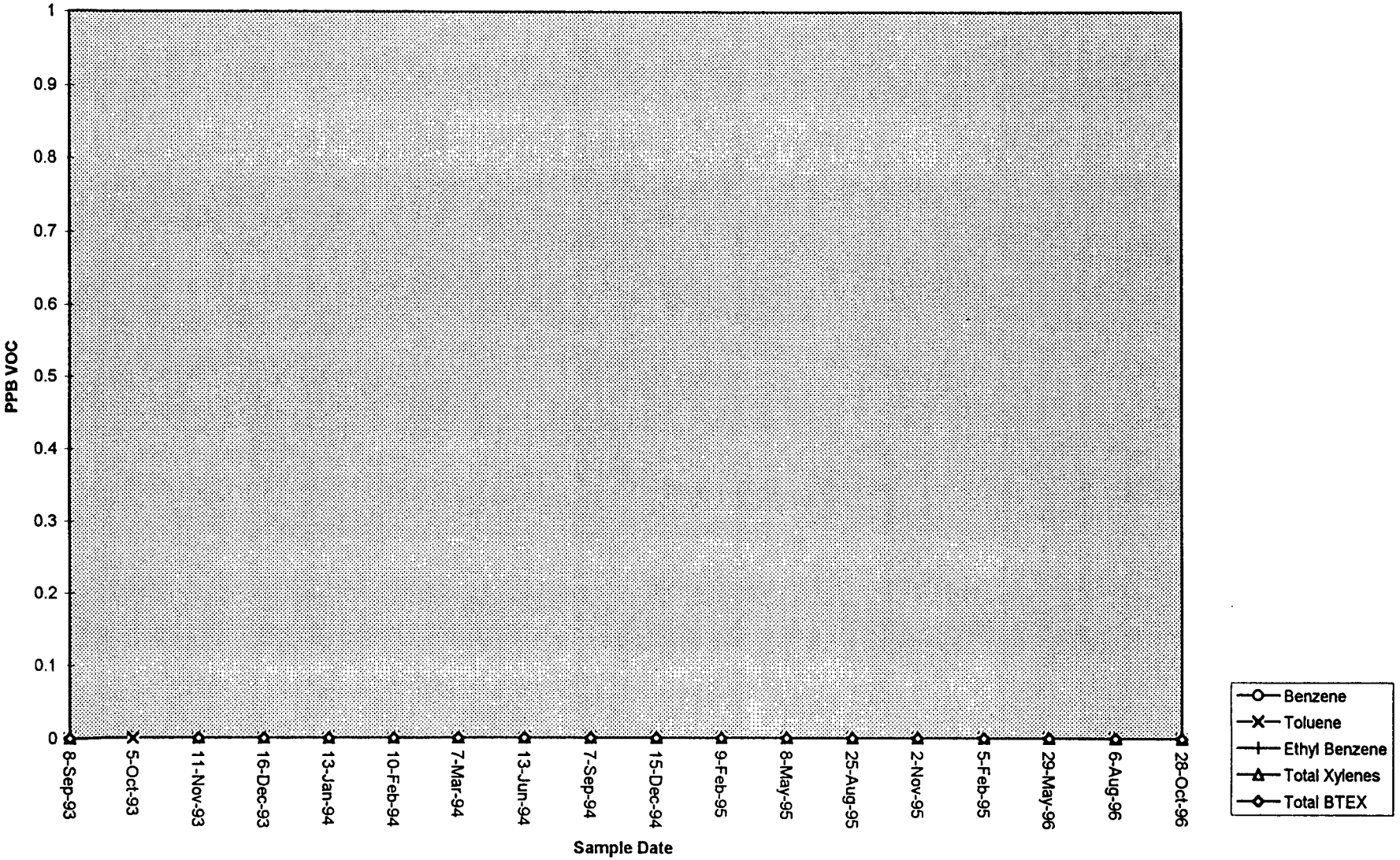
Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
10-28-96	1407										12.1	7.82	295		
10-28-96	1442						5.0	5.0			12.4	7.38	292		
10-28-96	1420						3.5	8.5			12.2	7.31	285	2.5	

Comments BAILED ORV @ 8.5 GALLONS.

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Smith Date 11/1/96

Jaquez Monitor Well M-1



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960907
MTR CODE | SITE NAME:		Jacquez MW M-2
SAMPLE DATE | TIME (Hrs):	10/28/96	1518
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	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 93.1 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: _____ Date: 11/1/96

960906.XLS,10/30/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-2

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removed
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 3.73
Height of Water Column in Well (feet) 11.37
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		7.5	22.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

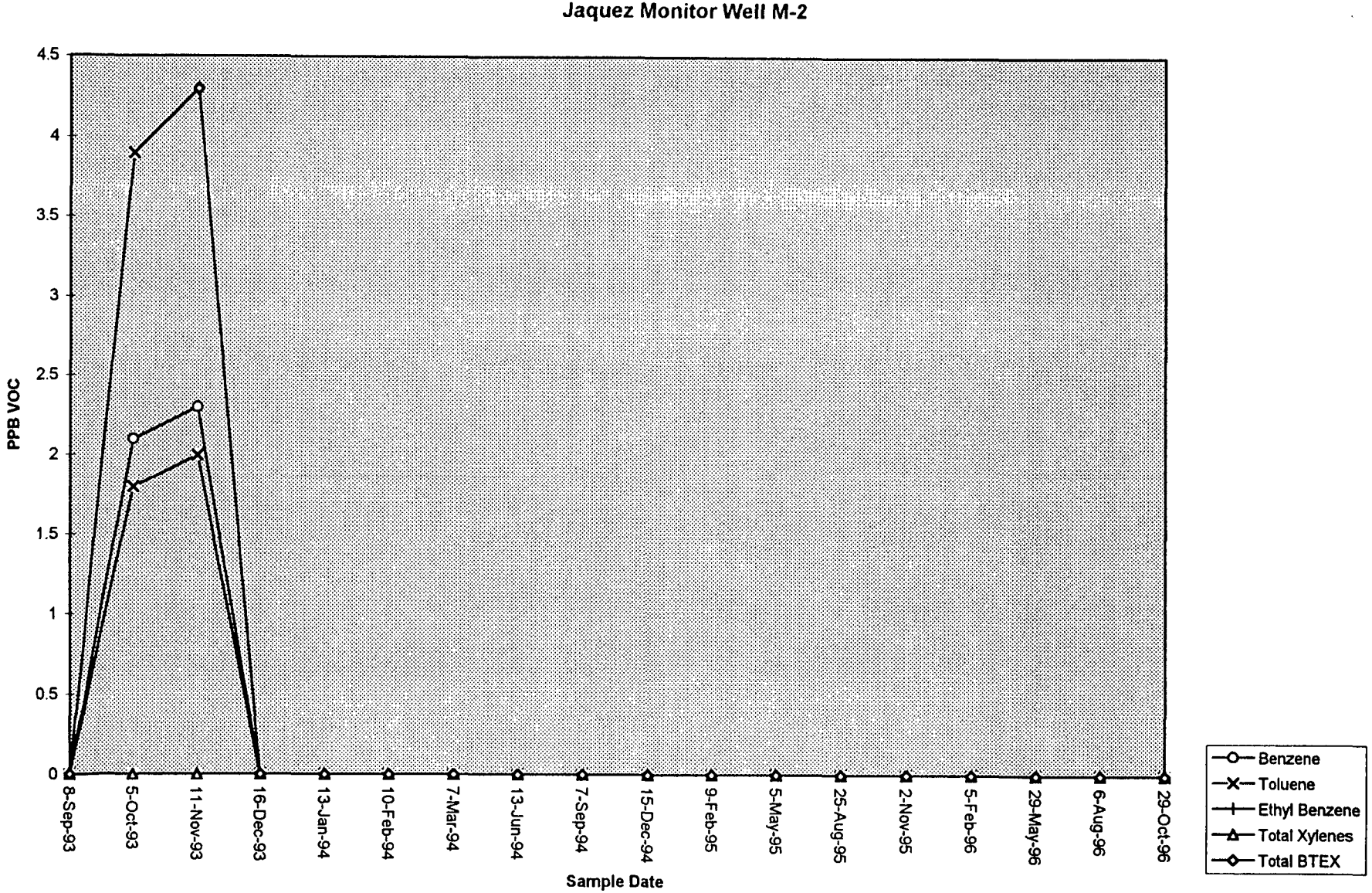
ON SITE BARRELS

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-28-96	1432										11.0	7.12	539		
10-28-96	1438						5.0	5.0			11.3	6.92	540		
10-28-96	1443						5.0	10.0			12.0	7.00	536		
10-28-96	1450						5.0	15.0			11.7	6.88	500		
10-28-96	1455						5.0	20.0			11.7	6.90	497		
10-28-96	1501						5.0	25.0			11.5	6.86	505	1.0	

Comments

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Fuller Date 11/1/96


Jaquez Monitor Well M-2
PPB VOC
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
8-Sep-93
5-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
5-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
29-Oct-96
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960908
MTR CODE | SITE NAME:		Jacquez MW M-3
SAMPLE DATE | TIME (Hrs):	10/28/96	1625
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	17.4	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	1.55	PPB				
TOTAL XYLENES	2.23	PPB				
TOTAL BTEX	21	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.9 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Stabler Date: 11/1/96

960908.XLS,11/1/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-3

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 4.75
Height of Water Column in Well (feet) 10.45
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.9	20.7
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O CHEMETS KIT

Water Disposal

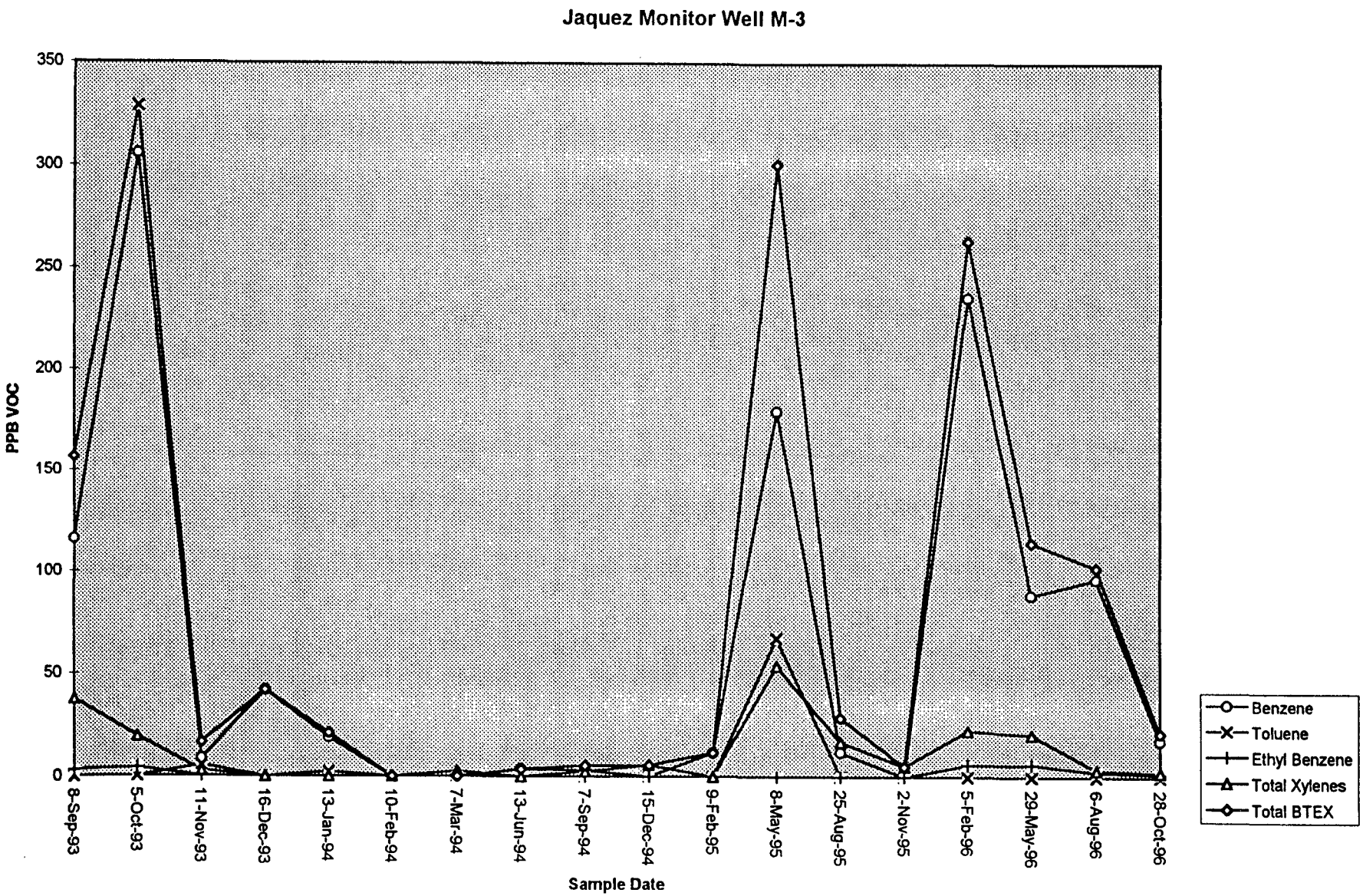
ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
10-28-96	1542										11.5	7.05	546		
10-28-96	1547						5.0	5.0			12.1	6.88	510		
10-28-96	1552						5.0	10.0			12.4	6.87	449		
10-28-96	1603						5.0	15.0			12.2	6.92	412		
10-28-96	1608						5.0	20.0			12.3	6.90	398		
10-28-96	1615						5.0	25.0			11.9	6.95	374	1.5	

Comments

Developer's Signature Dennis Bird Date 10-28-96 Reviewer John Smith Date 11/4/96


Jaquez Monitor Well M-3
PPB VOC
350
300
250
200
150
100
50
0
8-Sep-93
5-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
28-Oct-96
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960909
MTR CODE | SITE NAME:		Jacquez MW M-4
SAMPLE DATE | TIME (Hrs):	10/29/96	1046
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/29/96
TYPE | DESCRIPTION:	Grab	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	1.03	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	3.66	PPB				
TOTAL XYLENES	55.5	PPB				
TOTAL BTEX	60	PPB				

--BTEX is by EPA Method 8020 --

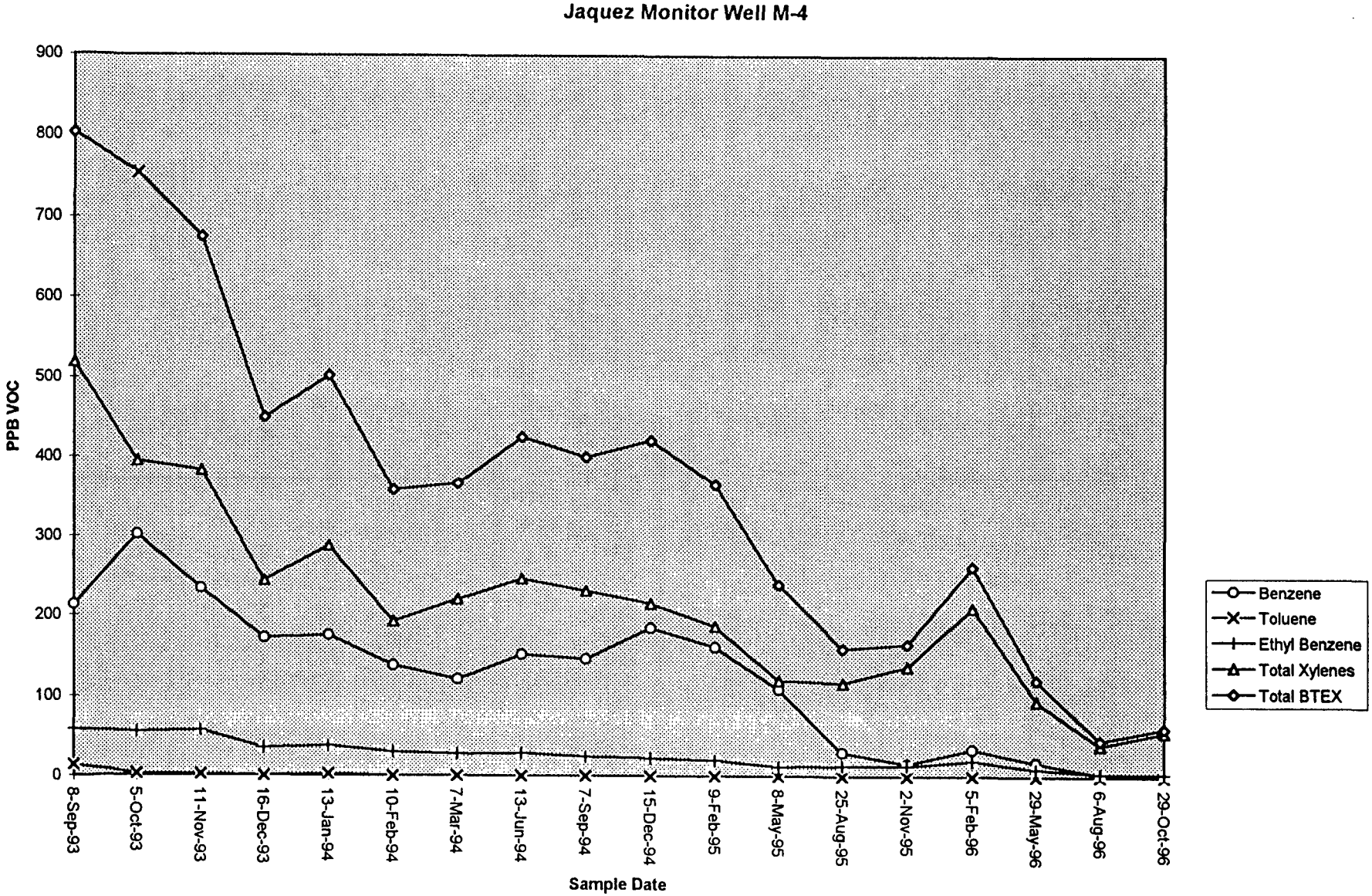
The Surrogate Recovery was at 93.0 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Labadie Date: 11/1/96

960907.XLS,10/30/96


Jaquez Monitor Well M-4
PPB VOC
900
800
700
600
500
400
300
200
100
0
8-Sep-93
5-Oct-93
11-Nov-93
16-Dec-93
13-Jan-94
10-Feb-94
7-Mar-94
13-Jun-94
7-Sep-94
15-Dec-94
9-Feb-95
8-May-95
25-Aug-95
2-Nov-95
5-Feb-96
29-May-96
6-Aug-96
29-Oct-96
Sample Date
Benzene
Toluene
Ethyl Benzene
Total Xylenes
Total BTEX

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-4

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	Bottom Valve
[ ]	Submersible	[ ]	Double Check Valve
[ ]	Peristaltic	[ ]	Stainless-steel Kemmerer

[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 15.7
Initial Depth to Water (feet) 3.04
Height of Water Column in Well (feet) 12.26
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		8.1	24.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
10-29-96	0925										10.8	6.98	405		
10-29-96	0930						5.0	5.0			11.8	6.94	418		
10-29-96	0938						5.0	10.0			11.7	6.99	404		
10-29-96	1037						4.0	14.0			12.2	7.03	402	5.0	

Comments BAILED DRY @ 10.0 GALLONS.

Developer's Signature Dennis Bird Date 10-29-96 Reviewer John Fuller Date 11/1/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960910
MTR CODE | SITE NAME:		Jacquez MW M-5
SAMPLE DATE | TIME (Hrs):	10/29/96	1100
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	10/29/96	10/30/96
TYPE | DESCRIPTION:	Grab	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: 11/1/96

960908.XLS,10/30/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-5

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removed
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 4.23
Height of Water Column in Well (feet) 10.87
Diameter (inches): Well 4 Gravel Pack

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

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

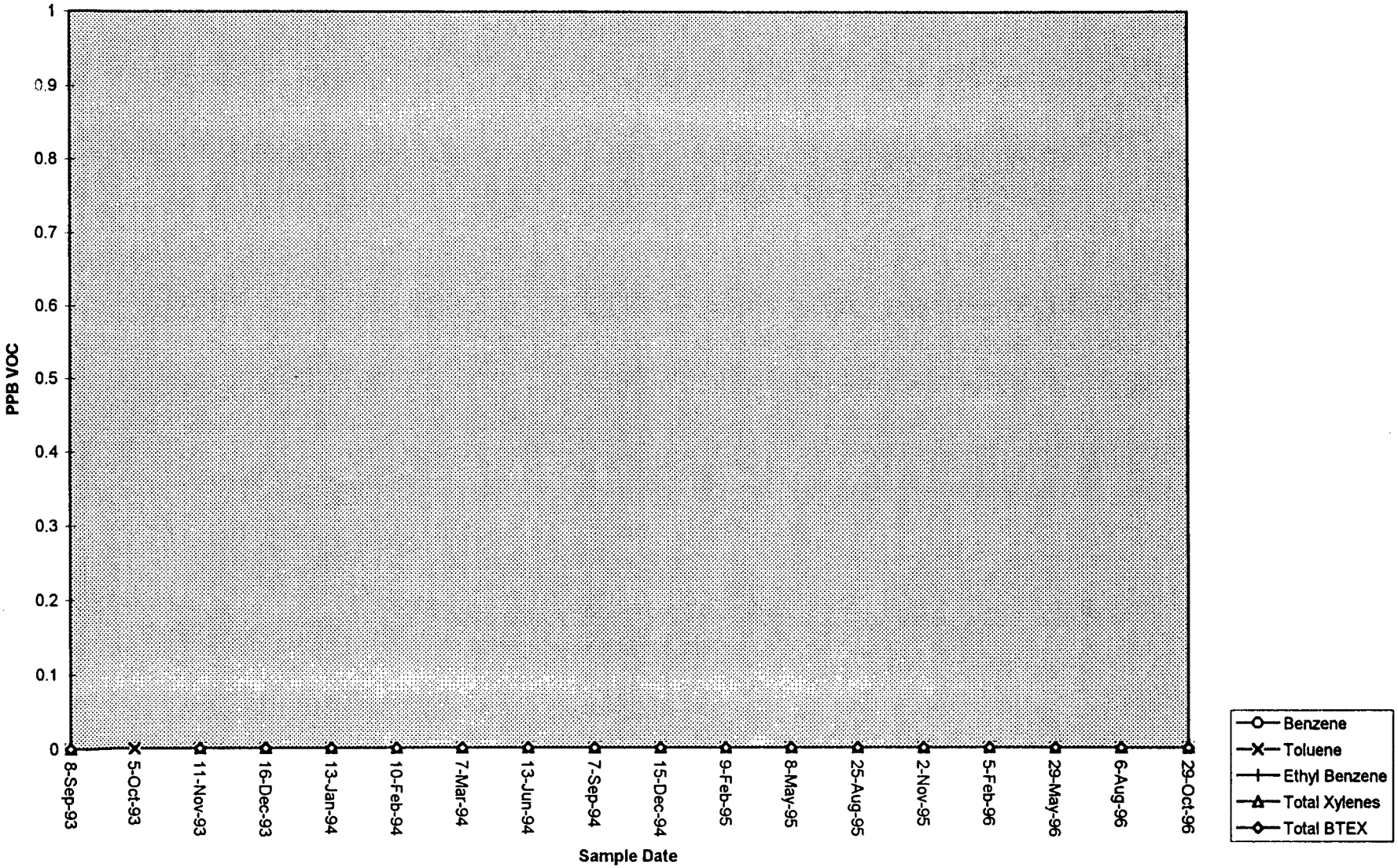
Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
10-29-96	0955										10.6	6.92	548		
10-29-96	1001						5.0	5.0			11.1	6.83	468		
10-29-96	1005						5.0	10.0			11.7	6.80	448		
10-29-96	1013						5.0	15.0			11.7	6.84	464		
10-29-96	1021						5.0	20.0			11.8	6.87	481		
10-29-96	1032						5.0	25.0			11.7	7.02	482	4.0	

Comments

Developer's Signature Dennis Bird Date 10-29-96 Reviewer Date 11/1/96

Jaquez Monitor Well M-5



December 2, 1996

Post-Test Pumping Results

Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 961007 to 961017
Sampled November 20, 1996
Sampled by D. Bird

Report Distribution:

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

Attachments

El Paso Natural Gas Company

A 1955

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis				Remarks
Samplers: (Signature)	Date:							

MATRIX	Date	Time	Comp.	GRAB	Sample Number
WATER	11-20-96	1055		X	
WATER	11-20-96	1045		X	
WATER	11-20-96	1032		X	
WATER	11-20-96	1022		X	
WATER	11-20-96	1015		X	
WATER	11-20-96	1005		X	
WATER	11-20-96	0950		X	
WATER	11-20-96	0940		X	
WATER	11-20-96	0930		X	
WATER	11-20-96	0922		X	
WATER	11-20-96	0917		X	
WATER	11-20-96	0907		X	
WATER	11-20-96	—		X	—
WATER	11-21-96	—		X	—

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
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:	
			11/25/96		

Carrier Co: | Carrier Phone No. | Date Results Reported / by: (Signature)

Air Bill No.:

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961007
MTR CODE | SITE NAME:	N/A	Jaquez MW R-1
SAMPLE DATE | TIME (Hrs):	11/20/96	1055
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/26/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	1240	PPB	25	D		
TOLUENE	1540	PPB	25	D		
ETHYL BENZENE	61.9	PPB	25	D		
TOTAL XYLENES	600	PPB	25	D		
TOTAL BTEX	3450	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 101 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: _____ Date: 12/2/96

961007.XLS,12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961008
MTR CODE | SITE NAME:	N/A	Jaquez MW R-1
SAMPLE DATE | TIME (Hrs):	11/20/96	1055
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/26/96	11/26/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: Field Duplicate

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	1320	PPB	25	D		
TOLUENE	1610	PPB	25	D		
ETHYL BENZENE	63.1	PPB	25	D		
TOTAL XYLENES	613	PPB	25	D		
TOTAL BTEX	3610	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 101 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: John Fowler Date: 12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-1

Site Name JAQUEZ

Meter Code

Development Criteria

- [X] 3 to 5 Casing Volumes of Water Removel
- [ ] Stabilization of Indicator Parameters
- [ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 15.1
Height of Water Column in Well (feet) 7.00
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		4.6	13.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- [X] pH Meter
- [ ] DO Monitor
- [X] Conductivity Meter
- [X] Temperature Meter
- [X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
11-20-96	1026										13.4	7.46	669		
11-20-96	1034						5.0	5.0			13.6	7.13	708		
11-20-96	1040						5.0	10.0			14.0	7.08	530		
11-20-96	1046						5.0	15.0			14.6	7.00	478	0.5	

Comments

Developer's Signature Dennis Bird Date 11-20-96 Reviewer Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961009
MTR CODE | SITE NAME:	N/A	Jaquez MW R-2
SAMPLE DATE | TIME (Hrs):	11/20/96	1152
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/26/96	11/26/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	428	PPB	25	D		
TOLUENE	1340	PPB	25	D		
ETHYL BENZENE	87.3	PPB	25	D		
TOTAL XYLENES	821	PPB	25	D		
TOTAL BTEX	2680	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 99.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: _____ Date: 12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-2

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 22.1
Initial Depth to Water (feet) 13.98
Height of Water Column in Well (feet) 8.12
Diameter (inches): Well Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		5.4	16.1
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O CHEMETS KIT

Methods of Development

Pump	Bailer
[ ] Centrifugal	[X] Bottom Valve
[ ] Submersible	[ ] Double Check Valve
[ ] Peristaltic	[ ] Stainless-steel Kemmerer

[ ] Other

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
11-20-96	1116										15.3	7.10	413		
11-20-96	1121						5.0	5.0			14.6	6.88	493		
11-20-96	1128						5.0	10.0			14.6	6.97	505		
11-20-96	1145						5.0	15.0			14.8	7.15	460	0.5	

Comments 0.04' OF FREE FLOATING HYDROCARBON. STRONG HYDROCARBON SMELL.

Developer's Signature Dennis Bird Date 11-20-96 Reviewer Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961010
MTR CODE | SITE NAME:	N/A	Jaquez MW R-3
SAMPLE DATE | TIME (Hrs):	11/20/96	1228
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/25/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	12.5	PPB				
ETHYL BENZENE	12.4	PPB				
TOTAL XYLENES	114	PPB				
TOTAL BTEX	139	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 101 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Faithe Date: 12/2/96

961010.XLS,12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-3

Site Name JAQUEZ

Meter Code

Development Criteria

- [X] 3 to 5 Casing Volumes of Water Removel
- [ ] Stabilization of Indicator Parameters
- [ ] Other

Methods of Development

Pump	Bailer
[ ] Centrifugal	[X] 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) 14.88
Height of Water Column in Well (feet) 7.22
Diameter (inches): Well 4 Gravel Pack

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

Instruments

- [X] pH Meter
- [ ] DO Monitor
- [X] Conductivity Meter
- [X] Temperature Meter
- [X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
11-20-96	1204										15.9	7.00	926		
11-20-96	1209						5.0	5.0			16.0	6.99	876		
11-20-96	1215						5.0	10.0			16.5	7.06	608		
11-20-96	1223						5.0	15.0			16.6	7.12	556	1.5	

Comments

Developer's Signature Dennis Bird Date 11-20-96 Reviewer John Stiller Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961011
MTR CODE | SITE NAME:	N/A	Jaquez MW R-4
SAMPLE DATE | TIME (Hrs):	11/20/96	1315
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/25/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	289	PPB	5	D		
TOLUENE	31.2	PPB	5	D		
ETHYL BENZENE	19.3	PPB	5	D		
TOTAL XYLENES	220	PPB	5	D		
TOTAL BTEX	560	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 102 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

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

Narrative:

Approved By: _____ Date: 12/2/96

961011.XLS,12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-4

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 14.48
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		5.0	15
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other O.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
11-20-96	1245										17.6	7.18	611		
11-20-96	1250						5.0	5.0			17.5	7.25	670		
11-20-96	1256						5.0	10.0			17.6	7.31	843		
11-20-96	1306						5.0	15.0			17.9	7.43	1160	1.0	

Comments

Developer's Signature Dennis Bird Date 11-20-96 Reviewer Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961012
MTR CODE | SITE NAME:	N/A	Jaquez MW R-5
SAMPLE DATE | TIME (Hrs):	11/20/96	1405
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/25/96
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 102 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Ludlum Date: 12/2/96

961012.XLS,12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number R-5

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removed
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 12.05
Height of Water Column in Well (feet) 2.35
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		4.9	14.6
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
11-20-96	1327										18.5	7.64	1076		
11-20-96	1332						5.0	5.0			17.6	7.60	1070		
11-20-96	1400						5.0	10.0			16.6	7.57	996	2.5	

Comments BAILED DRY @ 80 GALLONS.

Developer's Signature Dennis Bird Date 11-20-96 Reviewer Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961013
MTR CODE | SITE NAME:	N/A	Jaquez MW M-1
SAMPLE DATE | TIME (Hrs):	11/20/96	1512
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/25/96
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 101 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Leach Date: 12/2/96

961013.XLS,12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-1

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 5.19
Height of Water Column in Well (feet) 10.11
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		6.7	20.0
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
11-20-96	1435										14.3	7.83	324		
11-20-96	1440						5.0	5.0			13.8	7.51	350		
11-20-96	1505						5.0	10.0			13.8	7.37	319	3.5	

Comments BAILED DRY @ 7.0 GALLONS

Developer's Signature Dennis Bird Date 11-20-96 Reviewer Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961014
MTR CODE | SITE NAME:	N/A	Jaquez MW M-2
SAMPLE DATE | TIME (Hrs):	11/20/96	1556
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/25/96
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 102 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: _____ Date: 12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-2

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Water Volume Calculation

Initial Depth of Well (feet) 15'
Initial Depth to Water (feet) 4.85
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		6.8	20.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	Bottom Valve
[ ]	Submersible	[ ]	Double Check Valve
[ ]	Peristaltic	[ ]	Stainless-steel Kemmerer

[ ] Other

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
11-20-96	1526										12.5	7.26	562		
11-20-96	1530						5.0	5.0			11.7	7.08	552		
11-20-96	1535						5.0	10.0			11.7	7.03	538		
11-20-96	1545						5.0	15.0			11.6	7.02	512		
11-20-96	1550						5.0	20.0			11.6	7.03	509	1.0	

Comments

Developer's Signature Dennis Bird Date 11-20-96 Reviewer John Keith Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961015
MTR CODE | SITE NAME:	N/A	Jaquez MW M-3
SAMPLE DATE | TIME (Hrs):	11/20/96	1642
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/25/96	11/25/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	70.2	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	1.89	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	72.1	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 100 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Zaida Date: 12/2/96

961015.XLS,12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-3

Site Name JAQUEZ

Meter Code

Development Criteria

[X] 3 to 5 Casing Volumes of Water Removel
[ ] Stabilization of Indicator Parameters
[ ] Other

Methods of Development

Pump		Bailer	
[ ]	Centrifugal	[X]	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) 5.86
Height of Water Column in Well (feet) 9.34
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.2	18.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

[X] pH Meter
[ ] DO Monitor
[X] Conductivity Meter
[X] Temperature Meter
[X] Other O.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
11-20-96	1612										12.5	7.07	416		
11-20-96	1617						5.0	5.0			12.5	7.04	372		
11-20-96	1622						5.0	10.0			12.3	7.08	364		
11-20-96	1629						5.0	15.0			11.9	7.21	339		
11-20-96	1635						5.0	20.0			11.7	7.20	335		

Comments

Developer's Signature Dennis Bird Date 11-20-96 Reviewer Joe Lowe Date 12/2/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961016
MTR CODE | SITE NAME:	N/A	Jaquez MW M-4
SAMPLE DATE | TIME (Hrs):	11/21/96	1147
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/26/96	11/26/96
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	3.28	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	7.77	PPB				
TOTAL XYLENES	90.3	PPB				
TOTAL BTEX	101	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 91.6 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Sturdevant Date: 12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number M-4

Site Name JAQUEZ

Meter Code

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removel
☐ 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) 4.27
Height of Water Column in Well (feet) 11.03
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing		7.3	21.9
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: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal): Increment	Water Volume Removed (gal): Cumulativ	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
11-21-96	1041										13.8	6.93	419		
11-21-96	1045						5.0	5.0			14.0	6.89	423		
	1107						5.0	10.0			15.3	7.17	404	3.5	

Comments BAILED DRY @ 8.0 GALLONS.

Developer's Signature Dennis Bird Date 11-21-96 Reviewer Date 12/4/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	961017
MTR CODE | SITE NAME:	N/A	Jaquez MW M-5
SAMPLE DATE | TIME (Hrs):	11/21/96	1217
PROJECT:	Groundwater Remediation	
DATE OF BTEX EXT. | ANAL.:	11/26/96	11/26/96
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 89.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Fowler Date: 12/2/96

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

[ ] Development
[X] Purging

Well Number M-5

Site Name JAQUEZ

Meter Code

Development Criteria

- [X] 3 to 5 Casing Volumes of Water Removel
- [ ] Stabilization of Indicator Parameters
- [ ] Other

Methods of Development

Pump	Bailer
[ ] Centrifugal	[X] 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) 5.41
Height of Water Column in Well (feet) 9.69
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.4	19.2
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- [X] pH Meter
- [ ] DO Monitor
- [X] Conductivity Meter
- [X] Temperature Meter
- [X] Other D.O. CHEMETS KIT

Water Disposal

ON SITE BARRELS

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulativ	Increment	Cumulative					
11-21-96	1120										14.0	7.21	505		
11-21-96	1124						5.0	5.0			14.0	7.03	501		
11-21-96	1128						5.0	10.0			14.6	6.98	509		
11-21-96	1140						5.0	15.0			14.7	7.00	483		
11-21-96	1205						5.0	20.0			14.5	7.30	499	3.5	

Comments

Developer's Signature Dennis Bird Date 11-21-96 Reviewer Date 12/2/96

Appendix B - PAH Analytical Results

February 26, 1996

1996 PNA REPORT

Jaquez Corn Field
Monitor Well Analytical Results
Lab Sample #'s 960093 to 960103
Sampled February 5, 1996
Sampled by D. Bird and R. Benson

Report Distribution:

Sandra Miller - With Copy of Invoice
Results Log Book

Original Invoice to Accounts Payable, Charge 6138-6113-6115-90010-515

Analytical Technologies, Inc.

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

ATI I.D. **602311**

February 21, 1996

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

Project Name/Number: JAQUEZ

Attention: John Lambdin

On **02/07/96**, Analytical Technologies, of New Mexico Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

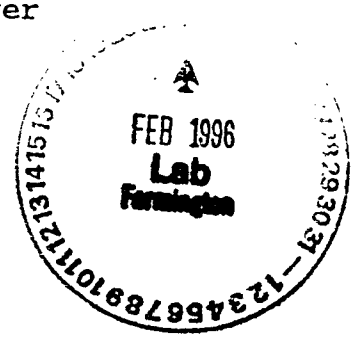
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



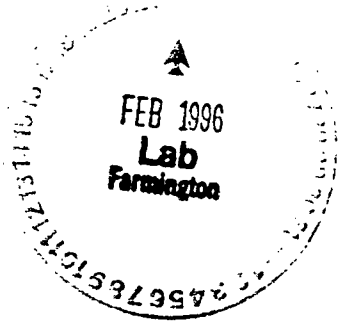
Analytical**Technologies,**Inc.

CLIENT : EL PASO NATURAL GAS
PROJECT # : (NONE)
PROJECT NAME : JAQUEZ

DATE RECEIVED : 02/07/96
REPORT DATE : 02/21/96

ATI ID: 602311

	ATI ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	602311-01	960093- R-1	AQUEOUS	02/05/96
02	602311-02	960094- R-2	AQUEOUS	02/05/96
03	602311-03	960095- R-3	AQUEOUS	02/05/96
04	602311-04	960097- R-4	AQUEOUS	02/05/96
05	602311-05	960098- R-5	AQUEOUS	02/05/96
06	602311-06	960099- m-1	AQUEOUS	02/05/96
07	602311-07	960100- m-2	AQUEOUS	02/05/96
08	602311-08	960101- m-3	AQUEOUS	02/05/96
09	602311-09	960102- m-4	AQUEOUS	02/05/96
10	602311-10	960103- m-5	AQUEOUS	02/05/96



---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	10

ATI STANDARD DISPOSAL PRACTICE

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

AnalyticalTechnologies,Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-01

Sample Matrix: Water
Cleanup: N/A

Sample ID

960093

MW R-1

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-13-96

Sample Volume: 1000 mL
Final Volume: 10 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	30	5.0
Acenaphthylene	ND	10
1-Methylnaphthalene	17	10
2-Methylnaphthalene	33	10
Acenaphthene	ND	10
Fluorene	2.4	1.0
Phenanthrene	2.5	0.50
Anthracene	ND	1.0
Flouranthrene	1.9	1.0
Pyrene	0.86	0.50
Benzo(a)anthracene	ND	0.50
Chrysene	ND	0.50
Benzo(b)fluoranthrene	ND	1.0
Benzo(k)fluoranthrene	ND	0.50
Benzo(a)pyrene	ND	0.50
Dibenzo(a,h)anthracene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0

SURROGATE RECOVERY

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

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

Naphthalenes = 80 PPB - WQCC Limit = 30 PPB - Fail
Benzo(a) pyrene = < 0.50 PPB - WQCC Limit = 0.7 PPB - Pass

2-26-96

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies, Inc.

Method 8310

Sample ID

960094

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-02

Sample Matrix: Water
Cleanup: N/A

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-13-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	2.7 K	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	3.7	1.0
2-Methylnaphthalene	3.6	1.0
Acenaphthene	ND	1.0
Fluorene	1.0	0.10
Phenanthrene	0.58	0.050
Anthracene	ND	0.10
Flouranthrene	0.80	0.10
Pyrene	0.39	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	0.050
Dibenzo(a,h)anthracene	0.20	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	73	15 - 117

ND = Not Detected at or above client requested detection limit.
K = Concentration confirmation does not agree within 50%.

Naphthalenes = 10 PPB — WQCC Limit = 30 PPB PASS

Benzo(A) Pyrene PASS 2-26-96

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-03

Sample Matrix: Water
Cleanup: N/A

Sample ID

960095

mw
R-3

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-13-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	0.58	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	ND	1.0
2-Methylnaphthalene	0.60 J	1.0
Acenaphthene	ND	1.0
Fluorene	ND	0.10
Phenanthrene	0.037 J	0.050
Anthracene	ND	0.10
Flouranthrene	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	0.050
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	28	15 - 117

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

PASS ALL
J.L.
2-26-96

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-04

Sample Matrix: Water
Cleanup: N/A

Sample ID

960097

mw
R-4

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	2.3	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	3.2	1.0
2-Methylnaphthalene	5.5	1.0
Acenaphthene	ND	1.0
Fluorene	0.60	0.10
Phenanthrene	0.59	0.050
Anthracene	ND	0.10
Flouranthrene	0.47	0.10
Pyrene	0.20	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	0.050
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	73	15 - 117

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

PASS HL
JF
2-26-96

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-05

Sample Matrix: Water
Cleanup: N/A

Sample ID
960098

mw
R-5

Date Collected: 2-0[illegible]-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection 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
Flouranthrene	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	0.050
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	64	15 - 117

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

IAS
2-26-96

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-06

Sample Matrix: Water
Cleanup: N/A

Sample ID
960099

mw
m-1

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection 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
Flouranthrene	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	0.050
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	15 - 117

PASS 2-16-96

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

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-07

Sample Matrix: Water
Cleanup: N/A

Sample ID
960100

mw
m-2

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection 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
Flouranthrene	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	0.050
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	15 - 117

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

PAS
2-16-96

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-08

Sample Matrix: Water
Cleanup: N/A

Sample ID
960101

mw
m-3

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	0.16 J	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	0.12	0.050
Anthracene	ND	0.10
Flouranthrene	0.16	0.10
Pyrene	0.053	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	0.050
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	81	15 - 117

D.F.
PASS
2-26-96

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

POLYNUCLEAR AROMATIC HYDROCARBONS

Analytical Technologies, Inc.

Method 8310

Sample ID

960102

mw
m-4

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-09

Sample Matrix: Water
Cleanup: N/A

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection Limit (ug/L)
Naphthalene	2.5	0.50
Acenaphthylene	ND	1.0
1-Methylnaphthalene	1.6	1.0
2-Methylnaphthalene	2.2	1.0
Acenaphthene	ND	1.0
Fluorene	0.29	0.10
Phenanthrene	0.077	0.050
Anthracene	ND	0.10
Flouranthrene	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	0.050
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	81	15 - 117

HAS
2-26-96

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

POLYNUCLEAR AROMATIC HYDROCARBONS

AnalyticalTechnologies,Inc.

Method 8310

Sample ID

960103

mw
m-5

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: 96-02-057-10

Sample Matrix: Water
Cleanup: N/A

Date Collected: 2-05-96
Date Extracted: 2-09-96
Date Analyzed: 2-14-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection 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
Flouranthrene	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	0.050
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	40	15 - 117

PASS 2-16-96 DJS

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

AnalyticalTechnologies,Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: ATI-NM
Client Project ID: EPNG - Jaquez -- 602311
Lab Sample ID: WRB1 02/09/96

Sample Matrix: Water
Cleanup: N/A

Sample ID

Reagent Blank

Date Collected: N/A
Date Extracted: 2-09-96
Date Analyzed: 2-13-96

Sample Volume: 1000 mL
Final Volume: 1 mL

Analyte	Conc (ug/L)	Detection 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
Flouranthrene	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	0.050
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	15 - 117

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

Acceptable.
2-26-96

Analytical Technologies, Inc.

POLYNUCLEAR AROMATIC HYDROCARBONS BLANK SPIKE

Method 8310

Lab Name: Analytical Technologies of Colorado, Inc.

Lab Sample ID: WBS1,2 02/09/96

Client Name: ATI-NM

Client Project ID: EPNG - Jaquez -- 602311

Date Extracted: 2-09-96

Date Analyzed: 2-13-96

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	6.15	61	23 - 122
Phenanthrene	1.00	0.757	76	34 - 112
Pyrene	1.00	0.679	68	35 - 116
Dibenzo(a,h)anthracene	1.00	0.751	75	33 - 123
Benzo(k)fl anthene	0.250	0.231	93	39 - 119

Analyte	Spike Added (ug/L)	BSD Concentration (ug/L)	BSD Percent Recovery	RPD	QC Limits RPD
Acenaphthylene	10.0	6.32	63	3	20
Phenanthrene	1.00	0.785	78	4	20
Pyrene	1.00	0.698	70	3	20
Dibenzo(a,h)anthracene	1.00	0.806	81	7	20
Benzo(k)fluoranthene	0.250	0.260	104	12	20

SURROGATE RECOVERY BS/BSD

Analyte	% Recovery BS	% Recovery BSD	% Rec Limits
2-Chloroanthracene	85	90	15 -117

Acceptable - JP 2-26-96

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

AnalyticalTechnologies,Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 2-5-96 PAGE 1 OF 3

ATI LAB I.D. 602311

PROJECT MANAGER: JOHN CAMBOIA

COMPANY: EL PASO FIELD SERVICE
ADDRESS: P.O. BOX 4990
FARMINGTON N.M. 87499
PHONE: 505-599-2144
FAX: 505-599-2261

BILL TO: JAMES AVENUE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Volatile Organics GC/MS (624/8240)	NUMBER OF CONTAINERS
960093	2-5-96	1020	WATER	-01	X	2
960094	2-5-96	1035	WATER	-02	X	2
960095	2-5-96	1120	WATER	-03	X	2
960097	2-5-96	1205	WATER	-04	X	2
960098	2-5-96	1220	WATER	-05	X	2
960099	2-5-96	1358	WATER	-06	X	2
960100	2-5-96	1410	WATER	-07	X	2
960101	2-5-96	1442	WATER	-08	X	2
960102	2-5-96	1529	WATER	-09	X	2

Petroleum Hydrocarbons (418.1); (MOD 8015) Gas/Diesel; Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020); BTXE/MTBE (8020); Chlorinated Hydrocarbons (601/8010); Aromatic Hydrocarbons (602/8020); SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.; Pesticides/PCB (608/8080); Herbicides (615/8150); Base/Neutral/Acid Compounds GC/MS (625/8270); Polynuclear Aromatics (610/8310); SDWA Primary Standards - Arizona; SDWA Secondary Standards - Arizona; SDWA Primary Standards - Federal; SDWA Secondary Standards - Federal; The 13 Priority Pollutant Metals; RCRA Metals by Total Digestion; RCRA Metals by TCLP (1311)

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:		NO. CONTAINERS	20
PROJ. NAME: JAQUEZ		CUSTODY SEALS	Y (N) NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA: AIR BORNE		RECEIVED COLD	2°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments: Detection limits on Naphthalenes = 1 ppb and Benzo(a) Pyrene = 0.5 ppb
CHARGE TO: 6000-6115-6115-515

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Dennis Bird Time: 1700	Signature: Time:	Signature: Time:
Printed Name: DENNIS BIRD Date: 2-5-96	Printed Name: Date:	Printed Name: Date:
Company: EL PASO FIELD SERVICE Phone: 599-2144	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 11:03
Printed Name: Date:	Printed Name: Date:	Printed Name: Dan Johnson Date: 2-7-96
Company:	Company:	Analytical Technologies, Inc.

ATI [illegible] San [illegible] 9) 458 [illegible] Phoe [illegible] 2) 496 [illegible] Seatt [illegible] 228-8 [illegible] ensac [illegible] l) 474 [illegible] , ortla [illegible]) 684- [illegible] Albuq [illegible] (505) 3 [illegible] 7 [illegible] BUTIO [illegible] , Car [illegible] I • Pi [illegible] GINA [illegible]

AnalyticalTechnologies, Inc., Albuquerque, NM

San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 2-5-96 PAGE 1 OF 2

ATI LAB I.D. 602311

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: JOHN CAMBDIN

COMPANY: EL PASO FIELD SERVICE
ADDRESS: P.O. BOX 4990
FARMINGTON N.M. 87499
PHONE: 505-599-2144
FAX: 505-599-2281

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
960103	2-5-96	1537	WATER	-10																X													2

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: JAQUEZ
P.O. NO.:
SHIPPED VIA: AIR BORNE

SAMPLE RECEIPT

NO. CONTAINERS	20
CUSTODY SEALS	Y (N) NA
RECEIVED INTACT	Y
RECEIVED COLD	2°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments: DETECTION LIMITS ON NAPHTHALENE = 1 ppb
& BENZO (A) PYRENE = 0.5 ppb
CHARGE TO: 6000-6115-6115-515

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Dennis Bird Time: 1703	Signature: Time:	Signature: Time:
Printed Name: DENNIS BIRD Date: 2-5-96	Printed Name: Date:	Printed Name: Date:
Company: EL PASO FIELD SERVICE Phone: 599-2144	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 11:03
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: Dan Johnson 2-7-96
Company:	Company:	Analytical Technologies, Inc.

ATI [illegible] San [illegible] (619) 458-[illegible] • Phoenix (602) 496-[illegible] • Seattle (206) 228-[illegible] • Pensacola (904) 47[illegible] • [illegible] (970) 484-[illegible] • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

Analytical**Technologies** of New Mexico, Inc.
Albuquerque, New Mexico

Interlab Chain of Custody

96-02-057

DATE: 2-7-96 PAGE: 1 OF 2

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: **Analytical Technologies of New Mexico, Inc.**
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER: Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry			Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
602311-01	2-5-96	10:20	AQ	01																		X											
-02		10:35		02																		X											
-03		11:20		03																		X											
-04		12:05		04																		X											
-05		12:20		05																		X											
-06		13:58		06																		X											
-07		14:10		07																		X											
-08		14:42		08																		X											
-09		15:29		09																		X											

PROJECT INFORMATION

PROJECT NUMBER:
PROJECT NAME: EPNG - Jaquez
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS:
CHAIN OF CUSTODY SEALS:
INTACT?:
RECEIVED GOOD COND./COLD:
LAB NUMBER:

SAMPLES SENT TO:
SAN DIEGO
FT. COLLINS X
RENTON
PENSACOLA
PORTLAND
PHOENIX

RELINQUISHED BY: 1.
Signature: Dan Johnson Time: 17:00
Printed Name: Dan Johnson Date: 2-7-96
Analytical Technologies of New Mexico, Inc. Albuquerque

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company: Fedex

RECEIVED BY: (LAB) 2.
Signature: Time: 930
Printed Name: D Hull Date: 2/8/96
Company:

DUE DATE: 2-19-96 Detection Limits: Naphthalene: 1ppb
RUSH SURCHARGE:
CLIENT DISCOUNT: 15
SPECIAL CERTIF ON REQUIRED: ☐YES ☐NO
Benzo(a)Pyrene: 0.5ppb

AnalyticalTechnologies of New Mexico, Inc.
Albuquerque, New Mexico

Interlab Chain of Custody

96-02-057

DATE: 2-7-96 PAGE: 2 OF 2

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: **Analytical Technologies of New Mexico, Inc.**

ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)	TOX	TOC	Gen Chemistry	Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)	TO-14	Gross Alpha/Beta	NUMBER OF CONTAINERS
602311-10	2-5-96	15:39	AQ	10															X					

PROJECT INFORMATION

PROJECT NUMBER:
PROJECT NAME: EPNG-Jaquez
QC LEVEL: (STD) IV
QC REQUIRED: (MS) MSD BLANK
TAT: (STANDARD) RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND /COLD	
LAB NUMBER	

SAMPLES SENT TO:

SAN DIEGO	
FT. COLLINS	X
RENTON	
PENSACOLA	
PORTLAND	
PHOENIX	

RELINQUISHED BY: 1.
Signature: Dan Johnson Time: 17:00
Printed Name: Dan Johnson Date: 2-7-96
Analytical Technologies of New Mexico, Inc. Albuquerque

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company: Fedex

RECEIVED BY: (LAB) 2.
Signature: Time: 930
Printed Name: D. Hull Date: 2/8/96
Company: ATI

DUE DATE: 2-19-96 Detection Limits: Naphthalenes: 1ppb
Benzo(a)Pyrene: 0.5ppb
RUSH SURCHARGE:
CLIENT DISCOUNT: 15
SPECIAL CERTIFICATION REQUIRED: ☐YES ☐NO

AnalyticalTechnologies,Inc., Albuquerque, NM
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CHAIN OF CUSTODY

DATE: 2-5-96 PAGE 1 OF 3

ATI LAB I.D.

PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO FIELD SERVICE
ADDRESS: P.O. BOX 4990
FARMINGTON N.M. 87499
PHONE: 505-599-2144
FAX: 505-599-2261

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal	The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS
960093	2-5-96	1020	WATER													X								2
960094	2-5-96	1035	WATER													X								2
960095	2-5-96	1120	WATER													X								2
960097	2-5-96	1205	WATER													X								2
960098	2-5-96	1220	WATER													X								2
960099	2-5-96	1358	WATER													X								2
960100	2-5-96	1410	WATER													X								2
960101	2-5-96	1442	WATER													X								2
960102	2-5-96	1529	WATER													X								2

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:		NO. CONTAINERS	
PROJ. NAME: JAQUEZ		CUSTODY SEALS	Y / N / NA
P.O. NO.:		RECEIVED INTACT	
SHIPPED VIA: AIR BORNE		RECEIVED COLD	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments: [illegible]
CHARGE TO: [illegible]

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [illegible] Time: 1700	Signature: Time:	Signature: Time:
Printed Name: DENNIS B[illegible] Date: 2-5-96	Printed Name: Date:	Printed Name: Date:
Company: EL PASO FIELD SERVICE Phone: 599-2144	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Analytical Technologies, Inc.

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